

confidence of prediction: 0.801553  
Y\_true: [20 24 26 42 49]  
Y\_pred: [20 40 42 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
60f on coumadin was found slightly, score: 0.01945163  
significant for hypertension osteoarthritis involving bilateral  
knee, score: 0.016987264  
was made cmo by, score: 0.0042521507

confidence of prediction: 0.877541  
Y\_true: [20 24 26 42 49]  
Y\_pred: [20 40 42 49]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was intubated w o, score: 0.0694113  
physical exam intubated non sedated received no, score: 0.0049870345  
was made cmo by family she expired shortly after, score:  
0.0034903425

confidence of prediction: 0.695665  
Y\_true: [20 24 26 42 49]  
Y\_pred: [20 40 42 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
60f on coumadin was found slightly, score: 0.91939837  
on admission unknown discharge medications expired discharge, score:  
0.00664867  
social history unknown family history nc, score: 0.005463505

confidence of prediction: 0.541797  
Y\_true: [ 2 21 36 42 48]  
Y\_pred: [ 2 23 24 26 27 33 34 36 40 42 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
1st degree avb and lbbb dm type ii cri baseline cr, score:  
0.0015008781  
prilosec senokot zocor lantus discharge medications none, score:  
0.0009968717

confidence of prediction: 0.563562  
Y\_true: [ 2 21 36 42 48]  
Y\_pred: [ 2 23 24 26 27 33 34 36 40 42 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
type ii cri baseline cr s p splenectomy, score: 0.10549891  
prilosec senokot zocor lantus discharge medications, score:  
0.023393098  
thin frail elderly man, score: 0.016664926

confidence of prediction: 0.774814  
Y\_true: [ 2 21 36 42 48]

Y\_pred: [ 2 23 24 26 27 33 34 36 40 42 48]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
elderly man intubated in hard collar [UNK], score: 0.060955353  
pt was intubated at osh and transferred, score: 0.021849893  
dnr per family request, score: 0.0020518159

confidence of prediction: 0.879291  
Y\_true: [ 2 21 36 42 48]  
Y\_pred: [ 2 23 24 26 27 33 34 36 40 42 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
chf reported ef 1st, score: 0.0012396416  
medical history cad s p mi in s p cabg in ventricular aneurysm,  
score: 0.001158004  
lives with daughter in, score: 0.000994098

confidence of prediction: 0.950783  
Y\_true: [17 33 42]  
Y\_pred: [33 40 41 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
she was intubated and ventilated gi, score: 0.19877374  
subfalcine herniation a non displaced, score: 0.030546872  
on scene intubated en route for declining, score: 0.02849492

confidence of prediction: 0.861790  
Y\_true: [17 33 42]  
Y\_pred: [33 40 41 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was intubated and ventilated gi, score: 0.5974967  
on scene intubated en route for declining, score: 0.017484698  
subfalcine herniation a non displaced, score: 0.002535177

confidence of prediction: 0.915020  
Y\_true: [ 4 20 33 42]  
Y\_pred: [ 4 11 20 33 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history htn depression hyperlipidemia alcohol abuse social history,  
score: 0.0041005914  
l basal ganglia iph, score: 0.0011334709  
admission lisinopril hctz pravastatin fluoxetine concerta discharge,  
score: 0.001099757

confidence of prediction: 0.999107  
Y\_true: [ 4 20 33 42]  
Y\_pred: [ 4 11 20 33 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn depression hyperlipidemia alcohol, score:

0.061549995

of whiskey he was brought to, score: 0.0031799357  
lisinopril hctz pravastatin fluoxetine concerta discharge  
medications none, score: 0.0025286085

confidence of prediction: 0.570264

Y\_true: [ 4 20 33 42]

Y\_pred: [ 4 11 20 33 40 42]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

ich respiratory failure discharge condition, score: 0.41575548

was made cmo by his, score: 0.01132838

he was intubated at, score: 0.009545886

confidence of prediction: 0.676939

Y\_true: [ 4 20 33 42]

Y\_pred: [ 4 11 20 33 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

remained intubated and stroke neurology, score: 0.19805294

status intubated off sedation no, score: 0.0541269

he was intubated corneals cough, score: 0.036430065

confidence of prediction: 0.695927

Y\_true: [42 44]

Y\_pred: [ 7 42 44]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

scene and intubated prior to, score: 0.028887479

trauma bay hemodynamically unstable, score: 0.0107379705

o2 intubated intubated 27am glucose lactate, score: 0.0027554783

confidence of prediction: 0.528889

Y\_true: [42 44]

Y\_pred: [ 7 42 44]

top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)

explored diffuse bleeding was noted, score: 0.21945724

intubated gunshot wounds to chest, score: 0.11370844

was packed and closed with a, score: 0.07923585

confidence of prediction: 0.862257

Y\_true: [ 3 10 20]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

medical history hypertension no, score: 0.26161227

discharge diagnosis hypertension aortic arch aneurysm, score:  
0.21133146

chief complaint hypertension major surgical or, score: 0.029829554

confidence of prediction: 0.923550

Y\_true: [10 42]  
Y\_pred: [ 0 33 40 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
meeting with stroke neurology, score: 0.00011923894  
after this meeting the, score: 0.00011236276  
progressed requiring endotracheal intubation for airway protection  
past, score: 6.458416e-05

confidence of prediction: 0.514379  
Y\_true: [ 1 4 21]  
Y\_pred: [1]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
history myeloproliferative disorder s, score: 0.0020977634  
po hs levothyroxine sodium mcg po ng, score: 0.0019117976  
evacuation of sdh history, score: 0.0018657448

confidence of prediction: 0.627366  
Y\_true: [ 6 42]  
Y\_pred: [39 42 44]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
pea on scene gcs [UNK], score: 0.049834892  
exam gcs intubated bilateral hips, score: 0.047285  
pulses popliteal pulses bilaterally pertinent, score: 0.040442534

confidence of prediction: 0.998745  
Y\_true: [16 23 24 26 27 40 42 49]  
Y\_pred: [ 0 17 26 27 41 43 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
chf afib on coumadin mi chronic, score: 0.00050869636  
systolic ejection murmur rrr, score: 0.00033453165  
expired followup instructions expired first name11 name pattern1,  
score: 0.00010501107

confidence of prediction: 0.939416  
Y\_true: [16 23 24 26 27 40 42 49]  
Y\_pred: [ 0 17 26 27 41 43 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
a severe chf exacerbation which was severely, score: 0.06879661  
chf she was unable to, score: 0.03286151  
history pmh chf afib on coumadin mi, score: 0.002939203

confidence of prediction: 0.761490  
Y\_true: [16 23 24 26 27 40 42 49]  
Y\_pred: [ 0 17 26 27 41 43 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin mi, score: 0.97774404

on admission coumadin lasix discharge medications, score:  
0.011796566  
nd bs extr no, score: 0.0002953435

confidence of prediction: 0.858587  
Y\_true: [ 2 10 20 39]  
Y\_pred: [20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diabetes and hypertension social history he also, score: 0.32735306  
and his hypertension and it was, score: 0.1439441  
patient s hypertension and coronary artery disease, score:  
0.08037733

confidence of prediction: 0.823296  
Y\_true: [28]  
Y\_pred: [28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.46578914  
otherwise normal egd to stomach cxr my, score: 0.119779855  
egd otherwise normal he was, score: 0.032745544

confidence of prediction: 0.784949  
Y\_true: [ 1 12 16 20 27 31 37 40 42]  
Y\_pred: [ 1 20 27 31 33 34 40 43]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
kyphosis hypothyroid multiple myeloma htn chf, score: 0.6105298  
admission avapro irbesartan cardizem sr levothyroxine omeprazole dr  
lasix procrit, score: 0.0023446342  
respiratory status continued to, score: 0.0013381075

confidence of prediction: 0.577079  
Y\_true: [ 1 12 16 20 27 31 37 40 42]  
Y\_pred: [ 1 20 27 31 33 34 40 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
multiple myeloma htn chf on lasix gerd psh cholecystectomy, score:  
0.34544483  
dr lasix procrit dose unknown colace, score: 0.13873573  
minimally displaced atherosclerotic disease breast calcifications,  
score: 0.027858643

confidence of prediction: 0.975001  
Y\_true: [ 1 12 16 20 27 31 37 40 42]  
Y\_pred: [ 1 20 27 31 33 34 40 43]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
htn chf on lasix gerd, score: 0.007816416  
procrit dose unknown colace, score: 0.0027200321  
discharge condition expired discharge instructions expired followup  
instructions expired first name8 namepattern2, score: 0.002006

confidence of prediction: 0.831761  
Y\_true: [ 1 12 16 20 27 31 37 40 42]  
Y\_pred: [ 1 20 27 31 33 34 40 43]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
given few air bronchograms underlying, score: 0.05450908  
consolidations with secretions in, score: 0.01434094  
and an aspiration was suspected she was, score: 0.006248889

confidence of prediction: 0.851766  
Y\_true: [ 1 12 16 20 27 31 37 40 42]  
Y\_pred: [ 1 20 27 31 33 34 40 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
be reintubated in conjunction with, score: 0.6132467  
she was intubated and bronched twice her right lung, score:  
0.016159995  
with respiratory failure discharge, score: 0.0022231746

confidence of prediction: 0.701734  
Y\_true: [ 9 12 16 31 33 40 41 42 43]  
Y\_pred: [40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
general appearance intubated sedated neck, score: 0.21318094  
he was intubated and placed on, score: 0.084759355  
and were intubated in the, score: 0.031045

confidence of prediction: 0.790462  
Y\_true: [ 9 12 16 31 33 40 41 42 43]  
Y\_pred: [40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and were intubated in the, score: 0.110296175  
he was intubated and placed on propofol, score: 0.07457847  
general appearance intubated sedated neck, score: 0.019578693

confidence of prediction: 0.801636  
Y\_true: [24]  
Y\_pred: [24 30]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease chronic obstructive pulmonary disease  
medications, score: 0.084271125  
showed a severely angulated abdominal, score: 0.021579333  
pulmonary disease coronary artery disease past surgical, score:  
0.01820709

confidence of prediction: 0.953582  
Y\_true: [ 4 16 17 26 40 42 46 47 49]  
Y\_pred: [ 4 6 26 30 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

lives with grandson able, score: 0.024472948  
2nd toe amputation and, score: 0.016147792  
illness 54f hx pvd, score: 0.013238284

confidence of prediction: 0.950993  
Y\_true: [ 4 16 17 26 40 42 46 47 49]  
Y\_pred: [ 4 6 26 30 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
af on coumadin hyperlipidemia mdd, score: 0.82121825  
bpg doctor last name, score: 0.022674063  
cool left foot [UNK], score: 0.013948651

confidence of prediction: 0.760419  
Y\_true: [ 4 16 17 26 40 42 46 47 49]  
Y\_pred: [ 4 6 26 30 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
af on coumadin hyperlipidemia mdd chronic anemia, score: 0.5597875  
metoprolol nexium warfarin discharge medications expired, score:  
0.35860667  
lives with grandson able, score: 0.0040278663

confidence of prediction: 0.773077  
Y\_true: [16 17 26 33 41 43 49]  
Y\_pred: [17 27 41 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
icp monitor placement history of, score: 0.09831844  
bolt was placed for icp, score: 0.09227872  
traumatic subarachnoid hemorrhage upon arrival, score: 0.06736654

confidence of prediction: 0.580394  
Y\_true: [16 17 26 33 41 43 49]  
Y\_pred: [17 27 41 42 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
r o2sats intubated gen, score: 0.052502926  
icp monitor placement history, score: 0.050590597  
3t on sedation neuro exam, score: 0.030396277

confidence of prediction: 0.740285  
Y\_true: [16 17 26 33 41 43 49]  
Y\_pred: [17 27 41 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
r o2sats intubated gen, score: 0.10601082  
icp monitor placement history of, score: 0.07435465  
3t on sedation neuro exam, score: 0.049393527

confidence of prediction: 0.959570  
Y\_true: [17 19 22 24 25 26 27 40 42 48 49]  
Y\_pred: [ 0 2 6 19 26 33 40 42 46 48 49]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)

multiple pressors cvvh and intubated, score: 0.13287225

esrd on hd calciphylaxis psh, score: 0.09992342

perform emergent dialysis he was, score: 0.05579036

confidence of prediction: 0.997957

Y\_true: [17 19 22 24 25 26 27 40 42 48 49]

Y\_pred: [ 0 2 6 19 26 33 40 42 46 48 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

cabg afib on coumadin cll asx, score: 0.0022670832

cabg gout lle angio, score: 0.00054710347

expired discharge diagnosis cardiopulmonary, score: 0.00014331323

confidence of prediction: 0.834731

Y\_true: [17 19 22 24 25 26 27 40 42 48 49]

Y\_pred: [ 0 2 6 19 26 33 40 42 46 48 49]

top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

patient was intubated patient then had a, score: 0.12710887

cvvh and intubated on ppd2 the, score: 0.035115737

week rare glass of, score: 0.008076095

confidence of prediction: 0.723049

Y\_true: [17 19 22 24 25 26 27 40 42 48 49]

Y\_pred: [ 0 2 6 19 26 33 40 42 46 48 49]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

cvvh and intubated on ppd2 the patient, score: 0.09094739

patient was intubated patient then had a, score: 0.039240535

to levophed vasopressin was, score: 0.005116013

confidence of prediction: 0.811800

Y\_true: [17 19 22 24 25 26 27 40 42 48 49]

Y\_pred: [ 0 2 6 19 26 33 40 42 46 48 49]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg afib on, score: 0.9398823

diagnostic angiogram history of, score: 0.014997848

k to reverse the inr, score: 0.0073206197

confidence of prediction: 0.796155

Y\_true: [17 19 22 24 25 26 27 40 42 48 49]

Y\_pred: [ 0 2 6 19 26 33 40 42 46 48 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)

cataract removal cabg gout lle angio, score: 0.0025476182

[UNK] senna coumadin 4mg, score: 0.001743524

took the patient to, score: 0.00058145245

confidence of prediction: 0.896532

Y\_true: [ 4 17 20 42]



Y\_pred: [ 4 20 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history htn hld social history lives with, score: 0.13745797  
significant for htn and hld who began to experience, score:  
0.0017080724  
on for coiling of, score: 0.001373308

confidence of prediction: 0.997411  
Y\_true: [ 4 17 20 42]  
Y\_pred: [ 4 20 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hld social history lives, score: 0.18499719  
significant for htn and hld who began, score: 0.06487642  
atherosclerotic disease but focal, score: 0.0064550354

confidence of prediction: 0.660383  
Y\_true: [ 4 17 20 42]  
Y\_pred: [ 4 20 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated upon arrival a ct, score: 0.5386334  
evd placement cerebral angiogram, score: 0.10407665  
on her evd was dropped to on, score: 0.087420784

confidence of prediction: 0.967056  
Y\_true: [11 34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
interstitial [UNK] depression add asthma gerd osa h o  
nephrolithiasis, score: 0.0014473095  
and state pouch as [UNK] continent, score: 0.0010343154  
cystectomy state pouch with [UNK], score: 0.0009538712

confidence of prediction: 0.937401  
Y\_true: [ 4 20 30 42]  
Y\_pred: [ 4 20 40 42 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
cva htn hyperlipidemia lacunar infarct sbo osteoporosis oa psh cabg  
r hip surgery, score: 0.06857943  
direction of future care, score: 0.0020438347  
illness 88f s p, score: 0.0019774116

confidence of prediction: 0.992295  
Y\_true: [ 4 20 30 42]  
Y\_pred: [ 4 20 40 42 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ca cva htn hyperlipidemia lacunar infarct sbo osteoporosis oa psh  
cabg r hip, score: 0.4514255

granulomatous disease social history, score: 0.033774644  
yeast mult organisms c, score: 0.025563449

confidence of prediction: 0.816447  
Y\_true: [ 4 20 30 42]  
Y\_pred: [ 4 20 40 42 48]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for a gcs, score: 0.4664739  
physical exam intubated and sedated withdraws all, score:  
0.0061526867  
to extubation the patient, score: 0.0049334723

confidence of prediction: 0.807145  
Y\_true: [42]  
Y\_pred: [42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated comatose pupils dilated minimally, score: 0.53843725  
bs neurological off propofol, score: 0.08413961  
was unresponsive intubated and taken, score: 0.028698677

confidence of prediction: 0.723234  
Y\_true: [17 45]  
Y\_pred: [17]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
of multiple superior mesenteric artery branches, score: 0.020627474  
without murmurs rubs or, score: 0.019210177  
past medical history hepatitis, score: 0.011922542

confidence of prediction: 0.927399  
Y\_true: [20 42]  
Y\_pred: [20 33 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn kidney stones social history, score: 0.06487433  
sons retired federal government employee since, score: 0.057239294  
dnr while awaiting further, score: 0.0051837806

confidence of prediction: 0.925794  
Y\_true: [20 42]  
Y\_pred: [20 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
distress and intubated him intubation was difficult, score:  
0.0072997753  
received mannitol gm iv, score: 0.006352778  
is intubated and on, score: 0.005368163

confidence of prediction: 0.828949

Y\_true: [ 2 4 8 21 23 24 26 27 36]  
Y\_pred: [ 7 26 27 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with hr to 140s, score: 0.7750609  
paf sick sinus syndrome, score: 0.13452333  
chf ecg notable for rbbb, score: 0.018910145

confidence of prediction: 0.895512  
Y\_true: [ 2 4 8 21 23 24 26 27 36]  
Y\_pred: [ 7 26 27 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
h o chf dyslipidemia dysrhythmia hx paf, score: 0.039909925  
ischemic heart ds h o, score: 0.010234878  
given his chf ecg notable for rbbb, score: 0.009364725

confidence of prediction: 0.922252  
Y\_true: [ 5 16 26 34 40 42]  
Y\_pred: [17 33 40 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was emergently intubated she initially received a, score: 0.6239831  
to continue intubation for one more, score: 0.0030211988  
started arterial line was, score: 0.0010788387

confidence of prediction: 0.803353  
Y\_true: [ 5 16 26 34 40 42]  
Y\_pred: [17 33 40 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was emergently intubated she initially received a, score: 0.26193073  
to continue intubation for one, score: 0.016508717  
quickly deteriorated to 5l, score: 0.0076878793

confidence of prediction: 0.770971  
Y\_true: [ 2 3 13 18 23 24]  
Y\_pred: [ 3 13 18 20 24]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
medical history hypercholesterolemia arthritis catarct surgeries  
social, score: 0.20693028  
bypass grafts hypercholesterolemia degenerative joint disease,  
score: 0.12956414  
and pressors weaned off [UNK] was, score: 0.013472844

confidence of prediction: 0.993483  
Y\_true: [ 2 3 13 18 23 24]  
Y\_pred: [ 3 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafts x lima lad, score: 0.47378635  
coronary artery bypass grafting x left, score: 0.07248204

descending saphenous vein grafted to, score: 0.050617274

confidence of prediction: 0.946393

Y\_true: [ 2 3 13 18 23 24]

Y\_pred: [ 3 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

creams or powders to, score: 0.7406368

bypass grafting x left internal, score: 0.050001353

saphenous vein grafted to, score: 0.035663202

confidence of prediction: 0.999398

Y\_true: [ 2 3 13 18 23 24]

Y\_pred: [ 3 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafts x lima lad, score: 0.6020849

coronary artery disease s p coronary artery bypass grafts, score:

0.12746525

disease osteal lad and, score: 0.03800477

confidence of prediction: 0.666808

Y\_true: [ 6 11 21 35 36]

Y\_pred: [ 6 21 36]

top three important windows for true positive code 6 (276.2:

Acidosis)

gap metabolic acidosis likely alcoholic ketoacidosis that, score:

0.047789633

lipase 45pm albumin calcium, score: 0.00963361

by his [UNK] lawyer, score: 0.0075804633

confidence of prediction: 0.854043

Y\_true: [ 6 11 21 35 36]

Y\_pred: [ 6 21 36]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic

kidney disease stage I through stage IV, or unspecified)

hip chronic kidney disease baseline cr of social history, score:

0.0055856416

lost his job and started drinking, score: 0.004600214

night intoxicated d c, score: 0.003135781

confidence of prediction: 0.804169

Y\_true: [ 6 11 21 35 36]

Y\_pred: [ 6 21 36]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic kidney disease baseline cr of social history, score:

0.10050973

lost his job and started drinking, score: 0.0075334273

acidosis likely alcoholic ketoacidosis, score: 0.003670552

confidence of prediction: 0.817856

Y\_true: [20 40 42]

Y\_pred: [ 7 20 40 42 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
with ascites htn anxiety depression seizure pshx, score: 0.12471744  
multiple liver biopsies history of, score: 0.042382337  
1u cryoprecipitate without an appropriate, score: 0.008105525

confidence of prediction: 0.787866  
Y\_true: [20 40 42]  
Y\_pred: [ 7 20 40 42 44]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
his jp drain continued, score: 0.0724346  
he was intubated in the ed, score: 0.050107036  
he was aggressively resuscitated, score: 0.00972226

confidence of prediction: 0.748736  
Y\_true: [20 40 42]  
Y\_pred: [ 7 20 40 42 44]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
his jp drain continued, score: 0.052518193  
he was intubated in the ed, score: 0.013749115  
hx ivdu family history non contributory, score: 0.013044405

confidence of prediction: 0.979557  
Y\_true: [20 33 40 42]  
Y\_pred: [20 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn sah basilar tip, score: 0.75438213  
expired on pertinent results, score: 0.051069513  
service for subarachnoid hemorrhage, score: 0.024904761

confidence of prediction: 0.808250  
Y\_true: [20 33 40 42]  
Y\_pred: [20 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was intubated in the ed, score: 0.09133517  
suprasellar cistern consistent with, score: 0.0062072114  
adverse drug reactions attending first, score: 0.003738857

confidence of prediction: 0.824925  
Y\_true: [20 33 40 42]  
Y\_pred: [20 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated in the ed, score: 0.054237574  
and occipital horns there, score: 0.020741232  
and occipital horns underlying intraventricular large, score:  
0.020741232

confidence of prediction: 0.918783

Y\_true: [ 4 7 20]

Y\_pred: [ 4 20]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history scoliosis hld htn laminectomy breast biopsy, score: 0.18655087

and urine lytes vitals, score: 0.0021474685

fenofibrate hydrochlorothiazide klonopin arimidex discharge medications hydrochlorothiazide mg, score: 0.0020460512

confidence of prediction: 0.988167

Y\_true: [ 4 7 20]

Y\_pred: [ 4 20]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

scoliosis hld htn laminectomy breast biopsy, score: 0.14986725

fenofibrate hydrochlorothiazide klonopin arimidex discharge medications, score: 0.12357118

hctz was resumed the, score: 0.020365985

confidence of prediction: 0.675396

Y\_true: [ 3 6 17 20 26 31 35 40 42 49]

Y\_pred: [ 0 4 17 26 33 35 44 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

in pea arrest until, score: 0.07709712

factor viia as well, score: 0.027589466

he was transfused 7u, score: 0.014598335

confidence of prediction: 0.905328

Y\_true: [ 3 6 17 20 26 31 35 40 42 49]

Y\_pred: [ 0 4 17 26 33 35 44 46]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib and nausea brought to, score: 0.6435039

afib on fio2 gen, score: 0.065516315

dyslipidemia atrial fibrillation basal cell carcinoma, score: 0.0047664247

confidence of prediction: 0.703921

Y\_true: [ 3 6 17 20 26 31 35 40 42 49]

Y\_pred: [ 0 4 17 26 33 35 44 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

worsening renal failure with creatinine rising, score: 0.09246801

failure acute renal failure discharge condition expired, score: 0.04456592

was made dnr on hd she, score: 0.012197299

confidence of prediction: 0.901081

Y\_true: [ 0 4 9 10 11 12 17 25 28 29 33 35 39 40 42 48]

Y\_pred: [ 4 11 20 23 33 40 42 48]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
failure hypertension hyperlipidemia depression alcohol and tobacco, score: 0.037661444  
failure hypertension hyperlipidemia depression alcohol and, score: 0.037661444

confidence of prediction: 0.823606  
Y\_true: [ 0 4 9 10 11 12 17 25 28 29 33 35 39 40 42 48]  
Y\_pred: [ 4 11 20 23 33 40 42 48]  
top three important windows for true positive code 11 (311: Depressive disorder, not elsewhere classified)  
hyperlipidemia depression alcohol and tobacco abuse, score: 0.17677273  
hypertension hyperlipidemia depression alcohol and tobacco abuse, score: 0.007868036

confidence of prediction: 0.846668  
Y\_true: [ 0 4 9 10 11 12 17 25 28 29 33 35 39 40 42 48]  
Y\_pred: [ 4 11 20 23 33 40 42 48]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxemic respiratory failure he expired, score: 0.20706345  
he was intubated and successfully extubated on, score: 0.02705126  
was made cmo and expired medications, score: 0.024322899

confidence of prediction: 0.813357  
Y\_true: [ 0 4 9 10 11 12 17 25 28 29 33 35 39 40 42 48]  
Y\_pred: [ 4 11 20 23 33 40 42 48]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
was re intubated after transfer, score: 0.34569502  
he was intubated and successfully extubated, score: 0.046198018  
to mucous plugging pontine, score: 0.0054300306

confidence of prediction: 0.701614  
Y\_true: [ 0 4 9 10 11 12 17 25 28 29 33 35 39 40 42 48]  
Y\_pred: [ 4 11 20 23 33 40 42 48]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
was re intubated after transfer, score: 0.10215471  
to mucous plugging pontine [UNK], score: 0.034422234  
he was intubated and successfully extubated, score: 0.023053225

confidence of prediction: 0.715769  
Y\_true: [ 0 4 9 10 11 12 17 25 28 29 33 35 39 40 42 48]  
Y\_pred: [ 4 11 20 23 33 40 42 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
history of cabg remote mi hip shoulder surgery liver, score: 0.620737  
history of cabg remote mi hip shoulder surgery liver, score: 0.25560305

k cl ammonia ca, score: 0.0019656229

confidence of prediction: 0.501859

Y\_true: [12 16 17 29 30 32 33 34 40 41 42 47]

Y\_pred: [ 8 33 34 40 42]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

she required intubation and [UNK] pressors, score: 0.10365529

multiple attempts were made, score: 0.045136098

to withdraw care medications, score: 0.029288126

confidence of prediction: 0.766528

Y\_true: [12 16 17 29 30 32 33 34 40 41 42 47]

Y\_pred: [ 8 33 34 40 42]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

o2 gerd osteoporosis who presented to, score: 0.25887737

of hyperthyroid gerd social history widowed and, score: 0.022737857

another institution dated a left sided, score: 0.016498404

confidence of prediction: 0.916659

Y\_true: [12 16 17 29 30 32 33 34 40 41 42 47]

Y\_pred: [ 8 33 34 40 42]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

she required intubation and [UNK] pressors, score: 0.6708724

considering feeding tube at time, score: 0.0027729282

only terminal extubation patient expired family members, score: 0.0024785213

confidence of prediction: 0.674233

Y\_true: [12 16 17 29 30 32 33 34 40 41 42 47]

Y\_pred: [ 8 33 34 40 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

she required intubation and [UNK] pressors, score: 0.53916216

considering feeding tube at time, score: 0.011748206

terminal extubation patient expired family members, score: 0.0032776366

confidence of prediction: 0.923652

Y\_true: [ 2 4 20 33 35 41 42]

Y\_pred: [ 2 4 17 20 40 41 43]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

history htn dm hld social history married, score: 0.08502734

gen intubated unresponsive heent no, score: 0.020305926

a neurology consultation was, score: 0.0053555216

confidence of prediction: 0.813407

Y\_true: [ 2 4 20 33 35 41 42]

Y\_pred: [ 2 4 17 20 40 41 43]



top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
medical history htn dm hld social history married family, score: 0.001828088  
traumatic brain injury cerebral, score: 0.001373176  
the emergency room and, score: 0.0010322405

confidence of prediction: 0.986579  
Y\_true: [ 2 4 20 33 35 41 42]  
Y\_pred: [ 2 4 17 20 40 41 43]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
medical history htn dm hld social history married, score: 0.18326855  
consult was called a, score: 0.024241026  
dnr dni cmo and, score: 0.00752653

confidence of prediction: 0.937362  
Y\_true: [ 2 4 20 33 35 41 42]  
Y\_pred: [ 2 4 17 20 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
subfalcine herniation new right, score: 0.26751322  
fracture aspirated secretions in the, score: 0.022719981  
herniation right temporal lobectomy, score: 0.017854402

confidence of prediction: 0.555116  
Y\_true: [6]  
Y\_pred: [ 0 2 6 17 23 24 26 27 33 42 43 46 49]  
top three important windows for true positive code 6 (276.2: Acidosis)  
severe metabolic acidosis with lactate peak, score: 0.10911837  
despite maximal pressors after discussions with the, score: 0.043592643  
despite max levophed started on, score: 0.035947524

confidence of prediction: 0.833105  
Y\_true: [42]  
Y\_pred: [42]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
neuro intubated in psych unable, score: 0.3113925  
he was intubated at the scene for, score: 0.20167133  
hour eeg which was, score: 0.027796146

confidence of prediction: 0.831197  
Y\_true: [ 1 34]  
Y\_pred: [ 1 27]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
home omeprazole levothyroxine welchol oxycontin 320mg tid, score: 0.0073917657  
with service facility ct vna [UNK] home healthcare and hospice discharge diagnosis, score: 0.0008993345

character of the skin, score: 0.00065504527

confidence of prediction: 0.662286

Y\_true: [ 3 20 47]

Y\_pred: [ 3 20]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)

disorder obesity hypertension hypercholesterolemia asthma and possible, score: 0.019035595

comm artery aneurysm suicidal, score: 0.006025006

asa 325mg hctz 25mg daily lisinopril, score: 0.0019363769

confidence of prediction: 0.980751

Y\_true: [ 3 20 47]

Y\_pred: [ 3 20]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

asa 325mg hctz 25mg daily lisinopril, score: 0.046823032

bipolar disorder obesity hypertension hypercholesterolemia asthma and possible, score: 0.021549668

40mg daily effexor 225mg qpm zyprexa 20mg, score: 0.002129488

confidence of prediction: 0.998139

Y\_true: [ 0 8 11 12 16 26 27 33 36 40 41 43 46 49]

Y\_pred: [24 26 27 40 49]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

af with aberreny on coumadin social, score: 0.0008611635

thoracentesis who presented to, score: 0.0005534922

gemcitabine afib on coumadin s p, score: 0.00027016972

confidence of prediction: 0.964005

Y\_true: [ 0 8 11 12 16 26 27 33 36 40 41 43 46 49]

Y\_pred: [24 26 27 40 49]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

afib on coumadin s, score: 0.010815521

cards heart sounds regular, score: 0.00705575

5l gen aox3 nad, score: 0.005888237

confidence of prediction: 0.869737

Y\_true: [ 0 8 11 12 16 26 27 33 36 40 41 43 46 49]

Y\_pred: [24 26 27 40 49]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

she was intubated goals of, score: 0.15763488

on gemcitabine oncologist is, score: 0.015913568

appearing woman labs were, score: 0.0072213775

confidence of prediction: 0.679106

Y\_true: [ 0 8 11 12 16 26 27 33 36 40 41 43 46 49]

Y\_pred: [24 26 27 40 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

afib on coumadin s, score: 0.8115049  
mg tablet warfarin mg tablet sig, score: 0.05654624  
was terminally extubated and, score: 0.001155924

confidence of prediction: 0.983569  
Y\_true: [ 3 20 44]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn sleep apnea social, score: 0.44308484  
pt underwent reimplantation surgery of, score: 0.07816277  
cr seconds in thumb, score: 0.019295834

confidence of prediction: 0.786257  
Y\_true: [17 20 41 42]  
Y\_pred: [17 20 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
was unarousable even off sedation with spontaneous movement, score:  
0.06238626  
htn bilateral cataract surgery hx, score: 0.032248516  
extubated at 9pm palliative care consult was, score: 0.02759172

confidence of prediction: 0.923886  
Y\_true: [17 20 41 42]  
Y\_pred: [17 20 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn bilateral cataract surgery hx, score: 0.09466712  
combined with htn was the likely cause, score: 0.001780805  
expired on at am, score: 0.0014338922

confidence of prediction: 0.678238  
Y\_true: [17 20 41 42]  
Y\_pred: [17 20 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
to painful stimuli throughout brainstem reflexes, score: 0.16189615  
cmv gen intubated patient arrived, score: 0.11734022  
even off sedation with spontaneous, score: 0.062610544

confidence of prediction: 0.908498  
Y\_true: [ 4 8 13 18 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disease hypertension hyperlipidemia peripheral vascular disease,  
score: 0.080941856  
grafts hypertension hyperlipidemia peripheral vascular disease,  
score: 0.07416922  
simvastatin 20mg d norvasc, score: 0.0081372345

confidence of prediction: 0.991059

Y\_true: [ 4 8 13 18 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafts x2 lima lad svg om history, score:  
0.74752885  
coronary artery bypass grafts hypertension hyperlipidemia, score:  
0.018274304  
tolerated the operation well, score: 0.008871572

confidence of prediction: 0.930331  
Y\_true: [ 4 8 13 18 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.74020594  
wires on day beta blockade, score: 0.17419958  
diuresed towards her preoperative, score: 0.0151738

confidence of prediction: 0.986787  
Y\_true: [ 4 8 13 18 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
artery disease hypertension hyperlipidemia peripheral vascular  
disease, score: 0.13301484  
artery disease major surgical, score: 0.018083796  
murmur gr sem base, score: 0.013357821

confidence of prediction: 0.999478  
Y\_true: [ 4 8 13 18 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafts x2 lima lad svg om, score: 0.5360675  
coronary artery disease major surgical, score: 0.19216327  
coronary artery disease s p coronary artery bypass grafts, score:  
0.11348895

confidence of prediction: 0.882098  
Y\_true: [ 4 8 13 18 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
disease gastroesophageal reflux social history lives, score:  
0.10401859  
history of present illness, score: 0.009565039  
allergies sulfa sulfonamide antibiotics penicillins codeine, score:  
0.008363994

confidence of prediction: 0.500355  
Y\_true: [ 4 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 4 (272.4: Other

and unspecified hyperlipidemia)  
after embolization hyperlipidemia per pt his pcp, score: 0.12905446  
dc d simvastatin bph terazosin held, score: 0.039534125  
resection hypertension hyperlipidemia bph gout social history,  
score: 0.023244279

confidence of prediction: 0.944373  
Y\_true: [ 4 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hyperlipidemia bph gout social, score: 0.30898798  
with colchicine hypertension anti hypertensive medications, score:  
0.15286705  
hyperlipidemia per pt his, score: 0.10577161

confidence of prediction: 0.544816  
Y\_true: [ 2 3 10 12 20]  
Y\_pred: [ 4 10 12 21 36]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
history tobacco pack years smokes pck d alcohol denies, score:  
0.0037796644  
pack year smoking hx, score: 0.0030774102  
history htn renal injury in, score: 0.0022876787

confidence of prediction: 0.954820  
Y\_true: [ 2 3 10 12 20]  
Y\_pred: [ 4 10 12 21 36]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
bronchoscopy and bronchoalveolar lavage r bronchial artery  
angiogram, score: 0.044447582  
you underwent bronchoscopy and embolization, score: 0.027501622  
r bronchial artery branches, score: 0.00918028

confidence of prediction: 0.867866  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
access r femoral line ppx pain control, score: 0.12969476  
a femoral line was placed and, score: 0.015389088  
supratherapeutic inr sepsis based on ua likely, score: 0.0076244655

confidence of prediction: 0.998206  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on warfarin chronic renal, score: 0.2529839  
afib and chronic renal, score: 0.012284294  
autopsy son name ni, score: 0.00022955835

confidence of prediction: 0.569333  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
and acute renal failure complicated by, score: 0.12456421  
given renal failure blood pressure, score: 0.12355296  
kidney insufficiency appears to, score: 0.105012596

confidence of prediction: 0.736151  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
renal insufficiency based on, score: 0.08011819  
chronic renal insufficiency presented from, score: 0.043137033  
warfarin chronic renal insufficiency anemia on, score: 0.03663285

confidence of prediction: 0.633131  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
urosepsis but bacturia could, score: 0.16518743  
diagnosis urosepsis death discharge condition expired, score: 0.09407686  
to excrete warfarin from, score: 0.028671106

confidence of prediction: 0.748908  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
urosepsis major surgical or, score: 0.13748907  
meeting with patient s children, score: 0.0855552  
supported with levophed and vasopressin to, score: 0.07985536

confidence of prediction: 0.869686  
Y\_true: [ 0 6 8 17 26 35 36 37 46 49]  
Y\_pred: [17 21 26 35 36 37 46 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on warfarin and chronic renal, score: 0.6327316  
afib on warfarin chronic renal, score: 0.31650177  
osh held warfarin type, score: 0.0028947243

confidence of prediction: 0.928186  
Y\_true: [ 4 21 27 29 33 35 36 37]  
Y\_pred: [ 4 17 21 27 29 31 33 36]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
lvef in hyperlipidemia hypertension cva left sided, score: 0.3449437  
meq daily allopurinol mg, score: 0.0043546185  
drop left sided leg, score: 0.00399032

confidence of prediction: 0.840716  
Y\_true: [ 4 21 27 29 33 35 36 37]  
Y\_pred: [ 4 17 21 27 29 31 33 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease cr was in anemia from, score: 0.17393816  
appearing elderly lady breathing, score: 0.014400376  
at cr baseline one year, score: 0.011634209

confidence of prediction: 0.913194  
Y\_true: [ 4 21 27 29 33 35 36 37]  
Y\_pred: [ 4 17 21 27 29 31 33 36]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
numeric identifier 58am blood, score: 0.14881995  
congestive heart failure lvef in hyperlipidemia, score: 0.09131233  
chf last ef aspiration, score: 0.08796344

confidence of prediction: 0.877376  
Y\_true: [ 4 21 27 29 33 35 36 37]  
Y\_pred: [ 4 17 21 27 29 31 33 36]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
with pneumonia followup to, score: 0.04427951  
o aspiration pna who presents, score: 0.03169843  
likely rml pna so she received, score: 0.022837246

confidence of prediction: 0.740674  
Y\_true: [ 4 21 27 29 33 35 36 37]  
Y\_pred: [ 4 17 21 27 29 31 33 36]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxemic respiratory failure in the, score: 0.3224751  
cantonese speaking lady with history, score: 0.022254223  
was made cmo and transfered out, score: 0.018816682

confidence of prediction: 0.810659  
Y\_true: [ 4 21 27 29 33 35 36 37]  
Y\_pred: [ 4 17 21 27 29 31 33 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
at cr baseline one year ago, score: 0.022118786  
appearing elderly lady breathing, score: 0.015578291  
weakness chronic kidney disease cr was in anemia from, score:  
0.0053373817

confidence of prediction: 0.553719  
Y\_true: [ 1 4 21 36]  
Y\_pred: [ 1 4 20 36]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
cva hypothyroidism per neuro note, score: 0.23309448

available hypothyroidism discharge condition stable, score:  
0.20506714  
daily levothyroxine [UNK] daily discharge medications levothyroxine  
mcg tablet sig one, score: 0.101643555

confidence of prediction: 0.940123  
Y\_true: [ 1 4 21 36]  
Y\_pred: [ 1 4 20 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history htn hyperlipidemia h o cva hypothyroidism, score: 0.05199622  
infarct hypertension hyperlipidemia h o cva, score: 0.048751805  
htn and hyperlipidemia cri who presented to, score: 0.03392565

confidence of prediction: 0.509610  
Y\_true: [ 1 4 21 36]  
Y\_pred: [ 1 4 20 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
and hyperlipidemia cri who presented to ed, score: 0.41365045  
subcortical infarct in the, score: 0.012496538  
examination valerian degeneration is, score: 0.008907291

confidence of prediction: 0.919490  
Y\_true: [ 1 4 17 20 24 35 37 44 48]  
Y\_pred: [ 1 4 20 27 44 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
daily levothyroxine mcg tablet sig one, score: 0.067599855  
ph leuk mod 00am wbc, score: 0.002122818  
hypertension hyperlipidemia hypothyroidism hit neurogenic bladder  
self, score: 0.0013277644

confidence of prediction: 0.857771  
Y\_true: [ 1 4 17 20 24 35 37 44 48]  
Y\_pred: [ 1 4 20 27 44 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
[UNK] hypertension hyperlipidemia hypothyroidism hit neurogenic  
bladder, score: 0.25748652  
zetia humalog 15u day, score: 0.016070522  
stranding penile implant reservoir, score: 0.006966996

confidence of prediction: 0.575067  
Y\_true: [ 1 4 17 20 24 35 37 44 48]  
Y\_pred: [ 1 4 20 27 44 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
x [UNK] hypertension hyperlipidemia hypothyroidism hit neurogenic,  
score: 0.57235664  
zetia humalog 15u day, score: 0.044646855  
cabg s p pacemaker placement for, score: 0.02759166

confidence of prediction: 0.843598



Y\_true: [ 1 4 17 20 24 35 37 44 48]

Y\_pred: [ 1 4 20 27 44 48]

top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)

he was transfused 2u prbcs for hct repeat, score: 0.040308382

normalization of bps on, score: 0.007603998

iliac fx r acetabular fx r inf, score: 0.007137105

confidence of prediction: 0.879539

Y\_true: [ 1 4 17 20 24 35 37 44 48]

Y\_pred: [ 1 4 20 27 44 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg s p pacemaker placement, score: 0.9695637

s p bypass and, score: 0.016221574

a day zetia mg tablet, score: 0.0013851441

confidence of prediction: 0.854899

Y\_true: [ 4 26 34 49]

Y\_pred: [ 4 20 26 34 49]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

illness hpi 81f with fall from, score: 0.012791251

buspar daily hctz daily, score: 0.011596869

social history social hx, score: 0.0067889

confidence of prediction: 0.997747

Y\_true: [ 4 26 34 49]

Y\_pred: [ 4 20 26 34 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

af bp hr r, score: 0.000109540335

fall major surgical or, score: 0.0001066542

arthritis afib on coumadin social history, score: 3.558795e-05

confidence of prediction: 0.961403

Y\_true: [ 4 26 34 49]

Y\_pred: [ 4 20 26 34 49]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

htn dyslipidemia gerd restless legs arthritis afib, score:  
0.05535391

illness hpi 81f with fall, score: 0.0091353515

she had cervical ct, score: 0.002727667

confidence of prediction: 0.789664

Y\_true: [ 4 26 34 49]

Y\_pred: [ 4 20 26 34 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)

to admission coumadin 5mg, score: 0.020328296

o t af bp hr r, score: 0.00039252033

81f with fall from, score: 0.0003787884

confidence of prediction: 0.541220

Y\_true: [ 2 8 17 20 31 35 37]

Y\_pred: [17 31 35 37]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

po medications groans moans, score: 0.024298027

renal disease picc line clot discharge condition, score: 0.016830008

you comfort measures only, score: 0.011399217

confidence of prediction: 0.913721

Y\_true: [ 2 8 17 20 31 35 37]

Y\_pred: [17 31 35 37]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

for aspiration pneumonia and has required, score: 0.16470857

an aspiration pneumonia and dehydration with, score: 0.11812457

diagnosis aspiration pneumonia dehydration hypernatremia, score: 0.06590649

confidence of prediction: 0.934839

Y\_true: [ 2 8 17 20 31 35 37]

Y\_pred: [17 31 35 37]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

frail elderly african american, score: 0.042343255

medications groans moans with, score: 0.019923083

acute renal failure and hypernatremia, score: 0.019730875

confidence of prediction: 0.838595

Y\_true: [ 2 8 17 20 31 35 37]

Y\_pred: [17 31 35 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

medications groans moans with turning, score: 0.048102938

with fluids uti urine culture with gram, score: 0.023714066

elderly african american female heent, score: 0.016117688

confidence of prediction: 0.814691

Y\_true: [ 4 10 20]

Y\_pred: [ 4 20]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

depression anxiety hyperlipidemia and hypertension social history, score: 0.66632324

prn trazodone 50mg qhs keppra 750mg hospital1 famotadine, score: 0.01906931

pravastatin mg tablet sig, score: 0.009000319

confidence of prediction: 0.900243

Y\_true: [ 4 10 20]

Y\_pred: [ 4 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hyperlipidemia and hypertension social history widowed, score:

0.12129407

uses family history non, score: 0.017423788

for evacuation she was, score: 0.016820045

confidence of prediction: 0.820740

Y\_true: [ 2 21 23 24 27 36 48]

Y\_pred: [ 2 20 23 24 27 44]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

htn dm2 who presented with, score: 0.015924778

previously cri baseline dm2 insulin dependent htn baseline, score: 0.011905851

cad htn dm2 who presented to, score: 0.0067910347

confidence of prediction: 0.543344

Y\_true: [ 2 21 23 24 27 36 48]

Y\_pred: [ 2 20 23 24 27 44]

top three important windows for true positive code 23 (412: Old myocardial infarction)

medical history mi in cad s p cabgx4 in, score: 0.2176139

arms angioplasty coronary stents x2 in, score: 0.013831272

of cad chf htn, score: 0.01379062

confidence of prediction: 0.846343

Y\_true: [ 2 21 23 24 27 36 48]

Y\_pred: [ 2 20 23 24 27 44]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

in cad s p cabgx4 in, score: 0.19783199

angioplasty coronary stents x2 in, score: 0.08474352

of cad chf htn dm2 who, score: 0.07223131

confidence of prediction: 0.959388

Y\_true: [ 2 21 23 24 27 36 48]

Y\_pred: [ 2 20 23 24 27 44]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

of cad chf htn dm2 who presented, score: 0.017618975

in and chf last overloaded about 1mo, score: 0.010176052

statins hmg coa reductase, score: 0.0017926077

confidence of prediction: 0.603973

Y\_true: [ 3 21 36]

Y\_pred: [ 3 7 20]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)

avastin therapy htn hypercholesterolemia s p appendectomy and, score: 0.0018290167

sternocleidomastoids and upper trapezius, score: 0.0013374769

reconstruction mr known lastname has, score: 0.0011658112

confidence of prediction: 0.995308

Y\_true: [20]

Y\_pred: [20 41 43]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

tracks but non communicative otherwise, score: 0.02148242

keppra 1500mg q12 fludrocortisone, score: 0.0028104594

underwent a l hemicraniectomy, score: 0.0025251678

confidence of prediction: 0.897360

Y\_true: [ 4 13 14 18 21 24 36 38 39]

Y\_pred: [ 4 13 14 18 21 24 36 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history hypertension hyperlipidemia chronic renal insufficiency creatinine, score: 0.1162021

grafts hypertension hyperlipidemia s p herniorrhaphies s, score: 0.07505098

hospital1 atorvastatin 10mg daily, score: 0.007707241

confidence of prediction: 0.729866

Y\_true: [ 4 13 14 18 21 24 36 38 39]

Y\_pred: [ 4 13 14 18 21 24 36 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

triple bypass grafts were, score: 0.07823665

coronary artery bypass grafts hypertension hyperlipidemia, score: 0.075968534

incisions gently with mild, score: 0.044579662

confidence of prediction: 0.800599

Y\_true: [ 4 13 14 18 21 24 36 38 39]

Y\_pred: [ 4 13 14 18 21 24 36 38]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

cardiac catheterization showed vessel disease, score: 0.0076471553

left heart catheterization coronary angiogram history of, score: 0.004471599

varicosities none x neuro, score: 0.004084993

confidence of prediction: 0.979198

Y\_true: [ 4 13 14 18 21 24 36 38 39]

Y\_pred: [ 4 13 14 18 21 24 36 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed per, score: 0.08609222

cardiothoracic allergies patient recorded, score: 0.013766349

washing incisions gently with mild soap, score: 0.009067267

confidence of prediction: 0.829801

Y\_true: [ 4 13 14 18 21 24 36 38 39]

Y\_pred: [ 4 13 14 18 21 24 36 38]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

hyperlipidemia chronic renal insufficiency creatinine anxiety s p,

score: 0.033685446  
 extractions chronic renal insufficiency s p lumbar, score:  
 0.005237725  
 social history race caucasian, score: 0.0040678727

confidence of prediction: 0.963448  
 Y\_true: [ 4 13 14 18 21 24 36 38 39]  
 Y\_pred: [ 4 13 14 18 21 24 36 38]  
 top three important windows for true positive code 24 (414.01:  
 Coronary atherosclerosis of native coronary artery)  
 coronary artery disease s p coronary artery bypass grafts, score:  
 0.26733795  
 coronary artery bypass grafts, score: 0.12872314  
 s p herniorrhaphies s p cataract, score: 0.09553666

confidence of prediction: 0.933941  
 Y\_true: [ 4 13 14 18 21 24 36 38 39]  
 Y\_pred: [ 4 13 14 18 21 24 36 38]  
 top three important windows for true positive code 36 (585.9:  
 Chronic kidney disease, unspecified)  
 hyperlipidemia chronic renal insufficiency creatinine anxiety s p,  
 score: 0.0038801203  
 extractions chronic renal insufficiency s p lumbar, score:  
 0.0021336693  
 recorded as having no, score: 0.0019981463

confidence of prediction: 0.940153  
 Y\_true: [ 4 13 14 18 21 24 36 38 39]  
 Y\_pred: [ 4 13 14 18 21 24 36 38]  
 top three important windows for true positive code 38 (88.56:  
 Coronary arteriography using two catheters)  
 varicosities none x neuro, score: 0.022746515  
 cardiac catheterization showed vessel disease, score: 0.0065498436  
 left heart catheterization coronary angiogram history of, score:  
 0.0049504344

confidence of prediction: 0.832411  
 Y\_true: [ 9 20 31 35]  
 Y\_pred: [20 31 35]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)  
 humerus fracture social history, score: 0.23875687  
 medical history htn crack cocaine and etoh, score: 0.16358174  
 bp trend hypotension likely, score: 0.0132074645

confidence of prediction: 0.945428  
 Y\_true: [ 9 20 31 35]  
 Y\_pred: [20 31 35]  
 top three important windows for true positive code 31 (507.0:  
 Pneumonitis due to inhalation of food or vomitus)  
 for aspiration pna coverage etoh utox, score: 0.10344343  
 secondary to aspiration pneumonia versus pneumonitis improved,  
 score: 0.016975855  
 denies cp sob f, score: 0.0022747833

confidence of prediction: 0.827160  
Y\_true: [ 9 20 31 35]  
Y\_pred: [20 31 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
acute renal failure baseline cr on admission creatinine resolved, score: 0.105333224  
with ivf lactate improved with fluids, score: 0.01809665  
recorded as having no, score: 0.016200652

confidence of prediction: 0.938526  
Y\_true: [20 27 34]  
Y\_pred: [18 20 27 34]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
left thoracotomy hypertension gastric reflux disease, score: 0.30473056  
ischemic cardiomyopathy chronic systolic, score: 0.04380058  
ef hepatitis c implanted, score: 0.026870312

confidence of prediction: 0.969021  
Y\_true: [20 27 34]  
Y\_pred: [18 20 27 34]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
defibrillator was implanted a, score: 0.13428839  
pacer defibrillator end of life, score: 0.06978713  
pacer defibrillator with lv leads, score: 0.031478543

confidence of prediction: 0.652139  
Y\_true: [20 27 34]  
Y\_pred: [18 20 27 34]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
approach was utilized to, score: 0.020934148  
in gastric reflux hypertension social history patient, score: 0.009323931  
left thoracotomy hypertension gastric reflux disease discharge condition good, score: 0.004638402

confidence of prediction: 0.531343  
Y\_true: [11 36 42]  
Y\_pred: [17 36 40 42]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
history depression renal insufficiency social history married, score: 0.020380683  
[UNK] whilst returning home after a, score: 0.0052453205  
medication unknown discharge disposition, score: 0.0044380426

confidence of prediction: 0.637823  
Y\_true: [11 36 42]  
Y\_pred: [17 36 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
external ventriculostomy drain was, score: 0.065631196  
sah pt intubated prior to, score: 0.029964622  
hr supplemented with 2ns, score: 0.015141745

confidence of prediction: 0.549706  
Y\_true: [ 6 40 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
fio2 general intubated sedated young, score: 0.10703324  
she was intubated urine and, score: 0.07693641  
she was intubated for airway protection and, score: 0.012157307

confidence of prediction: 0.829196  
Y\_true: [ 6 40 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was intubated urine and, score: 0.032834087  
fio2 general intubated sedated young, score: 0.01771619  
food particles and an og, score: 0.014975732

confidence of prediction: 0.850872  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension dyslipidemia chronic back pain carpal, score:  
0.17783925  
diagnosis hypertension hyperlipidemia chronic back pain coronary,  
score: 0.09402393  
gentleman with recent complaints, score: 0.0082053775

confidence of prediction: 0.971161  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting surgery given, score: 0.20676838  
coronary artery bypass grafting left internal mammary artery to  
left, score: 0.08827861  
bypass graft x postoperative atrial, score: 0.059758816

confidence of prediction: 0.978430  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed without, score: 0.36388165  
lotions powders or ointments to, score: 0.172093

incisions no baths or, score: 0.14968605

confidence of prediction: 0.858507

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

polypectomy tonsillectomy toe surgery, score: 0.39351872

medical history hypertension dyslipidemia chronic back pain, score:  
0.15761882

discharge diagnosis hypertension hyperlipidemia chronic back pain,  
score: 0.06453694

confidence of prediction: 0.993935

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease ejection, score: 0.26902366

three vessel coronary artery bypass grafting, score: 0.18896148

coronary artery disease s p coronary artery bypass graft, score:  
0.06595343

confidence of prediction: 0.922415

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation over several days, score: 0.51576394

atrial fibrillation discharge condition good, score: 0.102266915

atrial and ventricular arrhythmias the, score: 0.02002665

confidence of prediction: 0.816819

Y\_true: [ 8 9 21 34 36 37 39 40 41 42 44]

Y\_pred: [34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

orthopaedics allergies morphine percocet, score: 0.02658462

diffuse neuropathy gerd htn physical exam lower, score: 0.01493963

postop per standard protocol initial postop pain, score:  
0.0033041807

confidence of prediction: 0.558435

Y\_true: [ 7 10]

Y\_pred: [10]

top three important windows for true positive code 10 (305.1:

Tobacco use disorder)

tobacco ppd x years etoh patient, score: 0.5097583

pancreatitis etoh abuse gastritis alcohol, score: 0.008650432

abuse positive for history of, score: 0.0028552173

confidence of prediction: 0.684290

Y\_true: [ 7 11]

Y\_pred: [11]



top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
medical history depression personal hx of hospital1, score:  
0.09201581  
restart on depression continue paxil medications on, score:  
0.014794633  
cobalt nickel attending first, score: 0.010477698

confidence of prediction: 0.959800

Y\_true: [ 2 4 11 20]

Y\_pred: [ 2 4 20]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
medications metformin 1000mg hospital1 paxil mg, score: 0.08865225  
history dm htn and hospital transferred, score: 0.027775157  
history dm2 htn hld social history, score: 0.016575085

confidence of prediction: 0.848509

Y\_true: [ 2 4 11 20]

Y\_pred: [ 2 4 20]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
paroxetine hcl mg tablet, score: 0.0077777207  
medications metformin 1000mg hospital1 paxil mg daily, score:  
0.0054132515  
medical history dm2 htn hld social history lives with, score:  
0.0036184131

confidence of prediction: 0.976761

Y\_true: [ 2 4 11 20]

Y\_pred: [ 2 4 20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history dm htn and hospital transferred, score: 0.21435116  
metformin 1000mg hospital1 paxil, score: 0.013978488  
metformin mg tablet sig, score: 0.004082804

confidence of prediction: 0.705898

Y\_true: [ 2 3 20 48]

Y\_pred: [ 3 20 40 42]

top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
medical history hypercholesterolemia htn social history lawyer,  
score: 0.094421215  
hctz lorazepam nortriptyline simvastatin and, score: 0.0068827975  
daily daily hydrochlorothiazide mg capsule, score: 0.002233075

confidence of prediction: 0.981777

Y\_true: [ 2 3 20 48]

Y\_pred: [ 3 20 40 42]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
lisinopril ibuprofen hctz lorazepam nortriptyline simvastatin,

score: 0.24083045  
history hypercholesterolemia htn social history lawyer drink, score:  
0.07892766  
the parent vessel in future coil, score: 0.0042351605

confidence of prediction: 0.579828  
Y\_true: [ 2 20 42]  
Y\_pred: [ 2 4 20 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
repair dm on insulin x, score: 0.091196045  
of dm htn and hld who, score: 0.051946755  
hld and dm who was transferred, score: 0.015482624

confidence of prediction: 0.976096  
Y\_true: [ 2 20 42]  
Y\_pred: [ 2 4 20 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of dm htn and hld who, score: 0.29319897  
pmh of htn hld and dm who, score: 0.13300236  
medical history htn depression hld, score: 0.07807847

confidence of prediction: 0.647221  
Y\_true: [ 2 20 42]  
Y\_pred: [ 2 4 20 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
remained intubated and was, score: 0.12657093  
and was intubated a ct, score: 0.037777424  
status intubated off sedation does, score: 0.036811486

confidence of prediction: 0.938453  
Y\_true: [ 4 28 41 47]  
Y\_pred: [ 4 18 20 26 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia osa cpap mask at, score:  
0.06478394  
solutab mg tablet rapid, score: 0.027178809  
admission nexium crestor niacin discharge medications oxycodone,  
score: 0.024550531

confidence of prediction: 0.509061  
Y\_true: [ 4 28 41 47]  
Y\_pred: [ 4 18 20 26 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
cycle tube feeds were continued, score: 0.07931458  
your feeding tube sutures become loose, score: 0.045820914  
your feeding tube falls out save, score: 0.045820914

confidence of prediction: 0.811956  
 Y\_true: [ 2 7 17 33 40 43 45]  
 Y\_pred: [40 42 43 44]  
 top three important windows for true positive code 40 (96.04:  
 Insertion of endotracheal tube)  
 she was intubated and surgery, score: 0.3888186  
 remained intubated and was, score: 0.045487612  
 she remained intubated but otherwise, score: 0.004582748

confidence of prediction: 0.565959  
 Y\_true: [ 2 7 17 33 40 43 45]  
 Y\_pred: [40 42 43 44]  
 top three important windows for true positive code 43 (96.72:  
 Continuous invasive mechanical ventilation for 96 consecutive hours  
 or more)  
 she was intubated and surgery, score: 0.19137578  
 remained intubated and was transferred, score: 0.14269094  
 she remained intubated but otherwise, score: 0.08570299

confidence of prediction: 0.754185  
 Y\_true: [ 0 1 4 8 11 31 33 37 46]  
 Y\_pred: [ 0 1 4 17 27 29 33 37 46]  
 top three important windows for true positive code 0 (038.9:  
 Unspecified septicemia)  
 attributed to sepsis ua was also found, score: 0.3869521  
 mortem septic shock pt remained severely, score: 0.01599385  
 occasional envelop occasional 20pm blood, score: 0.014825236

confidence of prediction: 0.914101  
 Y\_true: [ 0 1 4 8 11 31 33 37 46]  
 Y\_pred: [ 0 1 4 17 27 29 33 37 46]  
 top three important windows for true positive code 1 (244.9:  
 Unspecified acquired hypothyroidism)  
 osteoarthritis hypothyroidism dyslipidemia anemia social, score:  
 0.35834417  
 failure hypothyroidism she was maintained on, score: 0.102940194  
 of levothyroxine iv rather, score: 0.012690298

confidence of prediction: 0.797659  
 Y\_true: [ 0 1 4 8 11 31 33 37 46]  
 Y\_pred: [ 0 1 4 17 27 29 33 37 46]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 osteoarthritis hypothyroidism dyslipidemia anemia social history  
 tobacco, score: 0.2584845  
 simvastatin 20mg qhs lorazepam, score: 0.016018122  
 depression hypothyroid osteoarthritis recently moved, score:  
 0.008851539

confidence of prediction: 0.798457  
 Y\_true: [ 0 1 4 8 11 31 33 37 46]  
 Y\_pred: [ 0 1 4 17 27 29 33 37 46]  
 top three important windows for true positive code 33 (518.81: Acute  
 respiratory failure)

hypercarbic respiratory failure in setting, score: 0.32795146  
and respiratory failure hypothyroidism, score: 0.10170693  
hypercarbic respiratory failure pt presented, score: 0.08189167

confidence of prediction: 0.896163  
Y\_true: [ 0 1 4 8 11 31 33 37 46]  
Y\_pred: [ 0 1 4 17 27 29 33 37 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks mod 50pm urine rbc, score: 0.14654647  
leuks wbcs and many bacteria urine, score: 0.0684146  
escherichia coli organisms ml blood, score: 0.0139528345

confidence of prediction: 0.929394  
Y\_true: [ 0 1 4 8 11 31 33 37 46]  
Y\_pred: [ 0 1 4 17 27 29 33 37 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock pt remained severely, score: 0.20568727  
attributed to sepsis ua was also found, score: 0.17532374  
envelop occasional 20pm blood, score: 0.04382379

confidence of prediction: 0.938398  
Y\_true: [34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
medical history gerd social history bottles of, score: 0.06504865  
nasonex discharge medications oxycodone, score: 0.0016253914  
surgery allergies patient recorded as having no, score: 0.0012332974

confidence of prediction: 0.705340  
Y\_true: [ 2 20 31]  
Y\_pred: [ 2 20 28 31]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hypercholesterolemia arthritis dmii hernia repair social, score:  
0.11067053  
simvastatin glyburide asa unknown dose advil, score: 0.09239521  
checks tight bp control with, score: 0.02761348

confidence of prediction: 0.892258  
Y\_true: [ 2 20 31]  
Y\_pred: [ 2 20 28 31]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension s p pna, score: 0.18168192  
hypertension discharge condition expired discharge, score:  
0.18141997  
heterogeneous opacification at the, score: 0.046482302

confidence of prediction: 0.886287  
Y\_true: [ 2 20 31]

Y\_pred: [ 2 20 28 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
possible aspiration pneumonia secondary hypertension discharge,  
score: 0.20317678  
have hemiplegia on l rushed, score: 0.042241838  
dense hemiplegia and complete hemisensory, score: 0.037032057

confidence of prediction: 0.775272  
Y\_true: [10 30]  
Y\_pred: [30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
crohn s copd chronic pain psh bl knee, score: 0.025595153  
fevers chills redness or, score: 0.00022177516  
last name un fhl, score: 0.00014824755

confidence of prediction: 0.922889  
Y\_true: [ 8 11 18]  
Y\_pred: [18]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies patient recorded, score: 0.02850011  
lotions creams or ointments to, score: 0.016212566  
heart rrr x irregular, score: 0.004526879

confidence of prediction: 0.827991  
Y\_true: [33 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
arrangments to accomodate her, score: 0.0061985455  
nodes her tumor was, score: 0.0015905919  
adriamycin and cytoxan and, score: 0.00094884966

confidence of prediction: 0.663147  
Y\_true: [ 6 16 33 42]  
Y\_pred: [ 6 7 28 33 35 40 42 43]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
intubated 11am lactate 11am freeca, score: 0.20009944  
for his acidosis abdominal, score: 0.19746687  
soon maximally dosed on levophed phenylephrine and, score:  
0.05605955

confidence of prediction: 0.774224  
Y\_true: [ 6 16 33 42]  
Y\_pred: [ 6 7 28 33 35 40 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
to respiratory failure the, score: 0.113000385  
intubated 11am lactate 11am, score: 0.07050504  
tidal vol peep o2, score: 0.0545042

confidence of prediction: 0.745248  
Y\_true: [ 6 16 33 42]  
Y\_pred: [ 6 7 28 33 35 40 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
after intubation sedation for endoscopy, score: 0.33293274  
was intubated for airway protection, score: 0.15741514  
was intubated and sedated, score: 0.0985465

confidence of prediction: 0.909930  
Y\_true: [10 15 20 22 24 27 38]  
Y\_pred: [20 24 27 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
and lasix milligrams on, score: 0.09536265  
lasix milligrams p o, score: 0.042671405  
milligrams of morphine milligrams of intravenous loproressor, score:  
0.035938874

confidence of prediction: 0.964359  
Y\_true: [10 15 20 22 24 27 38]  
Y\_pred: [20 24 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease cardiac, score: 0.13039698  
artery mid circumflex and a distal, score: 0.11403343  
coronary artery disease the, score: 0.11036652

confidence of prediction: 0.853909  
Y\_true: [10 15 20 22 24 27 38]  
Y\_pred: [20 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure at, score: 0.21151814  
congestive heart failure the patient had, score: 0.11980662  
heart failure on admission with, score: 0.077987984

confidence of prediction: 0.617144  
Y\_true: [10 15 20 22 24 27 38]  
Y\_pred: [20 24 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization on showed an, score: 0.11023554  
mid circumflex and a distal, score: 0.048024375  
cardiac catheterization on and cardiac catheterization showed  
moderately elevated, score: 0.0363125

confidence of prediction: 0.544252  
Y\_true: [ 4 21 24 26 36 48]  
Y\_pred: [ 4 7 15 21 26 27 33 36 38 40 42 44 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia ckd baseline, score: 0.23374492

of hypertension hyperlipidemia ckd, score: 0.13941981  
of htn hyperlipidemia ckd, score: 0.1047612

confidence of prediction: 0.879377  
Y\_true: [ 4 21 24 26 36 48]  
Y\_pred: [ 4 7 15 21 26 27 33 36 38 40 42 44 48]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
hyperlipidemia ckd baseline scr cad s, score: 0.121883474  
hyperlipidemia ckd severe aortic stenosis, score: 0.1022781  
chronic kidney disease discharge condition, score: 0.08166517

confidence of prediction: 0.635168  
Y\_true: [ 4 21 24 26 36 48]  
Y\_pred: [ 4 7 15 21 26 27 33 36 38 40 42 44 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
af with rvr and hypotensive, score: 0.09867707  
atrial fibrillation with rvr to, score: 0.020128863  
estgfr using this 40am, score: 0.011849302

confidence of prediction: 0.809340  
Y\_true: [ 4 21 24 26 36 48]  
Y\_pred: [ 4 7 15 21 26 27 33 36 38 40 42 44 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease discharge condition, score: 0.09859564  
hyperlipidemia ckd severe aortic stenosis, score: 0.08145129  
hyperlipidemia ckd baseline scr cad s, score: 0.07699979

confidence of prediction: 0.860328  
Y\_true: [ 4 21 24 26 36 48]  
Y\_pred: [ 4 7 15 21 26 27 33 36 38 40 42 44 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
p 3v cabg in, score: 0.28320584  
cardiac history cabg lima lad svg, score: 0.030451935  
coronary artery disease s p cabg critical, score: 0.003645167

confidence of prediction: 0.608236  
Y\_true: [ 6 20 23 26 42 49]  
Y\_pred: [20 26 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
surgery and radiotherapy hypertension retinal hemorrhage and, score:  
0.0054851724  
and [UNK] away at, score: 0.004238089  
collapsed in front of, score: 0.0011947737

confidence of prediction: 0.928937  
Y\_true: [ 6 20 23 26 42 49]  
Y\_pred: [20 26 49]  
top three important windows for true positive code 26 (427.31:

Atrial fibrillation)  
fib and old cerebellar, score: 0.0985035  
atrial fibrillation tia in myocardial, score: 0.049259733  
she takes coumadin mg, score: 0.025724394

confidence of prediction: 0.894086  
Y\_true: [ 6 20 23 26 42 49]  
Y\_pred: [20 26 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
she takes coumadin mg every, score: 0.46843904  
was on coumadin for her a fib and, score: 0.029885992  
fib and old cerebellar, score: 0.004984083

confidence of prediction: 0.981443  
Y\_true: [20 40]  
Y\_pred: [ 4 20 27 33 40 43]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
history of hypertension hyperlipidemia and alcoholic cirrhosis who presents, score: 0.096025094  
history of hypertension hyperlipidemia alcoholic cirrhosis and recently diagnosed, score: 0.096025094  
hypertension alcoholism alcoholic cirrhosis, score: 0.040234707

confidence of prediction: 0.645504  
Y\_true: [20 40]  
Y\_pred: [ 4 20 27 33 40 43]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
peep general intubated sedated diaphoretic, score: 0.20108502  
pulmonary alveolar proteinosis social, score: 0.100618325  
pulmonary alveolar proteinosis the, score: 0.0883476

confidence of prediction: 0.615597  
Y\_true: [ 2 6 7 16 17 20 29 33 35 40 42]  
Y\_pred: [ 3 10 24 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
new acute renal failure likely due to, score: 0.018294947  
this was improving on, score: 0.011736139  
etodolac indomethacin naproxen sertraline oxycodone, score: 0.007047276

confidence of prediction: 0.969258  
Y\_true: [20 37]  
Y\_pred: [20 37]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
his missing breakfast this, score: 0.021626893  
today after falling down, score: 0.021262651  
[UNK] trazodone zyprexa asa, score: 0.014466513

confidence of prediction: 0.916066



Y\_true: [20 37]  
Y\_pred: [20 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection discharge condition, score: 0.22707047  
a urinary tract infection please be, score: 0.008008392  
for a urinary tract infection his home medications, score:  
0.0034373638

confidence of prediction: 0.771422  
Y\_true: [ 0 4 7 20 31 33 40 43 44 46]  
Y\_pred: [ 4 7 20 31 44]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
medical history dyslipidemia htn h o bleeding, score: 0.16383545  
aripiprazole atorvastatin benicar bupropion escitalopram oxalate  
hydromorphone, score: 0.028322345  
bupropion mg tablet sig, score: 0.013342091

confidence of prediction: 0.957678  
Y\_true: [ 0 4 7 20 31 33 40 43 44 46]  
Y\_pred: [ 4 7 20 31 44]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
extension ankle dorsiflexion and plantar, score: 0.39776182  
thoracolumbar fusion with instrumentation he, score: 0.062351685  
service orthopaedics allergies patient recorded as having no, score:  
0.025214545

confidence of prediction: 0.963684  
Y\_true: [ 0 4 7 20 31 33 40 43 44 46]  
Y\_pred: [ 4 7 20 31 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history dyslipidemia htn h o bleeding, score: 0.098778956  
t9 l5 history of, score: 0.084961444  
aripiprazole atorvastatin benicar bupropion escitalopram oxalate  
hydromorphone, score: 0.02838668

confidence of prediction: 0.963202  
Y\_true: [ 0 4 7 20 31 33 40 43 44 46]  
Y\_pred: [ 4 7 20 31 44]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
developed an aspiration pneumonia and was placed, score: 0.029065968  
s1 dermatomes clonus reflexes, score: 0.0007952542  
diagnosis scoliosis aspiration pneumonia post op blood, score:  
0.0006847709

confidence of prediction: 0.769678  
Y\_true: [ 0 4 7 20 31 33 40 43 44 46]  
Y\_pred: [ 4 7 20 31 44]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)

was transfused prbcs and [UNK] for, score: 0.44379535  
l5 anterior fusion via thoracotomy, score: 0.042514376  
extension ankle dorsiflexion and, score: 0.032449365

confidence of prediction: 0.919903

Y\_true: [ 5 11 41 43]

Y\_pred: [17 40 41 43]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
ivf tube feeds were started on, score: 0.08274527  
monitor placed icp remained ns infusion started, score: 0.03282471  
and unreactive mannitol given and emergent, score: 0.009691886

confidence of prediction: 0.934785

Y\_true: [ 5 11 41 43]

Y\_pred: [17 40 41 43]

top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
monitor placed icp remained ns infusion started, score: 0.30235353  
unreactive mannitol given and, score: 0.053754605  
count was routinely monitored and, score: 0.035071574

confidence of prediction: 0.786742

Y\_true: [ 2 3 6 20 33 37]

Y\_pred: [ 2 20 31 37]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily glipizide mg daily ezetimibe mg, score: 0.023159051  
glipizide mg tablet extended, score: 0.009287902  
history pmh dm2 htn hypercholesterol scalp melanoma, score:  
0.0054648635

confidence of prediction: 0.950979

Y\_true: [ 2 3 6 20 33 37]

Y\_pred: [ 2 20 31 37]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hydrochlorothiazide mg daily atenolol mg, score: 0.14341672  
hydrochlorothiazide mg tablet sig, score: 0.1200215  
softners with narcotics complete, score: 0.06781983

confidence of prediction: 0.589125

Y\_true: [ 2 3 6 20 33 37]

Y\_pred: [ 2 20 31 37]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
for urinary tract infection followup instructions, score:  
0.039969653  
rod s organisms ml cxr, score: 0.037676282  
culture with gnr he, score: 0.013110569

confidence of prediction: 0.608701

Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic shock respiratory failure pneumonia, score: 0.119108856  
he was given calcium, score: 0.11623719  
pneumonia and sepsis unfortunately, score: 0.064998895  
  
confidence of prediction: 0.944877  
Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
h o chf copd per chart presented, score: 0.03290947  
failure failure in terms of, score: 0.0041196635  
renal failure discharge condition, score: 0.0037746516  
  
confidence of prediction: 0.659305  
Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
lobe pneumonia multiple chronic right sided, score: 0.047172375  
respiratory failure pneumonia hyperkalemia liver, score: 0.024643704  
hospital with pneumonia and sepsis, score: 0.02400894  
  
confidence of prediction: 0.525384  
Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
o chf copd per chart presented to, score: 0.23871084  
found out copd and pulm htn social history lives with long time,  
score: 0.019996116  
the right ventricular cavity, score: 0.0098293945  
  
confidence of prediction: 0.911021  
Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
respiratory failure pneumonia hyperkalemia, score: 0.07006485  
he was intubated and sedated, score: 0.06903449  
mechanical ventilation abg demonstrated he, score: 0.054005817  
  
confidence of prediction: 0.650616  
Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
intubation terminal extubation history of, score: 0.095991716  
tube og tube cardiovascular, score: 0.056471158  
he was intubated and sedated hr, score: 0.043253157

confidence of prediction: 0.915701  
Y\_true: [ 0 17 27 29 30 33 42 46]  
Y\_pred: [ 0 6 27 29 30 33 40 42 43 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock respiratory failure pneumonia hyperkalemia, score:  
0.09467815  
he was given calcium, score: 0.05296385  
he was given aggressive, score: 0.05296385

confidence of prediction: 0.615149  
Y\_true: [ 6 11 16 17 26 31 33 35 37 40 42]  
Y\_pred: [11 17 26 33 40 42 43]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
bipolar disorder depression social history pt has, score:  
0.118625924  
pt was taken to, score: 0.013082289  
recorded as having no, score: 0.010411164

confidence of prediction: 0.961268  
Y\_true: [ 6 11 16 17 26 31 33 35 37 40 42]  
Y\_pred: [11 17 26 33 40 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
again and [UNK] rounds, score: 0.41858786  
venous line placement arterial line placement history of, score:  
0.37052438  
upon rewarming pt was found to, score: 0.011843786

confidence of prediction: 0.965817  
Y\_true: [ 6 11 16 17 26 31 33 35 37 40 42]  
Y\_pred: [11 17 26 33 40 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
a fib with aberrancy he was, score: 0.0048981  
expired discharge diagnosis discharge, score: 0.0029686957  
abg notable for acidosis, score: 0.0018411176

confidence of prediction: 0.523339  
Y\_true: [ 6 11 16 17 26 31 33 35 37 40 42]  
Y\_pred: [11 17 26 33 40 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
notable for acidosis he, score: 0.09404736  
the intubated status of, score: 0.07667143  
he was intubated at [UNK] with, score: 0.07472985

confidence of prediction: 0.546508  
Y\_true: [ 6 11 16 17 26 31 33 35 37 40 42]  
Y\_pred: [11 17 26 33 40 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

caucasian male intubated in nard heent, score: 0.2629345  
he was intubated at [UNK], score: 0.03990301  
the intubated status of, score: 0.02324084

confidence of prediction: 0.951650  
Y\_true: [ 6 11 16 17 26 31 33 35 37 40 42]  
Y\_pred: [11 17 26 33 40 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
caucasian male intubated in nard heent pupils, score: 0.035370614  
the intubated status of, score: 0.03242665  
he was intubated at [UNK], score: 0.03181927

confidence of prediction: 0.846061  
Y\_true: [ 1 13 18 20 24]  
Y\_pred: [ 1 4 13 18 20 24]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
hypertension hypothyroidism asthmatic bronchitis prostate, score:  
0.25311726  
qd levoxyl 100mcg qd lisinopril 5mg, score: 0.23504135  
refills levothyroxine mcg tablet sig one, score: 0.028061863

confidence of prediction: 0.991428  
Y\_true: [ 1 13 18 20 24]  
Y\_pred: [ 1 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.5479625  
descending artery saphenous vein graft, score: 0.041390847  
coronary artery bypass graft x please, score: 0.03094965

confidence of prediction: 0.973254  
Y\_true: [ 1 13 18 20 24]  
Y\_pred: [ 1 4 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.26632744  
cardiothoracic allergies lipitor morphine, score: 0.05449428  
marginal saphenous vein graft, score: 0.014085268

confidence of prediction: 0.813889  
Y\_true: [ 1 13 18 20 24]  
Y\_pred: [ 1 4 13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh hyperlipidemia hypertension hypothyroidism asthmatic, score:  
0.2059232  
qd lescol 40mg qd levoxyl 100mcg qd lisinopril, score: 0.11791348  
history hyperlipidemia hypertension hypothyroidism asthmatic, score:  
0.08869607

confidence of prediction: 0.999384

Y\_true: [ 1 13 18 20 24]  
Y\_pred: [ 1 4 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.5711334  
coronary artery disease s p coronary artery bypass graft, score:  
0.12091262  
descending artery saphenous vein graft, score: 0.021688228

confidence of prediction: 0.982655  
Y\_true: [ 3 14 20 24 38 48]  
Y\_pred: [ 2 13 15 18 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease all, score: 0.1082214  
coronary artery disease status, score: 0.044418253  
disease right coronary artery, score: 0.034433648

confidence of prediction: 0.823305  
Y\_true: [ 3 14 20 24 38 48]  
Y\_pred: [ 2 13 15 18 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
severely diffusely diseased proximally subtotally occluded, score:  
0.7676289  
marginal the distal left, score: 0.025771376  
catheterization she was started, score: 0.017267155

confidence of prediction: 0.616495  
Y\_true: [ 4 20 32]  
Y\_pred: [ 4 20 31]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
gentleman with metastatic melanoma, score: 0.080916755  
metastases hypertension hyperlipidemia bph gout social history,  
score: 0.064600565  
metastases hypertension hyperlipidemia bph gout discharge condition,  
score: 0.064600565

confidence of prediction: 0.996836  
Y\_true: [ 4 20 32]  
Y\_pred: [ 4 20 31]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
isosorbide mononitrate mg tablet, score: 0.030833958  
on admission hctz mg, score: 0.023372825  
discharge medications hydrochlorothiazide mg, score: 0.013828541

confidence of prediction: 0.801325  
Y\_true: [41]  
Y\_pred: [41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
j tube feeds as he, score: 0.3431989

the tube feeds well on, score: 0.14498235  
began tube feeds and his, score: 0.020133268

confidence of prediction: 0.851006  
Y\_true: [ 3 20 24 26 49]  
Y\_pred: [20 26 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn afib family history nc, score: 0.39632988  
coumadin in days after, score: 0.10200144  
to the elevator and tripped over, score: 0.08863595

confidence of prediction: 0.975201  
Y\_true: [ 3 20 24 26 49]  
Y\_pred: [20 26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib family history nc physical, score: 0.63638395  
elevator and tripped over his, score: 0.033795826  
for afib who is status post, score: 0.0068475325

confidence of prediction: 0.605625  
Y\_true: [ 3 20 24 26 49]  
Y\_pred: [20 26 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
regarding restarting coumadin in days after, score: 0.5587711  
on admission coumadin mg, score: 0.1976559  
s pm coumadin mg, score: 0.06610183

confidence of prediction: 0.721491  
Y\_true: [30 33 36 48]  
Y\_pred: [24 27 30 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
history chf copd on o2 2liters and, score: 0.052145682  
in emergency department requiring, score: 0.00021955375  
heart rate was bradycardic, score: 0.0001984553

confidence of prediction: 0.931999  
Y\_true: [ 4 13 18 20 24 39]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pda stenosis hyperlipidemia borderline hypertension osteoarthritis  
trigger, score: 0.078436576  
with htn hld cad stress test and, score: 0.051458832  
hyperlipidemia with plans for, score: 0.042099547

confidence of prediction: 0.933993  
Y\_true: [ 4 13 18 20 24 39]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

cabg history of present, score: 0.59042877  
creams lotions powders or ointments to incisions no, score:  
0.021937506  
with 3vd lad midvessel and d1, score: 0.020865168

confidence of prediction: 0.966855  
Y\_true: [ 4 13 18 20 24 39]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies penicillins sulfa, score: 0.01823814  
cabg history of present illness yo m, score: 0.014001282  
washing incisions no baths or, score: 0.0040517356

confidence of prediction: 0.996302  
Y\_true: [ 4 13 18 20 24 39]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
known 3vd htn hyperlipidemia with plans, score: 0.10640008  
hyperlipidemia borderline hypertension osteoarthritis trigger  
finger, score: 0.06319108  
with htn hld cad stress test, score: 0.02875903

confidence of prediction: 0.983458  
Y\_true: [ 4 13 18 20 24 39]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
and known 3vd htn, score: 0.093370564  
cabg history of present, score: 0.09276635  
3vd lad midvessel and d1, score: 0.032024052

confidence of prediction: 0.941374  
Y\_true: [ 1 23 26 37]  
Y\_pred: [ 1 20 26 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
mtx hypothyroidism on levoxyl afib not on, score: 0.6696452  
daily levoxyl 50mcg q9pm celexa 10mg, score: 0.008977732  
daily levothyroxine mcg tablet sig, score: 0.0074792425

confidence of prediction: 0.987848  
Y\_true: [ 1 23 26 37]  
Y\_pred: [ 1 20 26 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
chronic constipation bisacodyl mg, score: 0.0056220153  
fall major surgical or, score: 0.0021111409  
fluid with otherwise clear, score: 0.0011206855

confidence of prediction: 0.888097  
Y\_true: [ 1 23 26 37]  
Y\_pred: [ 1 20 26 37]



top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
many bacteria ucx pending inr, score: 0.08740153  
levoxyl afib not on, score: 0.05369542  
the foramen magnum stable, score: 0.019640464

confidence of prediction: 0.704311

Y\_true: [20]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
obstructive cardiomyopathy hcm an apical, score: 0.16729675  
medical history hypertension diagnosed years ago, score: 0.13994683  
htn and mi at 49yrs s, score: 0.052791394

confidence of prediction: 0.552581

Y\_true: [7]

Y\_pred: [7 9]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
bleeding soaking super tampons and, score: 0.39857128  
rosacea atypical melanocytic proliferation past, score: 0.07513663  
recorded as having no, score: 0.04957337

confidence of prediction: 0.755345

Y\_true: [42]

Y\_pred: [42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
at scene intubated for combativeness with multiple, score:  
0.15108539  
status intubated examined approx hours after, score: 0.03160628  
gen intubated at the scene with, score: 0.027994566

confidence of prediction: 0.814946

Y\_true: [ 6 10 19]

Y\_pred: [11 19]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
closed and hemodialysis was stopped, score: 0.19360562  
insertion hemodialysis history of, score: 0.10844704  
to initiate dialysis in the micu on, score: 0.043449514

confidence of prediction: 0.921776

Y\_true: [ 2 8 13 18 24]

Y\_pred: [ 2 13 18 20 24]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily metformin glucophage mg po bid, score: 0.0698891  
unknown metformin glucophage mg po bid, score: 0.059280574  
history diabetes mellitus asthma prostate, score: 0.016594619

confidence of prediction: 0.989906  
Y\_true: [ 2 8 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left internal mammary artery to left,  
score: 0.68903613  
coronary artery bypass graft x overall, score: 0.03891768  
wires were discontinued without, score: 0.027443483

confidence of prediction: 0.986679  
Y\_true: [ 2 8 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.74451387  
diuresed toward the preoperative, score: 0.021006476  
cardiothoracic allergies iv dye, score: 0.0029313718

confidence of prediction: 0.999631  
Y\_true: [ 2 8 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.7783113  
coronary artery disease he is, score: 0.036624216  
coronary artery disease s p coronary artery bypass graft, score:  
0.011798635

confidence of prediction: 0.816749  
Y\_true: [ 3 20 33 34 40 42]  
Y\_pred: [ 3 20 33 40 42]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
history gout htn hypercholesterolemia erectile dsyfunction  
angioedema, score: 0.0023919926  
with pitting edema respiratory, score: 0.001475913  
ace inhibitors nsaid non, score: 0.0009415695

confidence of prediction: 0.918309  
Y\_true: [ 3 20 33 34 40 42]  
Y\_pred: [ 3 20 33 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history gout htn hypercholesterolemia erectile dsyfunction  
angioedema, score: 0.3689806  
ace inhibitors nsaid non steroidal, score: 0.18172342  
inhibitors aspirin ibuprofen or, score: 0.10067397

confidence of prediction: 0.777955  
Y\_true: [ 3 20 33 34 40 42]  
Y\_pred: [ 3 20 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

to electively intubate the, score: 0.13638873  
otolaryngology allergies ace inhibitors, score: 0.075923644  
peep fio2 po2 pco2 ph, score: 0.033369306

confidence of prediction: 0.966700  
Y\_true: [ 3 20 33 34 40 42]  
Y\_pred: [ 3 20 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
to electively intubate the patient, score: 0.45871833  
optic intubation was performed successfully the, score: 0.009622757  
were intubated with a, score: 0.0042416477

confidence of prediction: 0.772534  
Y\_true: [ 3 20 33 34 40 42]  
Y\_pred: [ 3 20 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
to electively intubate the patient, score: 0.41966522  
optic intubation was performed successfully the, score: 0.018006928  
he was tolerating a, score: 0.005860389

confidence of prediction: 0.898602  
Y\_true: [ 1 8 18 20]  
Y\_pred: [ 1 18 20 30]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
prn levothyroxine 50mcg po daily piroxicam, score: 0.22106037  
disease hypothyroidism kidney stones degenerative, score: 0.03852913  
levothyroxine mcg tablet sig, score: 0.022127887

confidence of prediction: 0.986487  
Y\_true: [ 1 8 18 20]  
Y\_pred: [ 1 18 20 30]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7470688  
diuresed toward the preoperative, score: 0.021078566  
cardiothoracic allergies aspirin penicillins, score: 0.009215941

confidence of prediction: 0.975962  
Y\_true: [ 1 8 18 20]  
Y\_pred: [ 1 18 20 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
p avr hypertension asthma chronic obstructive pulmonary, score:  
0.14640734  
medical history hypertension asthma copd hypothyroidism kidney  
stones degenerative, score: 0.1275944  
significant for hypertension copd hypothyroidism and, score:  
0.043886114

confidence of prediction: 0.886622

Y\_true: [6 7]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
underwent endoscopy that was, score: 0.12751314  
and underwent egd in the, score: 0.095607094  
jejunum her bleeding stopped, score: 0.08899895

confidence of prediction: 0.909811  
Y\_true: [21 26 27 29 35 37 48]  
Y\_pred: [ 2 26 27 35 41 43 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib bp rr tachypnic satting, score: 0.8455179  
afib dm name ni, score: 0.015789507  
atrial fibrillation not on ac, score: 0.014254521

confidence of prediction: 0.948715  
Y\_true: [21 26 27 29 35 37 48]  
Y\_pred: [ 2 26 27 35 41 43 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf exacerbation back to, score: 0.16878743  
diastolic chf who has had, score: 0.1195259  
chf hospital1 stage ii, score: 0.083991736

confidence of prediction: 0.818643  
Y\_true: [21 26 27 29 35 37 48]  
Y\_pred: [ 2 26 27 35 41 43 48]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
bnp elevated lactate no, score: 0.29321516  
range [UNK] arf acute on chronic dchf, score: 0.0342486  
recorded as having no, score: 0.018519051

confidence of prediction: 0.643764  
Y\_true: [21 26 27 29 35 37 48]  
Y\_pred: [ 2 26 27 35 41 43 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
course after cabg and, score: 0.12578271  
including cad afib dm, score: 0.050205115  
eat today daughter went to, score: 0.02761824

confidence of prediction: 0.649918  
Y\_true: [40 41 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
transfer intubation major surgical, score: 0.549046  
was reintubated at placed, score: 0.11057517  
in intubation extubation was, score: 0.08590694

confidence of prediction: 0.814386

Y\_true: [40 41 42]

Y\_pred: [40 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

transfer intubation major surgical, score: 0.4098038

was reintubated at placed, score: 0.14221926

was intubated at midnight, score: 0.07742584

confidence of prediction: 0.836888

Y\_true: [ 5 9 27 31 41 43]

Y\_pred: [31 33 40 42]

top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)

for aspiration pneumonia and rle cellulitis, score: 0.19325347

o aspiration pna transfered from hospital1, score: 0.05527464

trach was replaced patient, score: 0.011427723

confidence of prediction: 0.988567

Y\_true: [13 18 24 34]

Y\_pred: [13 18 24 34]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft, score: 0.5267577

left internal mammary artery to the, score: 0.082490206

coronary artery bypass graft, score: 0.08058585

confidence of prediction: 0.980484

Y\_true: [13 18 24 34]

Y\_pred: [13 18 24 34]

top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies patient recorded, score: 0.014269794

washing incisions gently with mild soap, score: 0.009398864

marginal history of present, score: 0.009050767

confidence of prediction: 0.999583

Y\_true: [13 18 24 34]

Y\_pred: [13 18 24 34]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

coronary artery bypass graft, score: 0.69123787

coronary artery bypass graft, score: 0.02952184

coronary artery disease discharge, score: 0.027885418

confidence of prediction: 0.782624

Y\_true: [13 18 24 34]

Y\_pred: [13 18 24 34]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

gerd like sympoms chest, score: 0.11881185

discharge diagnosis gerd barrett s esophagus coronary, score: 0.070604

of intermittant gerd like, score: 0.0407666

confidence of prediction: 0.911495  
Y\_true: [ 1 20]  
Y\_pred: [ 1 20]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
sss hypothyroidism thyroidectomy appendectomy depression, score:  
0.2135579  
daily levothyroxine mcg tablet sig one, score: 0.0137834335  
hha 7a 5p and, score: 0.0006806291

confidence of prediction: 0.930732  
Y\_true: [ 1 20]  
Y\_pred: [ 1 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension s p permanent pacemaker sss  
hypothyroidism thyroidectomy appendectomy, score: 0.25494516  
pepcid ac ltab vit d mvi, score: 0.081475705

confidence of prediction: 0.881027  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
p stents hyperlipidemia hypertension social history he, score:  
0.25124326  
mental status hyperlipidemia hypertension discharge condition alert,  
score: 0.027037645  
p cabg postop etoh withdrawal, score: 0.0045377654

confidence of prediction: 0.990027  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting times three left, score: 0.6299599  
coronary artery bypass grafting surgery by, score: 0.0963742  
intraop tee prebypass no, score: 0.021447843

confidence of prediction: 0.981538  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies patient recorded, score: 0.012474731  
bypass grafting times three left, score: 0.011442064  
tee prebypass no atrial septal, score: 0.009506399

confidence of prediction: 0.992276  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

stents hyperlipidemia hypertension social history he [UNK], score:  
0.23626985  
added for hypertension over, score: 0.15847833  
status hyperlipidemia hypertension discharge condition alert, score:  
0.10649472

confidence of prediction: 0.997319  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.43611187  
coronary artery disease s p cabg postop, score: 0.0923277  
coronary artery disease s p stents hyperlipidemia, score:  
0.036073625

confidence of prediction: 0.927875  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was reintubated for safety on postoperative, score: 0.014316763  
became increasingly tachypneic tachycardic and, score: 0.00086547184  
was added for hypertension, score: 0.00067769503

confidence of prediction: 0.749481  
Y\_true: [ 4 7 13 18 20 24 40 41 42]  
Y\_pred: [ 4 13 18 20 24 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was reintubated for safety on postoperative, score: 0.0069030924  
he became increasingly tachypneic tachycardic and hypertensive he  
concomitantly became more, score: 0.0012198867  
over several days he, score: 0.0005824745

confidence of prediction: 0.691431  
Y\_true: [11]  
Y\_pred: [11]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
celexa overdose depression secondary diagnosis asthma, score:  
0.12716106  
history asthma depression social history patient reports, score:  
0.11933666  
took tabs celexa 40mg for total, score: 0.0065667504

confidence of prediction: 0.834446  
Y\_true: [ 2 3 5 20 29]  
Y\_pred: [ 2 4 20 29 33]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
metformin mg hospital1 glipizide mg hospital1 aspirin mg, score:

0.020436654

history htn dm2 hyperlipidemia bph social history, score:

0.020142563

business then in a, score: 0.019644031

confidence of prediction: 0.882644

Y\_true: [ 2 3 5 20 29]

Y\_pred: [ 2 4 20 29 33]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

his concurrent hypertension he was started, score: 0.14599529

sporting goods store has children, score: 0.071648374

medical history htn dm2 hyperlipidemia bph social, score:

0.034689307

confidence of prediction: 0.717140

Y\_true: [ 2 3 5 20 29]

Y\_pred: [ 2 4 20 29 33]

top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)

a possible pneumonia given left basilar, score: 0.025277557

lobes no pna mild septal, score: 0.023584563

hyponatremia treated with iv, score: 0.01781339

confidence of prediction: 0.901634

Y\_true: [ 7 47]

Y\_pred: [ 7 20]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

anemia she was transfused units of prbc and units of, score:

0.36067238

of serial hematocrits a protonix drip, score: 0.098162636

she developed melena for, score: 0.02373834

confidence of prediction: 0.957682

Y\_true: [ 4 13 18 20 23 24 34 39]

Y\_pred: [ 4 13 18 24 34]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

cabg hypertension dyslipidemia prior myocardial infarction sleep, score: 0.44742727

of rca hyperlipidemia hypertension gastroesophageal reflux disease, score: 0.042183865

hospital11 isosorbide 10mg qd simvastatin 20mg, score: 0.008028786

confidence of prediction: 0.954673

Y\_true: [ 4 13 18 20 23 24 34 39]

Y\_pred: [ 4 13 18 24 34]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting surgery by, score: 0.18956871

coronary artery bypass grafting utilizing the, score: 0.08093531

coronary artery bypass surgery, score: 0.07570865



confidence of prediction: 0.984429  
 Y\_true: [ 4 13 18 20 23 24 34 39]  
 Y\_pred: [ 4 13 18 24 34]  
 top three important windows for true positive code 18 (39.61:  
 Extracorporeal circulation auxiliary to open heart surgery)  
 wires were discontinued without, score: 0.80163664  
 creams or ointments to, score: 0.11596757  
 diuresed toward his preoperative, score: 0.037801236

confidence of prediction: 0.972039  
 Y\_true: [ 4 13 18 20 23 24 34 39]  
 Y\_pred: [ 4 13 18 24 34]  
 top three important windows for true positive code 24 (414.01:  
 Coronary atherosclerosis of native coronary artery)  
 coronary artery disease s p cabg hypertension, score: 0.25200182  
 coronary artery disease myocardial infarction ptca, score:  
 0.09846037  
 descending artery with saphenous, score: 0.05526364

confidence of prediction: 0.901167  
 Y\_true: [ 4 13 18 20 23 24 34 39]  
 Y\_pred: [ 4 13 18 24 34]  
 top three important windows for true positive code 34 (530.81:  
 Esophageal reflux)  
 hypertension gastroesophageal reflux disease obstructive sleep  
 apnea, score: 0.083924934  
 postop course was uneventful, score: 0.0011188542  
 allergies patient recorded as having no, score: 0.00048409257

confidence of prediction: 0.873188  
 Y\_true: [11 18]  
 Y\_pred: [11 18 24]  
 top three important windows for true positive code 11 (311:  
 Depressive disorder, not elsewhere classified)  
 parkinson s depression prostatism social history quit, score:  
 0.028118541  
 dz depression prostatism discharge condition good, score:  
 0.017180957  
 the staff radiologist dr, score: 0.0019970913

confidence of prediction: 0.982814  
 Y\_true: [11 18]  
 Y\_pred: [11 18 24]  
 top three important windows for true positive code 18 (39.61:  
 Extracorporeal circulation auxiliary to open heart surgery)  
 wires were discontinued without incident, score: 0.79600877  
 cardiothoracic allergies shellfish derived, score: 0.04781412  
 avr with dr last, score: 0.0016974888

confidence of prediction: 0.777133  
 Y\_true: [ 4 8 20 26 32 34 47]  
 Y\_pred: [ 9 20 26 27]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)

history pmh htn gout afib type b, score: 0.12147572  
discharge medications diovan hct mg tablet, score: 0.07359697  
history cad dm physical, score: 0.058571246

confidence of prediction: 0.963952  
Y\_true: [ 4 8 20 26 32 34 47]  
Y\_pred: [ 9 20 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib he was deemed stable, score: 0.25439665  
atrial fibrillation who had presented, score: 0.101928376  
afib type b thoracic, score: 0.009553963

confidence of prediction: 0.835010  
Y\_true: [ 2 18 21 25 30 36]  
Y\_pred: [ 2 4 18 25 30 36]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus hypertension chronic  
obstructive, score: 0.07173943  
non insulin diabetes mellitus hypertension hyperlipidemia mitral,  
score: 0.011109443  
needed glyburide mg tablet sig, score: 0.0076505803

confidence of prediction: 0.911619  
Y\_true: [ 2 18 21 25 30 36]  
Y\_pred: [ 2 4 18 25 30 36]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires also in a, score: 0.10138739  
cardiothoracic allergies patient recorded, score: 0.020087907  
incisions take all medications, score: 0.017033482

confidence of prediction: 0.613497  
Y\_true: [ 2 18 21 25 30 36]  
Y\_pred: [ 2 4 18 25 30 36]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve replacment was performed, score: 0.39847773  
mitral valve replacement 29mm, score: 0.33705157  
mitral valve endocarditis major surgical, score: 0.04184943

confidence of prediction: 0.691340  
Y\_true: [ 2 18 21 25 30 36]  
Y\_pred: [ 2 4 18 25 30 36]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
disease chronic obstructive pulmonary disease h o, score:  
0.0141666895  
disease benign prostatic hypertrophy, score: 0.0015130724  
mitral repair annuloplasty history, score: 0.0008264259

confidence of prediction: 0.726799

Y\_true: [ 2 18 21 25 30 36]  
Y\_pred: [ 2 4 18 25 30 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
disease chronic obstructive pulmonary, score: 0.02840407  
s p colostomy chronic renal insufficiency diverticular, score:  
0.026752766  
mellitus hypertension chronic obstructive, score: 0.0062183

confidence of prediction: 0.667271  
Y\_true: [21 26 36 40 42]  
Y\_pred: [21 26 27 41 43]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
dumon black tracheoscope t tube, score: 0.042294003  
dumon black tracheoscope flexible, score: 0.022102574  
participant in programming there, score: 0.019243749

confidence of prediction: 0.954983  
Y\_true: [21 26 36 40 42]  
Y\_pred: [21 26 27 41 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation obstructive sleep apnea chronic, score:  
0.4267348  
of a long trach, score: 0.001022268  
his hospital dc meds, score: 0.0009629892

confidence of prediction: 0.682804  
Y\_true: [ 3 20 22 24]  
Y\_pred: [ 3 17 18 20 24 39 40 42]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
oxygen hypertension hypercholesterolemia macular degeneration  
appendectomy, score: 0.051016152  
disease hypertension hypercholesterolemia macular degeneration  
discharge, score: 0.014767216  
daily cholestyramine sucrose gram, score: 0.007876542

confidence of prediction: 0.998765  
Y\_true: [ 3 20 22 24]  
Y\_pred: [ 3 17 18 20 24 39 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hypercholesterolemia macular degeneration discharge,  
score: 0.18451299  
hydrochlorothiazide mg tablet sig, score: 0.08238757  
retired tobacco pack year, score: 0.0707047

confidence of prediction: 0.994988  
Y\_true: [ 3 20 22 24]  
Y\_pred: [ 3 17 18 20 24 39 40 42]  
top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
coronary artery disease carotid, score: 0.18937822  
a coronary catheterization which revealed vessel cad tx d to hospital  
for, score: 0.0229011  
hypertension hypercholesterolemia macular degeneration, score:  
0.012220986

confidence of prediction: 0.897836  
Y\_true: [ 7 28 40 42]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
was transfused until of packed rbcs she, score: 0.15939488  
anemia gi bleed discharge, score: 0.072278954  
bleeding in esophagus stomach, score: 0.061555725

confidence of prediction: 0.893155  
Y\_true: [ 7 28 40 42]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness 53f with history, score: 0.36255682  
calchct egd esophagus lumen a small, score: 0.013813659  
bleeding in esophagus stomach duodenum impression, score:  
0.009892401

confidence of prediction: 0.535810  
Y\_true: [ 4 20]  
Y\_pred: [ 3 4 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
htn and hyperlipidemia he was in his, score: 0.2603021  
simvastatin mg tablet sig, score: 0.10208329  
10mg daily simvastatin discharge medications lisinopril, score:  
0.02197264

confidence of prediction: 0.997798  
Y\_true: [ 4 20]  
Y\_pred: [ 3 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn high cholesterol social history, score:  
0.31470153  
mri was ordered for, score: 0.031956773  
likely aggressive en plaque, score: 0.00698718

confidence of prediction: 0.954223  
Y\_true: [26 34]  
Y\_pred: [18 26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation chronic since, score: 0.16493203  
atrial fibrillation she has been, score: 0.10972602  
coagulated with coumadin she, score: 0.106632635

confidence of prediction: 0.925168  
Y\_true: [ 5 6 9 17 19 28 35 41 46]  
Y\_pred: [17 19 35 41 43 45 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
screen resistant to 1000mcg, score: 0.14867829  
line a line mcv, score: 0.06718473  
line a line blood, score: 0.06718473

confidence of prediction: 0.950750  
Y\_true: [ 5 6 9 17 19 28 35 41 46]  
Y\_pred: [17 19 35 41 43 45 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
for cvvh with the, score: 0.12540688  
on hemodialysis for his, score: 0.06812505  
and dialysis was initiated, score: 0.057676952

confidence of prediction: 0.967537  
Y\_true: [ 5 6 9 17 19 28 35 41 46]  
Y\_pred: [17 19 35 41 43 45 46]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
cvvh for arf hepato renal syndrome a family, score: 0.3958622  
lactate paracentesis revealed wbc, score: 0.04307172  
tunneled hd line placement, score: 0.017574966

confidence of prediction: 0.718732  
Y\_true: [ 5 6 9 17 19 28 35 41 46]  
Y\_pred: [17 19 35 41 43 45 46]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
a doboff tube placed and tf, score: 0.05795263  
syndrome renal was consulted, score: 0.038704474  
faecium ampicillin r linezolid, score: 0.031581476

confidence of prediction: 0.625457  
Y\_true: [ 5 6 9 17 19 28 35 41 46]  
Y\_pred: [17 19 35 41 43 45 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
placement paracentesis paracentesis left picc placement, score: 0.07551871  
hepatorenal syndrome secondary obesity h, score: 0.03961353  
arf likely hepatorenal syndrome renal was consulted, score: 0.02456457

confidence of prediction: 0.993701  
Y\_true: [13 17 18 20 24]  
Y\_pred: [ 4 13 18 20 23 24 34]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafts x4 lima lad svg dg svg, score:

0.53427166

wires were discontinued without, score: 0.021279398

cabg x with dr, score: 0.014635888

confidence of prediction: 0.986918

Y\_true: [13 17 18 20 24]

Y\_pred: [ 4 13 18 20 23 24 34]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.7448027

diuresed toward the preoperative, score: 0.021014627

bypass grafts x4 lima lad, score: 0.0033372624

confidence of prediction: 0.993892

Y\_true: [13 17 18 20 24]

Y\_pred: [ 4 13 18 20 23 24 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

p prostatectomy hypertension gastroesophageal reflux s, score:

0.37657255

hct daily zocor 40mg daily aspirin, score: 0.27103364

history cad htn hyperlipidemia prostate cancer lung, score:

0.05866221

confidence of prediction: 0.999218

Y\_true: [13 17 18 20 24]

Y\_pred: [ 4 13 18 20 23 24 34]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafts x4 lima lad, score: 0.60589486

coronary artery disease hyperlipidemia, score: 0.12827186

coronary artery disease major, score: 0.033971936

confidence of prediction: 0.683779

Y\_true: [1 3]

Y\_pred: [1]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

admission levothyroxine mcg simvastatin mg levetiracetam, score:

0.20783418

refills levothyroxine mcg tablet sig one, score: 0.04423122

medical history hypothyroid high cholesterol social history, score:

0.007512509

confidence of prediction: 0.939172

Y\_true: [20 26 27 33 35 37 40 42 49]

Y\_pred: [26 27 33 35 40 42 44 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation s p cva, score: 0.13367091

atrial fibrillation presented from nursing, score: 0.02952084

expired followup instructions expired, score: 0.0045652012

confidence of prediction: 0.602604

Y\_true: [20 26 27 33 35 37 40 42 49]  
Y\_pred: [26 27 33 35 40 42 44 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure s p cataract surgery, score: 0.20977667  
failure likely pre renal, score: 0.008584683  
attempt successful reportedly pt, score: 0.007913488

confidence of prediction: 0.910240  
Y\_true: [20 26 27 33 35 37 40 42 49]  
Y\_pred: [26 27 33 35 40 42 44 49]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
placed and og lavage, score: 0.13472919  
for respiratory failure likely, score: 0.11608199  
peep general intubated and sedated heent, score: 0.08377775

confidence of prediction: 0.807341  
Y\_true: [20 26 27 33 35 37 40 42 49]  
Y\_pred: [26 27 33 35 40 42 44 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure likely pre renal given hypovolemia also, score:  
0.05934448  
noxious stimuli derm tenting of, score: 0.021927753  
recorded as having no, score: 0.007836751

confidence of prediction: 0.812665  
Y\_true: [20 26 27 33 35 37 40 42 49]  
Y\_pred: [26 27 33 35 40 42 44 49]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
peep general intubated and sedated, score: 0.13099438  
she was intubated for respiratory, score: 0.03820738  
and intubated ros unable, score: 0.034200206

confidence of prediction: 0.632347  
Y\_true: [20 26 27 33 35 37 40 42 49]  
Y\_pred: [26 27 33 35 40 42 44 49]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
peri intubation levophed stopped versed, score: 0.15591691  
and intubated ros unable, score: 0.11775368  
intubated intubated vent controlled, score: 0.092146225

confidence of prediction: 0.658405  
Y\_true: [20 26 27 33 35 37 40 42 49]  
Y\_pred: [26 27 33 35 40 42 44 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
po qhs coumadin cyanocobalamin ml im, score: 0.29305258  
while on coumadin restarted, score: 0.26539063  
cva on coumadin for atrial fibrillation presented, score: 0.1465634

confidence of prediction: 0.898300

Y\_true: [7]

Y\_pred: [ 7 40 42]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

plts [UNK] surgicel gelfoam and, score: 0.1393591

11u prbc 6u units ffp 2u cryo, score: 0.082901604

illness 36f g2p2 s, score: 0.061987072

confidence of prediction: 0.878308

Y\_true: [ 2 3 8 13 14 17 18 20 23 24 27 38 44]

Y\_pred: [ 2 4 13 18 20 24 38]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

hyperlipidemia diabetes mellitus myocardial infarction s, score: 0.052556776

with diabetes hypertension hypercholesterolemia, score: 0.02447037

hyperlipidemia diabetes mellitus s p myocardial, score: 0.020940805

confidence of prediction: 0.990892

Y\_true: [ 2 3 8 13 14 17 18 20 23 24 27 38 44]

Y\_pred: [ 2 4 13 18 20 24 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft x lima to lad svg, score: 0.61992687

coronary artery bypass graft x please, score: 0.094839305

coronary artery bypass graft x hypertension, score: 0.015154909

confidence of prediction: 0.918865

Y\_true: [ 2 3 8 13 14 17 18 20 23 24 27 38 44]

Y\_pred: [ 2 4 13 18 20 24 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

creams or powders to, score: 0.8487578

cardiothoracic allergies patient recorded, score: 0.020918854

bypass graft x please see, score: 0.012345008

confidence of prediction: 0.946005

Y\_true: [ 2 3 8 13 14 17 18 20 23 24 27 38 44]

Y\_pred: [ 2 4 13 18 20 24 38]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

with diabetes hypertension hypercholesterolemia and a family, score: 0.28607717

artery disease hypertnesion hyperlipidemia diabetes mellitus

myocardial, score: 0.07300568

x hypertension hyperlipidemia diabetes mellitus s, score: 0.03233624

confidence of prediction: 0.998471

Y\_true: [ 2 3 8 13 14 17 18 20 23 24 27 38 44]

Y\_pred: [ 2 4 13 18 20 24 38]

top three important windows for true positive code 24 (414.01:



Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.4833407  
coronary artery disease s p coronary artery bypass graft, score:  
0.10232635  
coronary artery disease upon, score: 0.09740852

confidence of prediction: 0.844822  
Y\_true: [ 2 3 8 13 14 17 18 20 23 24 27 38 44]  
Y\_pred: [ 2 4 13 18 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath selective coronary angiography of this, score:  
0.15051836  
catheterization on and was, score: 0.12169684  
vessel there was an, score: 0.06664953

confidence of prediction: 0.595320  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
sevelamer 800mg tid sucralfate, score: 0.013028066  
q6hrs prn amitriptyline 25mg, score: 0.0068965605  
copd schizoaffective disorder hypertension hyperlipidemia diabetes  
mellitus type ii lumbar disc disease, score: 0.0057750195

confidence of prediction: 0.789229  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disorder hypertension hyperlipidemia diabetes mellitus type ii,  
score: 0.1495338  
q6hrs prn amitriptyline 25mg, score: 0.012989454  
sphincterectomy of minor duct, score: 0.011055001

confidence of prediction: 0.634562  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
transitioned to cvvh due to, score: 0.060802806  
history of esrd on hd significant peripheral, score: 0.04596122  
comfort care cvvh was discontinued, score: 0.023418358

confidence of prediction: 0.640612  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with rvr which, score: 0.17180343  
amiodarone on her pressor, score: 0.09794747  
thrombectomies her postoperative course, score: 0.029181065

confidence of prediction: 0.634780  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
hospital acquired pneumonia when transitioned to, score: 0.1702094  
less responsive when the, score: 0.008360387  
was made she was, score: 0.0060521564

confidence of prediction: 0.660367  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
mesenteric artery copd schizoaffective disorder hypertension  
hyperlipidemia, score: 0.07957451  
daughter who declined this, score: 0.017022932  
gm qid tiotropium 18mcg, score: 0.009467469

confidence of prediction: 0.794475  
Y\_true: [ 2 4 6 7 9 10 19 24 26 29 30 33 34 40 42]  
Y\_pred: [ 2 4 12 19 26 29 30 33 43 44]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
by respiratory failure multi organ system, score: 0.13859314  
pressure support ventilation for, score: 0.043996114  
corneal reflexes absent doll, score: 0.04283573

confidence of prediction: 0.842403  
Y\_true: [20 26 42]  
Y\_pred: [ 4 33 40 41 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated loaded with, score: 0.20516072  
rapid sequence intubation was done with, score: 0.051069517  
con intubated intubated ct head impressions, score: 0.010968541

confidence of prediction: 0.759007  
Y\_true: [ 7 10 20]  
Y\_pred: [ 7 20]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
baseline dark maroon guaiac positive stool on, score: 0.1433086  
bleeding he required a, score: 0.09163182  
recorded as having no, score: 0.07396429

confidence of prediction: 0.995648  
Y\_true: [ 7 10 20]  
Y\_pred: [ 7 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history borderline hypertension social history married children,

score: 0.13831966  
for access talked w gi plan, score: 0.014100363  
guiaic positive stool on rectal continued to, score: 0.00543286

confidence of prediction: 0.728439  
Y\_true: [ 9 17 30 34 35 46]  
Y\_pred: [ 6 20 29 30 34]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
autopsy was declined medications on, score: 0.002457918  
metastatic to lungs copd hypertension gerd, score: 0.0014475877  
s multifocal hcc mild, score: 0.0013434573

confidence of prediction: 0.676042  
Y\_true: [ 9 17 30 34 35 46]  
Y\_pred: [ 6 20 29 30 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hypertension gerd neuropathy headaches constipation weakness, score:  
0.08396124  
crystalloid and eventually requiring levophed, score: 0.015701769  
and blood sugars were, score: 0.008262036

confidence of prediction: 0.990440  
Y\_true: [ 1 3 13 18 20 24 26 45]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafts x lima lad svg dg svg, score:  
0.6495445  
coronary artery bypass grafts hypertension hyperlipidemia, score:  
0.015878951  
incisions gently with mild, score: 0.009318045

confidence of prediction: 0.979442  
Y\_true: [ 1 3 13 18 20 24 26 45]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were [UNK] per, score: 0.021854592  
cardiothoracic allergies patient recorded, score: 0.013940762  
diuresed towards her preoperative, score: 0.011595093

confidence of prediction: 0.915022  
Y\_true: [ 1 3 13 18 20 24 26 45]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
s esophagus hypertension hyperlipidemia s p total, score: 0.08152131  
daily lisinopril hctz hospital1 amlodipine daily simvastatin qhs,  
score: 0.017846378  
hyperlipidemia barrett s esophagus, score: 0.015093477

confidence of prediction: 0.999325

Y\_true: [ 1 3 13 18 20 24 26 45]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafts x lima lad, score: 0.66792136  
coronary artery disease s p coronary artery bypass grafts, score:  
0.14140327  
coronary artery disease major surgical, score: 0.037449703

confidence of prediction: 0.887042  
Y\_true: [ 1 3 13 18 20 24 26 45]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation on which converted to, score: 0.42815903  
amiodarone mg tablet sig, score: 0.017979855  
barrett s esophagus hypertension, score: 0.0059311315

confidence of prediction: 0.952713  
Y\_true: [20 26 49]  
Y\_pred: [20 26 42 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn a fib dementia anxiety depression social, score:  
0.21403797  
significant for htn possible baseline dementia and, score:  
0.20123576  
maintained on coumadin eliciting a, score: 0.006919847

confidence of prediction: 0.900827  
Y\_true: [20 26 49]  
Y\_pred: [20 26 42 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
a fib dementia anxiety depression social, score: 0.014943195  
20mg hospital1 coumadin 5mg, score: 0.00855156  
fall major surgical or, score: 0.004050355

confidence of prediction: 0.502249  
Y\_true: [20 26 49]  
Y\_pred: [20 26 42 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
20mg hospital1 coumadin 5mg, score: 0.78554046  
maintained on coumadin eliciting, score: 0.04089983  
and a fib for which he, score: 0.022295924

confidence of prediction: 0.988248  
Y\_true: [13 18 20 22 24 26 27]  
Y\_pred: [13 18 20 24 26 27]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x5 left internal mammary artery to  
left, score: 0.6410938

obtuse marginal ramus and, score: 0.016129114  
coronary artery bypass graft x5 myocardial, score: 0.015672363

confidence of prediction: 0.979462  
Y\_true: [13 18 20 22 24 26 27]  
Y\_pred: [13 18 20 24 26 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires removed per protocol, score: 0.15193735  
diuresed toward her preop, score: 0.07484822  
cardiothoracic allergies patient recorded, score: 0.011221277

confidence of prediction: 0.985909  
Y\_true: [13 18 20 22 24 26 27]  
Y\_pred: [13 18 20 24 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension untreated ischemic cardiomyopathy  
social history race caucasian, score: 0.10617934  
medical history hypertension untreated ischemic cardiomyopathy  
right, score: 0.10617934

confidence of prediction: 0.998388  
Y\_true: [13 18 20 22 24 26 27]  
Y\_pred: [13 18 20 24 26 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.56539214  
coronary artery disease s p coronary artery bypass graft, score:  
0.11969716  
untreated ischemic cardiomyopathy social history, score: 0.030194703

confidence of prediction: 0.973227  
Y\_true: [13 18 20 22 24 26 27]  
Y\_pred: [13 18 20 24 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
amiodarone mg tablet sig, score: 0.005805102  
diuresed toward her preop, score: 0.004304967  
irregular murmur no abdomen, score: 0.0029073935

confidence of prediction: 0.892072  
Y\_true: [13 18 20 22 24 26 27]  
Y\_pred: [13 18 20 24 26 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
dysfunction with akinesis of, score: 0.019338995  
cardiomyopathy social history race, score: 0.009122871  
acute systolic heart failure past medical history, score:  
0.007058465

confidence of prediction: 0.947376  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn cad copd who presented, score: 0.11432245  
continued to tire so, score: 0.045495916  
controlled on furosemide hospital1, score: 0.028043048

confidence of prediction: 0.692630  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
htn cad copd who presented to, score: 0.0056211883  
medical history cad s p mi eight years ago managed with, score:  
0.0051778415

confidence of prediction: 0.651115  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
htn cad copd who presented to, score: 0.081265785  
history cad s p mi eight years ago managed with ptca, score:  
0.034079257  
and was diuresed with, score: 0.01087025

confidence of prediction: 0.926730  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
effusion possible postobstructive pna and very poor, score:  
0.014922067  
obstructive pneumonia and volume, score: 0.014732931  
for pneumonia during that, score: 0.008556768

confidence of prediction: 0.817777  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
cad copd who presented to hospital6, score: 0.30123776  
later htn copd social history he is, score: 0.019660749  
for presumed copd and was diuresed, score: 0.016558347

confidence of prediction: 0.924198  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure thought due, score: 0.30283192  
hypoxic respiratory failure was believed, score: 0.24150613  
had respiratory arrest requiring, score: 0.054882243

confidence of prediction: 0.855024

Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was intubated on the, score: 0.074025616  
he was intubated on the, score: 0.036815543  
arrest requiring intubation he also, score: 0.023505457

confidence of prediction: 0.533044  
Y\_true: [ 4 20 23 24 29 30 32 33 40 42]  
Y\_pred: [12 20 23 24 29 30 33 40 41 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
arrest requiring intubation he also, score: 0.041355036  
a bronchoalveolar lavage during that, score: 0.04077174  
by bedside thoracentesis hematology, score: 0.03364325

confidence of prediction: 0.972574  
Y\_true: [20 26 42 47]  
Y\_pred: [20 26 33 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
paroxetine felodipine lovastatin triamterine, score: 0.26389354  
medical history htn social history lives in, score: 0.08169563  
atrial fibrillation hypertension discharge condition mental, score:  
0.07455865

confidence of prediction: 0.949550  
Y\_true: [20 26 42 47]  
Y\_pred: [20 26 33 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with rvr which was, score: 0.44178197  
atrial fibrillation hypertension discharge condition, score:  
0.052856404  
atrial fibrillation initially with rvr, score: 0.0129592335

confidence of prediction: 0.835069  
Y\_true: [20 26 42 47]  
Y\_pred: [20 26 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
genl sedated intubated heent sclerae anicteric, score: 0.1316539  
she was intubated given her, score: 0.11213406  
of ha falls fatigue, score: 0.019692682

confidence of prediction: 0.926592  
Y\_true: [ 1 8 20 34 41 43 49]  
Y\_pred: [ 1 2 4 20 34 42 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
anxiety depression hypothyroid social history lives at, score:

0.011332229

qd synthroid 12mcg qd cymbalta 30mg, score: 0.0023667882

1000u tramadol prn ativan, score: 0.0009033823

confidence of prediction: 0.930790

Y\_true: [ 1 8 20 34 41 43 49]

Y\_pred: [ 1 2 4 20 34 42 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

humalog ss florastor 250mg hospital1, score: 0.13886972

with dm htn hl [UNK] dementia dvts, score: 0.11306563

keppra and htn goals neurology is, score: 0.08137019

confidence of prediction: 0.898123

Y\_true: [ 1 8 20 34 41 43 49]

Y\_pred: [ 1 2 4 20 34 42 49]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

vasc dementia gerd anemia diabetic neuropathy s, score: 0.11679282

lethargy iph major surgical, score: 0.0064699985

and htn goals neurology, score: 0.0035711105

confidence of prediction: 0.847691

Y\_true: [ 1 8 20 34 41 43 49]

Y\_pred: [ 1 2 4 20 34 42 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

dvts on coumadin who was found, score: 0.76750475

dvt on coumadin anxiety depression hypothyroid, score: 0.040226184

autopsy medications on admission coumadin 3mg, score: 0.010713314

confidence of prediction: 0.886049

Y\_true: [ 2 4 18 20 24 33]

Y\_pred: [ 2 4 18 20 24]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

placed in diabetes mellitus hyperlipidemia hypertension sick, score: 0.047242608

stenosis diabetes mellitus hyperlipidemia hypertension sick, score: 0.033262588

needed metformin mg twice a, score: 0.0066779754

confidence of prediction: 0.625763

Y\_true: [ 2 4 18 20 24 33]

Y\_pred: [ 2 4 18 20 24]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

diabetes mellitus hyperlipidemia hypertension sick sinus, score: 0.1325294

diabetes mellitus hyperlipidemia hypertension sick sinus, score: 0.09552279

p left saphenectomy discharge, score: 0.054548856



confidence of prediction: 0.968648  
Y\_true: [ 2 4 18 20 24 33]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies amoxicillin attending, score: 0.041295186  
descending thoracic aorta the, score: 0.010906873  
lotions creams powders or ointments to, score: 0.005356459

confidence of prediction: 0.993162  
Y\_true: [ 2 4 18 20 24 33]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
mellitus hyperlipidemia hypertension sick sinus, score: 0.030340526  
timolol eye drops to, score: 0.012655134  
placed in diabetes mellitus hyperlipidemia hypertension sick sinus,  
score: 0.01034383

confidence of prediction: 0.974360  
Y\_true: [ 2 4 18 20 24 33]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
vessel coronary artery disease as, score: 0.18292685  
coronary artery disease status post left, score: 0.11263456  
coronary artery disease s p, score: 0.07867788

confidence of prediction: 0.793341  
Y\_true: [ 4 20 34]  
Y\_pred: [ 4 20 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pmhx htn dyslipidemia bph frequent falls hernia, score: 0.42024055  
simvastatin mg tablet sig, score: 0.055054  
daily valsartan mg tablet sig, score: 0.014834349

confidence of prediction: 0.993794  
Y\_true: [ 4 20 34]  
Y\_pred: [ 4 20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh of htn frequent falls, score: 0.2936104  
history pmhx htn dyslipidemia bph frequent falls, score: 0.12790474  
zocor [UNK] protonix diovan discharge medications amlodipine, score:  
0.02081457

confidence of prediction: 0.918217  
Y\_true: [ 4 20 34]  
Y\_pred: [ 4 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
ago gerd social history social hx, score: 0.028152306  
frequent falls had unwitnessed fall, score: 0.0064699133

about noon while gardening he, score: 0.0040114317

confidence of prediction: 0.860030

Y\_true: [ 1 4 18 20 34]

Y\_pred: [ 1 4 18 20 34]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

gerd hypothyroidism obesity rheumatic fever, score: 0.21229681

prn synthroid 125mcg qd lotrel 10mg, score: 0.12712297

refills levothyroxine mcg tablet sig one, score: 0.020048117

confidence of prediction: 0.779209

Y\_true: [ 1 4 18 20 34]

Y\_pred: [ 1 4 18 20 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

aortic stenosis dyslipidemia hypertension gerd hypothyroidism

obesity, score: 0.14563406

asc aorta dyslipidemia hypertension gerd hypothyroidism obesity,  
score: 0.054287266

simvastatin mg tablet sig, score: 0.04486525

confidence of prediction: 0.979401

Y\_true: [ 1 4 18 20 34]

Y\_pred: [ 1 4 18 20 34]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed toward her pre, score: 0.09037852

cardiothoracic allergies patient recorded, score: 0.013549585

washing incisions gently with mild soap, score: 0.0089244945

confidence of prediction: 0.998643

Y\_true: [ 1 4 18 20 34]

Y\_pred: [ 1 4 18 20 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

aorta dyslipidemia hypertension gerd hypothyroidism obesity, score:  
0.27444807

resumed for hypertension and she continued on, score: 0.07791814

dyslipidemia hypertension gerd hypothyroidism obesity, score:  
0.0664797

confidence of prediction: 0.919606

Y\_true: [ 1 4 18 20 34]

Y\_pred: [ 1 4 18 20 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

sciatica lung nodule rul, score: 0.033552404

dyslipidemia hypertension gerd hypothyroidism obesity rheumatic  
fever, score: 0.031315234

dyslipidemia hypertension gerd hypothyroidism obesity rheumatic  
fever, score: 0.02622864

confidence of prediction: 0.773562

Y\_true: [ 6 29 32 33 40 42 46]  
Y\_pred: [ 0 9 17 19 33 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
acute respiratory failure and met, score: 0.21343088  
fever respiratory failure plan, score: 0.1855682  
intubated 54pm lactate 54pm, score: 0.07583106

confidence of prediction: 0.774020  
Y\_true: [ 6 29 32 33 40 42 46]  
Y\_pred: [ 0 9 17 19 33 40 42 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was intubated soon after admission, score: 0.29120308  
o2 intubated intubated 54pm lactate 54pm, score: 0.041434053  
bring him to the, score: 0.004526532

confidence of prediction: 0.635300  
Y\_true: [ 6 29 32 33 40 42 46]  
Y\_pred: [ 0 9 17 19 33 40 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated soon after admission, score: 0.13111496  
to bring him to the, score: 0.008592355  
o2 intubated intubated 54pm lactate 54pm, score: 0.005497445

confidence of prediction: 0.701915  
Y\_true: [ 6 29 32 33 40 42 46]  
Y\_pred: [ 0 9 17 19 33 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
pt was admitted with, score: 0.41647646  
he required vasopressors to maintain adequate blood, score:  
0.089723505  
and met sirs criteria he was intubated soon, score: 0.01616685

confidence of prediction: 0.537349  
Y\_true: [ 1 12 16 20 24 26 33 40 41 42 48]  
Y\_pred: [ 1 12 26 40 41 42 43 45]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
wks hypothyroidism cad mr first, score: 0.14677188  
daily levothyroxine mcg tablet last name, score: 0.09931086  
qid prn levothyroxine mcg tablet qday lisinopril, score: 0.008489274

confidence of prediction: 0.876575  
Y\_true: [ 1 12 16 20 24 26 33 40 41 42 48]  
Y\_pred: [ 1 12 26 40 41 42 43 45]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
pm bronchoalveolar lavage final report gram, score: 0.15399757  
distress a bronchoscopy on showed, score: 0.11872691  
she was bronched again, score: 0.05943262

confidence of prediction: 0.939227  
Y\_true: [ 1 12 16 20 24 26 33 40 41 42 48]  
Y\_pred: [ 1 12 26 40 41 42 43 45]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation which responded to, score: 0.15122955  
mod tr gi the, score: 0.0029289755  
moderate tricuspid regurgitation is, score: 0.0024639866

confidence of prediction: 0.937859  
Y\_true: [ 1 12 16 20 24 26 33 40 41 42 48]  
Y\_pred: [ 1 12 26 40 41 42 43 45]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
required re intubation for respiratory distress, score: 0.08470347  
suction jp drain and, score: 0.017056454  
prior to extubation she was bronched again, score: 0.0013600168

confidence of prediction: 0.902052  
Y\_true: [ 1 12 16 20 24 26 33 40 41 42 48]  
Y\_pred: [ 1 12 26 40 41 42 43 45]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
j tube feeds were started and, score: 0.09778219  
the sicu intubated with, score: 0.009090612  
j tube in place, score: 0.007377053

confidence of prediction: 0.726042  
Y\_true: [ 1 12 16 20 24 26 33 40 41 42 48]  
Y\_pred: [ 1 12 26 40 41 42 43 45]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was bronched again on moderate, score: 0.04464279  
required re intubation for respiratory distress, score: 0.039744914  
on tpn for wks, score: 0.020524435

confidence of prediction: 0.523835  
Y\_true: [25]  
Y\_pred: [25 28]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve repair who originally, score: 0.11231478  
history mitral regurgitation myxomatous valves, score: 0.074819915  
state mitral regurgitation myxomatous valves severe regurgitation  
from likely, score: 0.060735937

confidence of prediction: 0.900276  
Y\_true: [26 31 33 42]  
Y\_pred: [ 8 17 22 26 31 33 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation likely secondary to, score: 0.14297059

a fib with rate of 130s, score: 0.007761972  
weaning of dilt started, score: 0.0012817909

confidence of prediction: 0.936042  
Y\_true: [26 31 33 42]  
Y\_pred: [ 8 17 22 26 31 33 40 42]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
issues aspiration pneumonia v pneumonitis as, score: 0.030934671  
an aspiration pneumonia your lungs were, score: 0.020503156  
opiate overdose aspiration pneumonitis pneumonia discharge  
condition, score: 0.004864491

confidence of prediction: 0.952633  
Y\_true: [26 31 33 42]  
Y\_pred: [ 8 17 22 26 31 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
abg and intubated rr was, score: 0.10934843  
osh respiratory failure attributed, score: 0.08730151  
unresponsiveness and respiratory failure you, score: 0.041298863

confidence of prediction: 0.548226  
Y\_true: [26 31 33 42]  
Y\_pred: [ 8 17 22 26 31 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
respiratory failure intubated at osh, score: 0.10364009  
intubation placement of arterial line, score: 0.057387546  
tube projects cm above, score: 0.038502794

confidence of prediction: 0.746547  
Y\_true: [44]  
Y\_pred: [ 7 44]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
service orthopaedics allergies patient recorded as, score:  
0.064396985  
he was transfused 1u prbc for hct, score: 0.061559267  
was tranfused 2u prbc with appropriate bump, score: 0.049608674

confidence of prediction: 0.927521  
Y\_true: [ 1 3 18 20 34]  
Y\_pred: [ 1 4 18 20]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
dyslipidemia hypothyroidism discharge condition alert, score:  
0.6399091  
hypertension hypothyroidism hypercholesterolemia history of, score:  
0.10397401  
refills levothyroxine mcg tablet sig, score: 0.0154495165

confidence of prediction: 0.986652

Y\_true: [ 1 3 18 20 34]

Y\_pred: [ 1 4 18 20]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.75128675

diuresed toward the preoperative, score: 0.021197574

washing incisions gently with mild soap, score: 0.0022449885

confidence of prediction: 0.972146

Y\_true: [ 1 3 18 20 34]

Y\_pred: [ 1 4 18 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hydrochlorothiazide mg tablet sig, score: 0.38528258

p avr hypertension dyslipidemia hypothyroidism, score: 0.24808466

cm2 by continuity mild, score: 0.07696196

confidence of prediction: 0.821940

Y\_true: [ 0 2 17 21 24 27 36 46]

Y\_pred: [17 21 27 34 36]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

central subclavian line was placed and, score: 0.10003077

tolerated toast and coffee for, score: 0.049892236

a picc line was placed for, score: 0.046669185

confidence of prediction: 0.718982

Y\_true: [ 0 2 17 21 24 27 36 46]

Y\_pred: [17 21 27 34 36]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

ef unknown ckd baseline unknown type diabetes and, score:

0.056097273

medical history ckd h o chf dm2, score: 0.0218602

stent placement patient transferred, score: 0.0049683833

confidence of prediction: 0.941806

Y\_true: [ 0 2 17 21 24 27 36 46]

Y\_pred: [17 21 27 34 36]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

histry of chf ef unknown ckd baseline, score: 0.030379023

ckd h o chf dm2 htn lipids psoriasis, score: 0.0034407205

once daily combivent mcg, score: 0.002190964

confidence of prediction: 0.821502

Y\_true: [ 0 2 17 21 24 27 36 46]

Y\_pred: [17 21 27 34 36]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

ef unknown ckd baseline unknown type diabetes and, score:

0.042160444

medical history ckd h o chf dm2, score: 0.011111752

stent placement patient transferred, score: 0.0011021196

confidence of prediction: 0.888854

Y\_true: [ 0 6 7 20 33 35 37 44]

Y\_pred: [ 2 7 20 44]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

tranfused 5u prbc and extubated on, score: 0.16993804

recorded as having no, score: 0.031672325

additional 1u prbc transfusion with, score: 0.025282029

confidence of prediction: 0.700190

Y\_true: [ 0 6 7 20 33 35 37 44]

Y\_pred: [ 2 7 20 44]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

bph niddm htn diverticulosis umbilical hernia, score: 0.09873717

nephrectomy and renal vein tumor thrombectomy dr, score: 0.03915938

nephrectomy and renal vein tumor thrombectomy as, score: 0.03915938

confidence of prediction: 0.750536

Y\_true: [ 0 6 7 20 33 35 37 44]

Y\_pred: [ 2 7 20 44]

top three important windows for true positive code 44 (99.04:

Transfusion of packed cells)

additional 1u prbc transfusion with hct improved, score: 0.21202645

tranfused 5u prbc and extubated on pod, score: 0.09707833

advanced l renal mass, score: 0.009187039

confidence of prediction: 0.951439

Y\_true: [ 1 4 26 27 32 34 35 36 37]

Y\_pred: [ 1 4 26 27 34 37]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

bnf hypothyroidism synthroid stopped when patient, score: 0.2067661

dysfunction hypothyroidism gerd hyperlipidemia hip, score:

0.055117276

bid synthroid 88mcg daily asa 81mg, score: 0.009322671

confidence of prediction: 0.809197

Y\_true: [ 1 4 26 27 32 34 35 36 37]

Y\_pred: [ 1 4 26 27 34 37]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

hypothyroidism gerd hyperlipidemia hip fracture s p, score:

0.19582675

hypothyroidism cri hld discharge condition stable no, score:

0.09048383

88mcg daily asa 81mg daily prilosec 20mg, score: 0.0070728576

confidence of prediction: 0.977299

Y\_true: [ 1 4 26 27 32 34 35 36 37]

Y\_pred: [ 1 4 26 27 34 37]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)  
atrial fibrillation nl axis and, score: 0.33030602  
fibrillation atrial fibrillation pt with long, score: 0.17305337  
atrial fibrillation transferred to hospital1, score: 0.021995122

confidence of prediction: 0.969459  
Y\_true: [ 1 4 26 27 32 34 35 36 37]  
Y\_pred: [ 1 4 26 27 34 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf ef diastolic dysfunction hypothyroidism, score: 0.14773479  
chf dementia and atrial, score: 0.07413915  
chf dementia and atrial fibrillation, score: 0.07413915

confidence of prediction: 0.818123  
Y\_true: [ 1 4 26 27 32 34 35 36 37]  
Y\_pred: [ 1 4 26 27 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
cmo dementia ritalin stopped, score: 0.018134695  
dysfunction hypothyroidism gerd hyperlipidemia hip fracture s,  
score: 0.013720468  
radius spiral fracture through base, score: 0.010179931

confidence of prediction: 0.905913  
Y\_true: [ 1 4 26 27 32 34 35 36 37]  
Y\_pred: [ 1 4 26 27 34 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
daily asa 81mg daily, score: 0.011415252  
had a urinary tract infection that was, score: 0.0068364157  
gland thickening left femoral, score: 0.0052476665

confidence of prediction: 0.765031  
Y\_true: [33 40 42]  
Y\_pred: [10 20 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
he was intubated secondary to, score: 0.13198526  
intubated sedated heent sclera, score: 0.0509366  
micu patient intubated sedated review, score: 0.046487622

confidence of prediction: 0.866433  
Y\_true: [33 40 42]  
Y\_pred: [10 20 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
to intubate received etomidate succ and, score: 0.23490529  
general intubated sedated heent, score: 0.05906653  
he was intubated secondary to, score: 0.04625136

confidence of prediction: 0.689244  
Y\_true: [33 40 42]  
Y\_pred: [10 20 33 40 42]



top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated secondary to, score: 0.21135397  
patient intubated sedated review, score: 0.19808117  
to intubate received etomidate succ and, score: 0.17815585

confidence of prediction: 0.679815

Y\_true: [20 29 34]

Y\_pred: [20 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history pmh ibs gerd high cholesterol high, score: 0.2668234  
macrocyt occasional microcyt normal, score: 0.09289567  
distended to necessitate replacement of, score: 0.040758185

confidence of prediction: 0.914098

Y\_true: [20 29 34]

Y\_pred: [20 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
pmh ibs gerd high cholesterol high blood, score: 0.114136435  
continued acute cholecystitis as, score: 0.007798153  
distended to necessitate replacement of, score: 0.0036537426

confidence of prediction: 0.953207

Y\_true: [ 7 20 35 44]

Y\_pred: [ 7 20 28]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
matched for units with, score: 0.09191175  
complaint hematemesis melena major surgical or, score: 0.061759114  
recorded as having no, score: 0.03820387

confidence of prediction: 0.766404

Y\_true: [ 7 20 35 44]

Y\_pred: [ 7 20 28]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
to his htn given his recent, score: 0.8046787  
diagnosed with htn in the past, score: 0.026820578  
diagnosis of htn as, score: 0.026638227

confidence of prediction: 0.953371

Y\_true: [31 33]

Y\_pred: [31 33]

top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
to aspiration pneumonia pneumonitis as diagnosed, score: 0.10231562  
aspiration pneumonia discharge condition, score: 0.05754598  
aspiration pneumonitis he reports leaving, score: 0.056674317

confidence of prediction: 0.735813

Y\_true: [31 33]

Y\_pred: [31 33]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
became less tachypneic sputum culture was negative, score:  
0.10368244  
methylprednisolone sodium succ mg, score: 0.052996777  
he required 6l nc, score: 0.035384644

confidence of prediction: 0.857427  
Y\_true: [ 4 20]  
Y\_pred: [ 4 5 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
insufficiency prolapse hyperlipidemia prostate cancer s, score:  
0.15600061  
of htn hyperlipidemia prostate ca s, score: 0.05475008  
o htn hyperlipidemia prostate ca s, score: 0.042949468

confidence of prediction: 0.995009  
Y\_true: [ 4 20]  
Y\_pred: [ 4 5 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn hyperlipidemia prostate ca s, score: 0.20403257  
medical history hypertension mitral, score: 0.12958612  
hyperlipidemia prostate ca s, score: 0.058960117

confidence of prediction: 0.550028  
Y\_true: [ 4 8 35]  
Y\_pred: [ 4 23 24 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
diabetes mellitus hyperlipidemia elevated cholesterol discharge  
condition mental, score: 0.2682376  
simvastatin mg tablet sig, score: 0.01569209  
cholesterol is somewhat elevated so, score: 0.014009152

confidence of prediction: 0.584376  
Y\_true: [ 0 29 31 35 36 46]  
Y\_pred: [ 0 29]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
diagnosis sepsis pneumonia abnormal liver function, score:  
0.030490696  
he was empirically started, score: 0.015344836  
sepsis of note the, score: 0.015328969

confidence of prediction: 0.712005  
Y\_true: [ 0 29 31 35 36 46]  
Y\_pred: [ 0 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
out aspiration pneumonia or, score: 0.03664116  
for pneumonia given productive, score: 0.031022243

amoxicillin pot clavulanate mg tablet, score: 0.02969862

confidence of prediction: 0.991296

Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]

Y\_pred: [ 4 13 18 20 24 27 40 42]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafts x left, score: 0.71911436

coronary artery bypass grafting surgery for, score: 0.02613286

[UNK] with saphenous vein grafts to, score: 0.006476669

confidence of prediction: 0.923548

Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]

Y\_pred: [ 4 13 18 20 24 27 40 42]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

creams or powders to, score: 0.8209569

cardiothoracic allergies vicodin attending, score: 0.044141304

tee pre bypass no, score: 0.01771301

confidence of prediction: 0.998877

Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]

Y\_pred: [ 4 13 18 20 24 27 40 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

zocor 20mg d ntg mg, score: 0.03964175

endarterectomy hypertension hyperlipidemia chronic low back, score: 0.015878709

heart failure hypertension dyslipidemia cerebrovascular disease s, score: 0.009436758

confidence of prediction: 0.999274

Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]

Y\_pred: [ 4 13 18 20 24 27 40 42]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafts x left, score: 0.56948316

coronary artery disease s p, score: 0.12056327

coronary artery disease and, score: 0.11476897

confidence of prediction: 0.951786

Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]

Y\_pred: [ 4 13 18 20 24 27 40 42]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

undergoing heart surgery physical, score: 0.06787365

chronic systolic heart failure hypertension dyslipidemia, score: 0.012527984

moderate mitral regurgitation is, score: 0.006253663

confidence of prediction: 0.913911

Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]

Y\_pred: [ 4 13 18 20 24 27 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)  
heent oropharynx benign neck, score: 0.00039924387  
passed physical therapy and, score: 0.0001694057  
receiving an infusion of, score: 0.00015557154

confidence of prediction: 0.834633  
Y\_true: [13 16 18 20 24 25 26 27 33 39 40 42]  
Y\_pred: [ 4 13 18 20 24 27 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
receiving an infusion of, score: 0.00014288844  
off all narcotics no, score: 0.000112181704  
disp packet s refills, score: 8.887804e-05

confidence of prediction: 0.695123  
Y\_true: [ 2 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
home metformin 500mg hospital1 lopressor 100mg, score: 0.02155148  
syndrome diabetes mellitus obesity sleep apnea, score: 0.02016736  
diabetes on post op, score: 0.007811509

confidence of prediction: 0.986981  
Y\_true: [ 2 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending artery saphenous vein graft, score: 0.055790152  
coronary artery bypass graft x please, score: 0.041716605  
mammary artery to left, score: 0.021646315

confidence of prediction: 0.973982  
Y\_true: [ 2 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
lotions powders or ointments to, score: 0.2063148  
incisions no baths or, score: 0.17945209  
pacing wires were removed per, score: 0.008505881

confidence of prediction: 0.991613  
Y\_true: [ 2 13 18 24]  
Y\_pred: [ 2 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease [UNK], score: 0.20379803  
urgent coronary artery bypass graft, score: 0.0949354  
coronary artery disease status, score: 0.07962653

confidence of prediction: 0.780380  
Y\_true: [ 2 21 36]

Y\_pred: [ 2 19 37 40 42 49]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

hemodialysis since then underwent living, score: 0.04954507

on allopurinol dm on glipizide social history lives, score:  
0.015921518

thursday glipizide mg tablet sig, score: 0.015063118

confidence of prediction: 0.512433

Y\_true: [ 4 7 20]

Y\_pred: [ 4 7 20]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

stenosis spondylosis hld htn pda as child anemia pshx none, score:  
0.38679942

nt nd bue good, score: 0.0054590707

the anterior approach was, score: 0.003996368

confidence of prediction: 0.973482

Y\_true: [ 4 7 20]

Y\_pred: [ 4 7 20]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

extension ankle dorsiflexion and plantar, score: 0.41196442

anemia discharge condition good, score: 0.09672037

decompression fusion instrumentation t11, score: 0.018323338

confidence of prediction: 0.996103

Y\_true: [ 4 7 20]

Y\_pred: [ 4 7 20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

spondylosis hld htn pda as child anemia, score: 0.13308239

with psif as part, score: 0.008678038

with a sterile dressing call, score: 0.0060484186

confidence of prediction: 0.639240

Y\_true: [1]

Y\_pred: [ 1 20 37]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

pain levothyroxine sodium mcg po daily, score: 0.05339783

on admission levothyroxine mvi decadron discharge, score:  
0.0028070996

history of hypothyroidism for which she takes, score: 0.001974141

confidence of prediction: 0.582091

Y\_true: [ 2 34 42]

Y\_pred: [ 2 17 20 42 43]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

leg weakness dm reflux diverticulitis social history, score:

0.046014413

intubated sedated heent pupils, score: 0.0069728284

abnormalities impression endotracheal tube in, score: 0.006954645

confidence of prediction: 0.912813

Y\_true: [ 2 34 42]

Y\_pred: [ 2 17 20 42 43]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

intubated intubated 11pm o2 sat, score: 0.28282526

was intubated in the, score: 0.060418308

was intubated but off, score: 0.031387437

confidence of prediction: 0.948135

Y\_true: [ 1 20]

Y\_pred: [ 1 20]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

htn hypothyroidism fell at home, score: 0.07416223

history htn hypothyroidism last name un, score: 0.0024825055

on admission levoxyl dose unknown atenolol dose, score: 0.0010606775

confidence of prediction: 0.998557

Y\_true: [ 1 20]

Y\_pred: [ 1 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn hypothyroidism last name un uti social history  
lives, score: 0.28802502

illness 85f h o htn hypothyroidism, score: 0.003808973

component of underlying atrophy is, score: 0.001650459

confidence of prediction: 0.863425

Y\_true: [33 40 42]

Y\_pred: [33 40 42]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

to electively intubate patient sedated, score: 0.15053463

intubated for airway protection, score: 0.086203136

intubated sedated heent sclera, score: 0.055660374

confidence of prediction: 0.947083

Y\_true: [33 40 42]

Y\_pred: [33 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

to electively intubate patient sedated, score: 0.5998784

and was intubated for airway protection, score: 0.03960519

were intubated for airway protection, score: 0.018074963

confidence of prediction: 0.825289

Y\_true: [33 40 42]

Y\_pred: [33 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
to electively intubate patient sedated with, score: 0.53787637  
patient intubated and sedated, score: 0.22499178  
were intubated for airway protection, score: 0.012454784

confidence of prediction: 0.503835  
Y\_true: [ 2 4 5 6 9 20 26 37]  
Y\_pred: [ 2 4 9 20 26 31 33]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
retired from retail independent, score: 0.064853765  
htn hld dm cerebellar bleed psoriatic, score: 0.06454767  
vs metastatic cholangiocarcinoma pancreatic, score: 0.061424997

confidence of prediction: 0.800243  
Y\_true: [ 2 4 5 6 9 20 26 37]  
Y\_pred: [ 2 4 9 20 26 31 33]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history htn hld dm cerebellar bleed psoriatic, score: 0.18689711  
of htn hl dm2 remote alcoholism and, score: 0.07991825  
cholangiocarcinoma pancreatic carcinoma ultimately, score:  
0.011618108

confidence of prediction: 0.787502  
Y\_true: [ 2 4 5 6 9 20 26 37]  
Y\_pred: [ 2 4 9 20 26 31 33]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
past cirrhosis thrombocytopenia with platlets in social, score:  
0.14994323  
vs peripancreatic lymphangioma this, score: 0.103376895  
with rvr thrombocytopenia newly diagosed liver lesions, score:  
0.094556764

confidence of prediction: 0.961373  
Y\_true: [ 2 4 5 6 9 20 26 37]  
Y\_pred: [ 2 4 9 20 26 31 33]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn hl dm2 remote alcoholism, score: 0.118350625  
medical history htn hld dm cerebellar bleed, score: 0.08878143  
rvr thrombocytopenia newly diagosed, score: 0.036847107

confidence of prediction: 0.969315  
Y\_true: [ 2 4 5 6 9 20 26 37]  
Y\_pred: [ 2 4 9 20 26 31 33]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with rvr thrombocytopenia, score: 0.10072138  
effusions echo mildly dilated, score: 0.006903057

developed afib with rvr to the, score: 0.0021031501

confidence of prediction: 0.848649

Y\_true: [ 6 9 19 20 24 26 33 37]

Y\_pred: [ 4 6 9 17 19 24 26 27 33 35 40]

top three important windows for true positive code 6 (276.2: Acidosis)

developed metabolic acidosis and subsequent respiratory, score: 0.16300733

of metabolic acidosis on the patient was, score: 0.14385521

failure metabolic acidosis respiratory failure secondary aortic, score: 0.041546755

confidence of prediction: 0.537928

Y\_true: [ 6 9 19 20 24 26 33 37]

Y\_pred: [ 4 6 9 17 19 24 26 27 33 35 40]

top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)

hx of thrombocytopenia iv nitro, score: 0.32186046

c with thrombocytopenia s p, score: 0.12106921

scars or xanthomas pulses, score: 0.024226245

confidence of prediction: 0.693854

Y\_true: [ 6 9 19 20 24 26 33 37]

Y\_pred: [ 4 6 9 17 19 24 26 27 33 35 40]

top three important windows for true positive code 19 (39.95: Hemodialysis)

unsuccessful so cvvh was initiated at this, score: 0.17471296

dialysis line placement cordis, score: 0.029064102

significantly with cvvh which likely, score: 0.017411033

confidence of prediction: 0.983604

Y\_true: [ 6 9 19 20 24 26 33 37]

Y\_pred: [ 4 6 9 17 19 24 26 27 33 35 40]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

for stemi back on, score: 0.02682576

diffuse coronary artery disease severe cardiomyopathy with, score: 0.0114115095

cad with a lm, score: 0.01087133

confidence of prediction: 0.824172

Y\_true: [ 6 9 19 20 24 26 33 37]

Y\_pred: [ 4 6 9 17 19 24 26 27 33 35 40]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

fibrillation which requiried placement, score: 0.71771926

af hepatitis c with, score: 0.051962707

cabg n a percutaneous, score: 0.036396913

confidence of prediction: 0.637148

Y\_true: [ 6 9 19 20 24 26 33 37]

Y\_pred: [ 4 6 9 17 19 24 26 27 33 35 40]

top three important windows for true positive code 33 (518.81: Acute



respiratory failure)  
subsequent respiratory failure requiring intubation her family  
ultimately, score: 0.18814526  
hypoxic aggressive diuresis with, score: 0.04159486  
respiratory failure secondary aortic, score: 0.038869105

confidence of prediction: 0.839655  
Y\_true: [ 6 7 9 11 21 28 36]  
Y\_pred: [ 7 9 11 21 28 36]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
given unit prbc and hanging another, score: 0.11506387  
history of present illness, score: 0.08803439  
retired correctional officer no, score: 0.055722337

confidence of prediction: 0.779505  
Y\_true: [ 6 7 9 11 21 28 36]  
Y\_pred: [ 7 9 11 21 28 36]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
with anemia thrombocytopenia and gi bleed gi, score: 0.19892484  
loss anemia thrombocytopenia secondary to, score: 0.1501407  
retired correctional officer no, score: 0.023740476

confidence of prediction: 0.743907  
Y\_true: [ 6 7 9 11 21 28 36]  
Y\_pred: [ 7 9 11 21 28 36]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
diverticulosis neuropathy depression retinal detachment social  
history, score: 0.14243855  
home after having black tarry, score: 0.0046172705  
calcitriol 25mcg daily mvi, score: 0.002437748

confidence of prediction: 0.665933  
Y\_true: [ 6 7 9 11 21 28 36]  
Y\_pred: [ 7 9 11 21 28 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
retired correctional officer no, score: 0.032010246  
myeloma chronic renal insufficiency baseline creatinine mid  
presents, score: 0.031887334  
after having black tarry stools, score: 0.014102938

confidence of prediction: 0.827053  
Y\_true: [ 6 7 9 11 21 28 36]  
Y\_pred: [ 7 9 11 21 28 36]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.66183865  
admission an egd was performed on and, score: 0.02928858  
and black stools and, score: 0.01926513

confidence of prediction: 0.893946  
Y\_true: [ 6 7 9 11 21 28 36]  
Y\_pred: [ 7 9 11 21 28 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
retired correctional officer no, score: 0.021357555  
myeloma chronic renal insufficiency baseline creatinine mid  
presents, score: 0.009780155  
after having black tarry stools, score: 0.006840338

confidence of prediction: 0.981046  
Y\_true: [18]  
Y\_pred: [18]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.4344848  
tee which showed evidence, score: 0.019546846  
cardiothoracic allergies no known, score: 0.014517397

confidence of prediction: 0.831809  
Y\_true: [17]  
Y\_pred: [17]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line was placed his, score: 0.09733687  
line was placed and, score: 0.09733687  
picc line placement history of, score: 0.057440307

confidence of prediction: 0.572944  
Y\_true: [42 47]  
Y\_pred: [ 2 17 20 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and was intubated after ativan, score: 0.06315456  
accident requiring intubation for combativeness r posterior, score:  
0.02688411  
drop emg ncs in weeks, score: 0.010625183

confidence of prediction: 0.909120  
Y\_true: [ 4 10 20 29 30 40 42]  
Y\_pred: [ 4 30 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
copd hypertension dyslipidemia social history tobacco current,  
score: 0.24491732  
copd hypertension hyperlipidemia discharge condition stable  
discharge, score: 0.13065976  
tumor reveals squamous cell carcinoma he, score: 0.005388619

confidence of prediction: 0.698149  
Y\_true: [ 4 10 20 29 30 40 42]  
Y\_pred: [ 4 30 40 42]  
top three important windows for true positive code 30 (496: Chronic

airway obstruction, not elsewhere classified)  
medical history copd hypertension dyslipidemia social history,  
score: 0.23888181  
discharge diagnosis copd hypertension hyperlipidemia discharge  
condition, score: 0.20020555  
to his copd this was not, score: 0.10689356

confidence of prediction: 0.833921  
Y\_true: [ 4 10 20 29 30 40 42]  
Y\_pred: [ 4 30 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
requiring re intubation he was transferred, score: 0.48175156  
basal alveolar opacity that, score: 0.0032111777  
coagulation apc and mechanical debridement, score: 0.0008644894

confidence of prediction: 0.810044  
Y\_true: [ 4 10 20 29 30 40 42]  
Y\_pred: [ 4 30 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
requiring re intubation he was transferred, score: 0.33354193  
apc and mechanical debridement history, score: 0.005692264  
apc and mechanical debridement the, score: 0.005692264

confidence of prediction: 0.781491  
Y\_true: [ 6 8 34]  
Y\_pred: [28 31 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gerd placed on protonix mg, score: 0.08914756  
related to gerd dilated, score: 0.059801534  
past for gerd but is not, score: 0.03934156

confidence of prediction: 0.746374  
Y\_true: [ 2 13 18 24]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus obesity discharge condition,  
score: 0.052475616  
recorded as having no, score: 0.00075026584  
artery disease s p, score: 0.0003371209

confidence of prediction: 0.997037  
Y\_true: [ 2 13 18 24]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x4 lima lad svg, score: 0.34819275  
coronary artery bypass graft surgery see, score: 0.05326815  
coronary artery bypass grafts hypertension, score: 0.008512019

confidence of prediction: 0.986433

Y\_true: [ 2 13 18 24]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed per, score: 0.3559696

bypass grafting x4 lima lad svg, score: 0.03543068

diuresed towards his preoperative, score: 0.0068052146

confidence of prediction: 0.999309

Y\_true: [ 2 13 18 24]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting x4 lima lad, score: 0.6189453

coronary artery disease s p coronary artery bypass grafts, score:  
0.13103472

coronary artery disease and, score: 0.029125087

confidence of prediction: 0.806314

Y\_true: [ 4 6 9 17 20 24 40 42]

Y\_pred: [26 40 42 44]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

immediately re intubated w improvement in, score: 0.16419895

on cmv and transitioned, score: 0.005145828

palpation d dopplerable n, score: 0.0033950838

confidence of prediction: 0.869779

Y\_true: [ 4 6 9 17 20 24 40 42]

Y\_pred: [26 40 42 44]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

immediately re intubated w improvement in abg, score: 0.030637983

multiple colloid boluses was in, score: 0.026692614

support measures were stopped, score: 0.0041006086

confidence of prediction: 0.972822

Y\_true: [ 2 10 20 30]

Y\_pred: [ 7 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

101f dorzolamide timolol drops, score: 0.2635459

liver cancer hypertension psh cholecystectomy colon resection,  
score: 0.2018142

hydrochlorothiazide mg tablet tablet, score: 0.021683402

confidence of prediction: 0.958462

Y\_true: [ 2 26 30 34 47]

Y\_pred: [ 2 7 17 26 30]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or

unspecified type, not stated as uncontrolled)  
cirrhosis copd dm arthritis social history remote, score: 0.16507445  
day glyburide mg tablet sig, score: 0.0033471424  
loss requiring resuscitation with units prbc units, score:  
0.001922357

confidence of prediction: 0.513311  
Y\_true: [ 2 26 30 34 47]  
Y\_pred: [ 2 7 17 26 30]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
undergoing a laparoscopic converted to, score: 0.08280479  
irregular rate rhythm nl, score: 0.007718056  
difficulty swallowing diarrhea constipation, score: 0.005120281

confidence of prediction: 0.754825  
Y\_true: [ 2 26 30 34 47]  
Y\_pred: [ 2 7 17 26 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
etoh cirrhosis copd dm arthritis social history, score: 0.58467853  
atelectasis upper lungs clear heart size, score: 0.0040410836  
difficulty swallowing diarrhea constipation large, score:  
0.0037794781

confidence of prediction: 0.978820  
Y\_true: [ 7 18 26 34 49]  
Y\_pred: [18 20 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies patient recorded, score: 0.014869434  
amiodarone and beta blockers, score: 0.011769783  
washing incisions gently with mild soap, score: 0.009793819

confidence of prediction: 0.951096  
Y\_true: [ 7 18 26 34 49]  
Y\_pred: [18 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation s p atrial, score: 0.15924841  
atrial fibrillation major surgical or, score: 0.12355553  
fibrillation and cardioversion was, score: 0.082642674

confidence of prediction: 0.753468  
Y\_true: [10 32 33 41 43 45 46]  
Y\_pred: [17 33 41 43 45]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
by respiratory failure requiring a tracheostomy on, score:  
0.17565261  
developed worsening respiratory failure unable to, score: 0.02294988  
tube was placed on, score: 0.017517755

confidence of prediction: 0.856695

Y\_true: [10 32 33 41 43 45 46]

Y\_pred: [17 33 41 43 45]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

tolerate trach collar for more, score: 0.15125018

on tube feeds for the, score: 0.13710034

was carried out on which, score: 0.08503236

confidence of prediction: 0.892135

Y\_true: [10 32 33 41 43 45 46]

Y\_pred: [17 33 41 43 45]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours or more)

thus a tracheostomy tube was placed on, score: 0.16178606

tolerate trach collar for more, score: 0.078159384

a tracheostomy on and, score: 0.034941655

confidence of prediction: 0.980847

Y\_true: [10 32 33 41 43 45 46]

Y\_pred: [17 33 41 43 45]

top three important windows for true positive code 45 (99.15:

Parenteral infusion of concentrated nutritional substances)

started on tpn and a picc line, score: 0.0028472347

remained on tpn for over weeks, score: 0.002297889

trach collar for more, score: 0.0006455757

confidence of prediction: 0.979248

Y\_true: [17 20 33 41 43]

Y\_pred: [20 40 41 43]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn social history she lives, score: 0.18603578

vancomycin in d5w gram, score: 0.042259045

continued to withdraw both, score: 0.03642836

confidence of prediction: 0.922141

Y\_true: [17 20 33 41 43]

Y\_pred: [20 40 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

her tube feeds were started via, score: 0.03852644

stitle tracheostomy peg ivc, score: 0.021988118

a trach peg and ivc filter, score: 0.021432193

confidence of prediction: 0.911329

Y\_true: [17 20 33 41 43]

Y\_pred: [20 40 41 43]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours or more)

tracheostomy peg ivc dr, score: 0.05014643

a trach peg and ivc filter, score: 0.039698195

her sputum cultures grew coagulase positive, score: 0.035841923

confidence of prediction: 0.960266

Y\_true: [7]

Y\_pred: [ 7 20]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

extension ankle dorsiflexion and plantar, score: 0.716676

anemia discharge condition good, score: 0.1682601

prednisone humira celexa buspar, score: 0.010467488

confidence of prediction: 0.524791

Y\_true: [ 1 6 11 17 35]

Y\_pred: [17 34 35]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

radiology central line placement to begin, score: 0.13496523

cancer as above juvenile, score: 0.04891033

vena caval tumor on with, score: 0.033465944

confidence of prediction: 0.704602

Y\_true: [ 1 6 11 17 35]

Y\_pred: [17 34 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

acute renal failure during this, score: 0.043788645

and acute renal failure discharge medications, score: 0.029123267

developed acute renal failure with a, score: 0.020844368

confidence of prediction: 0.893265

Y\_true: [ 1 13 14 20 22 24 38]

Y\_pred: [ 1 2 13 14 18 20 24 25 38]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

hypertension hypothyroid diet controlled diabetes breast cancer

social, score: 0.36577305

hypertension hypothyroid diet controlled diabetes breast cancer

discharge, score: 0.36577305

xl synthroid discharge medications carvedilol, score: 0.016719637

confidence of prediction: 0.991189

Y\_true: [ 1 13 14 20 22 24 38]

Y\_pred: [ 1 2 13 14 18 20 24 25 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting, score: 0.5326557

coronary artery bypass grafting, score: 0.081488155

artery saphenous vein graft, score: 0.041037

confidence of prediction: 0.524310

Y\_true: [ 1 13 14 20 22 24 38]

Y\_pred: [ 1 2 13 14 18 20 24 25 38]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

cardiac catheterization selective coronary angiography of this,

score: 0.15093039  
catheterization history of present, score: 0.08023187  
mitral regurgitation is seen, score: 0.032399204

confidence of prediction: 0.764916  
Y\_true: [ 1 13 14 20 22 24 38]  
Y\_pred: [ 1 2 13 14 18 20 24 25 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
systemic arterial hypertension as above echo, score: 0.045835197  
myocardial infarction major surgical, score: 0.03866753  
infarction hypertension hypothyroid diet controlled diabetes, score:  
0.021643344

confidence of prediction: 0.998977  
Y\_true: [ 1 13 14 20 22 24 38]  
Y\_pred: [ 1 2 13 14 18 20 24 25 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.46101978  
coronary artery disease status post coronary artery, score:  
0.09760086  
coronary artery disease the, score: 0.09291015

confidence of prediction: 0.826448  
Y\_true: [ 1 13 14 20 22 24 38]  
Y\_pred: [ 1 2 13 14 18 20 24 25 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization selective coronary angiography of this,  
score: 0.24414058  
cardiac catheterization which revealed severe, score: 0.016816454  
cardiac catheterization history of present, score: 0.013055404

confidence of prediction: 0.950415  
Y\_true: [26 27 36 41 43]  
Y\_pred: [21 26 35 36 41 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation obstructive sleep apnea chronic, score:  
0.4209779  
estgfr using this 00pm, score: 0.0014356528  
muddy brown casts consistent with acute, score: 0.00096543453

confidence of prediction: 0.766526  
Y\_true: [26 27 36 41 43]  
Y\_pred: [21 26 35 36 41 43]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
cr began trending down, score: 0.08668308  
muddy brown casts consistent with acute, score: 0.03944931  
failure with creatinine trending, score: 0.026281767

confidence of prediction: 0.888063



Y\_true: [26 27 36 41 43]  
Y\_pred: [21 26 35 36 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
of tracheostomy tube to a portex, score: 0.05759212  
gi tube feeds initiated without, score: 0.03425312  
sputum cultures grew with, score: 0.017180402

confidence of prediction: 0.764018  
Y\_true: [26 27 36 41 43]  
Y\_pred: [21 26 35 36 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
of tracheostomy tube to a portex, score: 0.045520492  
a tracheostomy portex was, score: 0.04477436  
id sputum cultures grew with, score: 0.041562773

confidence of prediction: 0.734859  
Y\_true: [ 2 4 13 18 20 23 24]  
Y\_pred: [ 2 3 13 18 20 22 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
glipizide 10mg daily metformin 850mg daily zantac, score:  
0.026833383  
dependent diabetes mellitus coronary artery disease, score:  
0.0133589115  
dependent diabetes mellitus history of bare, score: 0.0133589115

confidence of prediction: 0.940993  
Y\_true: [ 2 4 13 18 20 23 24]  
Y\_pred: [ 2 3 13 18 20 22 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting surgery by, score: 0.25304502  
coronary artery bypass grafting utilizing the, score: 0.10803616  
descending and vein graft, score: 0.018428236

confidence of prediction: 0.947089  
Y\_true: [ 2 4 13 18 20 23 24]  
Y\_pred: [ 2 3 13 18 20 22 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires removed per protocol, score: 0.24260026  
bypass grafting utilizing the left, score: 0.021194719  
cardiothoracic allergies patient recorded, score: 0.017917152

confidence of prediction: 0.985506  
Y\_true: [ 2 4 13 18 20 23 24]  
Y\_pred: [ 2 3 13 18 20 22 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hypercholesterolemia non insulin

dependent, score: 0.20673119  
metformin 850mg daily zantac, score: 0.16080217  
s p cabg hypertension hypercholesterolemia non insulin dependent,  
score: 0.017516326

confidence of prediction: 0.977712  
Y\_true: [ 2 4 13 18 20 23 24]  
Y\_pred: [ 2 3 13 18 20 22 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg hypertension, score: 0.2358647  
coronary artery disease s p bms to, score: 0.124360025  
metal stent to right, score: 0.060708888

confidence of prediction: 0.724513  
Y\_true: [ 4 6 8 9 13 18 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension mild hyperlipidemia vitamin d deficiency social, score:  
0.23015739  
of hypertension hyperlipidemia was referred for, score: 0.13523653  
hypertension mild hyperlipidemia vitamin d deficiency discharge,  
score: 0.04719734

confidence of prediction: 0.893800  
Y\_true: [ 4 6 8 9 13 18 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending and reverse saphenous vein graft, score: 0.09996812  
wires were discontinued without, score: 0.07210195  
coronary artery by pass, score: 0.05371062

confidence of prediction: 0.986771  
Y\_true: [ 4 6 8 9 13 18 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.6730452  
cardiothoracic allergies no known, score: 0.0054422584  
washing incisions gently with mild soap, score: 0.0020111878

confidence of prediction: 0.989584  
Y\_true: [ 4 6 8 9 13 18 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension mild hyperlipidemia vitamin, score:  
0.20156124  
history of hypertension hyperlipidemia was referred for, score:  
0.09535472  
history occupation real estate doctor, score: 0.043498635

confidence of prediction: 0.993127  
Y\_true: [ 4 6 8 9 13 18 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p coronary artery bypass graft, score:  
0.23779768  
descending and reverse saphenous vein, score: 0.13628745  
coronary artery by pass, score: 0.09062568

confidence of prediction: 0.893774  
Y\_true: [ 4 6 8 9 13 18 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation he was started on, score: 0.12700649  
amiodarone mg tablet sig, score: 0.028374175  
amiodarone and beta blocker, score: 0.0056979805

confidence of prediction: 0.993484  
Y\_true: [ 2 24 30 47]  
Y\_pred: [24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lesion mid lad lesion of distal, score: 0.12367825  
coronary artery disease s, score: 0.094321966  
coronary artery disease type, score: 0.07568423

confidence of prediction: 0.996209  
Y\_true: [ 3 7 20 29]  
Y\_pred: [20 29]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
toprol lipitor hctz last name lf, score: 0.49040753  
hctz ativan discharge medications, score: 0.1978455  
t9 l5 laminectomy for, score: 0.05891022

confidence of prediction: 0.801609  
Y\_true: [ 3 7 20 29]  
Y\_pred: [20 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
a presumed pneumonia he was screened for, score: 0.07638023  
op pneumonia discharge condition stable, score: 0.014097391  
allergies patient recorded as, score: 0.0032941087

confidence of prediction: 0.989511  
Y\_true: [ 4 20 26 42 49]  
Y\_pred: [26 33 40 42 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib and history of recent, score: 0.17714028  
a fib who presents to, score: 0.0054397695  
initially a fib on coumadin bilateral total, score: 0.0007310229

confidence of prediction: 0.770003

Y\_true: [ 4 20 26 42 49]

Y\_pred: [26 33 40 42 49]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

was intubated for airway protection, score: 0.19796167

she was intubated for airway protection, score: 0.13659923

bed intubated on propofol, score: 0.039288346

confidence of prediction: 0.846635

Y\_true: [ 4 20 26 42 49]

Y\_pred: [26 33 40 42 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

for pain warfarin prescribed, score: 0.011771997

restarted on coumadin there, score: 0.006910017

initially a fib on coumadin bilateral total, score: 0.0063523822

confidence of prediction: 0.511977

Y\_true: [ 7 40 42]

Y\_pred: [ 7 40]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

anemia discharge condition mental, score: 0.22838153

tob opiates amphetamines lives, score: 0.13280037

anemia with improvement but, score: 0.09770174

confidence of prediction: 0.619729

Y\_true: [ 7 40 42]

Y\_pred: [ 7 40]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

he was intubated he had immediate desaturation, score: 0.46012875

prescription refills on saturdays, score: 0.01592002

any machinery while taking this medication, score: 0.010193911

confidence of prediction: 0.831751

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history hypertension dyslipidemia obesity social history lives, score: 0.18346737

cabg postop atrial fibrillation hypertension dyslipidemia obesity discharge condition alert, score: 0.03288151

views post bypass patient, score: 0.0102201095

confidence of prediction: 0.990907

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting x5 with the, score: 0.5366413  
artery and reverse saphenous vein graft, score: 0.022206273  
coronary artery bypass grafting for, score: 0.019501727

confidence of prediction: 0.980819

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
grafting x5 with the, score: 0.042995103  
cardiothoracic allergies patient recorded, score: 0.013360314  
washing incisions gently with mild soap, score: 0.00879983

confidence of prediction: 0.998698

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension dyslipidemia obesity social history,  
score: 0.14550674  
s p cabg postop atrial fibrillation hypertension dyslipidemia  
obesity discharge condition, score: 0.012328783

confidence of prediction: 0.999340

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.508001  
coronary artery disease s p cabg postop, score: 0.1075471  
coronary artery disease he, score: 0.10237835

confidence of prediction: 0.966396

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation he otherwise maintained stable, score:  
0.032097667  
atrial fibrillation hypertension dyslipidemia obesity, score:  
0.019428223  
atrial fibrillation were noted beta, score: 0.011490814

confidence of prediction: 0.984706

Y\_true: [11 18 20]

Y\_pred: [18]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without complication, score: 0.7453392  
lotions powders or ointments to, score: 0.08530565  
diuresed toward his preoperative, score: 0.035146527

confidence of prediction: 0.610488

Y\_true: [ 3 8 10 18 30 34 36 48]

Y\_pred: [ 3 10 13 18 24 30 35 48]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
diagnosis hypercholesterolemia hypertension coronary artery disease, score: 0.10004711  
medical history hypercholesterolemia hypertension coronary artery disease, score: 0.087685004  
cabgx3 and angioplasty pci, score: 0.050016444

confidence of prediction: 0.512103  
Y\_true: [ 3 8 10 18 30 34 36 48]  
Y\_pred: [ 3 10 13 18 24 30 35 48]  
top three important windows for true positive code 10 (305.1: Tobacco use disorder)  
history currently smokes ppd smoked for years, score: 0.05461614  
discharge diagnosis hypercholesterolemia hypertension, score: 0.0022851173  
rca being markedly aneurysmal, score: 0.0022308994

confidence of prediction: 0.979244  
Y\_true: [ 3 8 10 18 30 34 36 48]  
Y\_pred: [ 3 10 13 18 24 30 35 48]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
lotions powders or ointments to, score: 0.23933621  
cardiothoracic allergies patient recorded, score: 0.00948714  
washing incisions gently with mild soap, score: 0.0062487475

confidence of prediction: 0.648856  
Y\_true: [ 3 8 10 18 30 34 36 48]  
Y\_pred: [ 3 10 13 18 24 30 35 48]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
airspace suggests copd linear streaks of gas, score: 0.080037095  
osteoarthritis chronic obstructive pulmonary disease social, score: 0.0043850937  
osteoarthritis chronic obstructive pulmonary disease discharge, score: 0.0043850937

confidence of prediction: 0.690128  
Y\_true: [ 3 8 10 18 30 34 36 48]  
Y\_pred: [ 3 10 13 18 24 30 35 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg in, score: 0.4510567  
s p cabg years ago physical, score: 0.23930801  
s p cabg reason, score: 0.092058085

confidence of prediction: 0.921680  
Y\_true: [1]  
Y\_pred: [ 1 26]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
daily levothyroxine mcg tablet sig one, score: 0.019015107

arthritis glaucoma hypothyroidism past surgical history tah, score: 0.0012226055

mg qday levoxyl she does not, score: 0.0011357403

confidence of prediction: 0.855709

Y\_true: [ 4 28]

Y\_pred: [4]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

dyslipidemia and obesity physical, score: 0.17627986

apnea asthma dyslipidemia venous stasis change irritable, score: 0.028081816

leg varicose vein stripping right oophorectomy, score: 0.0075722337

confidence of prediction: 0.690382

Y\_true: [11 40 42]

Y\_pred: [11 33 40 42]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

medical history depression multiple past suicide, score: 0.17098796

depression with suicidality as above patient initially, score: 0.039037503

secondary diagnosis depression discharge condition mental, score: 0.014876112

confidence of prediction: 0.808823

Y\_true: [11 40 42]

Y\_pred: [11 33 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

was intubated unable to, score: 0.31018054

initially required intubation for stabilization, score: 0.17494193

initially required intubation by ems, score: 0.10046491

confidence of prediction: 0.824261

Y\_true: [11 40 42]

Y\_pred: [11 33 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

was intubated unable to, score: 0.22548907

initially required intubation by ems, score: 0.14976054

initially required intubation for stabilization, score: 0.08117304

confidence of prediction: 0.814258

Y\_true: [ 0 7 17 20 37 46]

Y\_pred: [ 7 20]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

anemia he was transfused back, score: 0.09965595

of packed red blood, score: 0.026880585

m service orthopaedics allergies penicillins attending first, score: 0.021977114

confidence of prediction: 0.809719  
Y\_true: [ 0 7 17 20 37 46]  
Y\_pred: [ 7 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension sepsis hemiplegia neurogenic bladder,  
score: 0.37255168  
source line peripheral line 01am, score: 0.089181796  
resistant organisms social history lives, score: 0.061646946

confidence of prediction: 0.990735  
Y\_true: [13 14 18 21 24 35 36 37 38]  
Y\_pred: [ 1 2 13 14 18 24 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.5918748  
descending artery saphenous vein graft, score: 0.0447078  
coronary artery bypass graft x please, score: 0.033429876

confidence of prediction: 0.655504  
Y\_true: [13 14 18 21 24 35 36 37 38]  
Y\_pred: [ 1 2 13 14 18 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization coronary angiography of this, score:  
0.19314311  
severely diffusely diseased the lcx had, score: 0.030805033  
cardiac cath on which revealed, score: 0.02616846

confidence of prediction: 0.962878  
Y\_true: [13 14 18 21 24 35 36 37 38]  
Y\_pred: [ 1 2 13 14 18 24 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders on, score: 0.39022562  
pacing wires were removed per, score: 0.010003036  
bypass graft x left, score: 0.0056757513

confidence of prediction: 0.999199  
Y\_true: [13 14 18 21 24 35 36 37 38]  
Y\_pred: [ 1 2 13 14 18 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.52406126  
coronary artery disease hypertension, score: 0.110947154  
coronary artery disease cardiac, score: 0.105615005

confidence of prediction: 0.822713  
Y\_true: [13 14 18 21 24 35 36 37 38]  
Y\_pred: [ 1 2 13 14 18 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization coronary angiography of this, score:  
0.21479556



catheterization history of present, score: 0.07554803  
marginal saphenous vein graft, score: 0.039426383

confidence of prediction: 0.945190

Y\_true: [ 6 10 20]

Y\_pred: [ 6 20 28]

top three important windows for true positive code 6 (276.2:  
Acidosis)

lactic acidosis serum tox was, score: 0.050788492

ag metabolic acidosis found to have, score: 0.03081926

discharge ag acidosis the acidosis rapidly improved with, score:  
0.006816149

confidence of prediction: 0.885012

Y\_true: [ 6 10 20]

Y\_pred: [ 6 20 28]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

was positive htn continued on metoprolol code, score: 0.07401536

etoh abuse htn remote ivdu depression, score: 0.06755516

kidney injury sepsis or, score: 0.056435168

confidence of prediction: 0.868772

Y\_true: [ 1 20 26 27]

Y\_pred: [ 1 17 20 26 27]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

daily levothyroxine mcg tablet sig one, score: 0.059995607

daily levothyroxine mcg p o daily, score: 0.017692192

hypertension hypertension hypothyroidism left humerus fx s, score:  
0.0039038882

confidence of prediction: 0.968804

Y\_true: [ 1 20 26 27]

Y\_pred: [ 1 17 20 26 27]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

hctz mg p o, score: 0.24332875

moderate pulmonary hypertension hypertension hypothyroidism left  
humerus fx, score: 0.16106333

ef moderate aortic insufficiency, score: 0.026955325

confidence of prediction: 0.903036

Y\_true: [ 1 20 26 27]

Y\_pred: [ 1 17 20 26 27]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib on asa 81mg s, score: 0.8275391

fo leftward shift he, score: 0.040518627

fall major surgical or, score: 0.009921618

confidence of prediction: 0.961985

Y\_true: [ 1 20 26 27]

Y\_pred: [ 1 17 20 26 27]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure ef moderate aortic insufficiency, score:  
0.10773598  
weigh yourself every morning name8, score: 0.00682636  
3cm with a component, score: 0.003006073

confidence of prediction: 0.984488  
Y\_true: [ 2 11 17 21 27 36]  
Y\_pred: [27 31]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure w acute exacerbation, score: 0.6734688  
htn crf chf dm requires insulin depression, score: 0.009813207  
with chf crf dm transferred from, score: 0.0069024027

confidence of prediction: 0.587538  
Y\_true: [ 3 12]  
Y\_pred: [1 3]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
from her operation but, score: 0.028135411  
a tracheobronchoplasty by dr, score: 0.012464655  
levothyroxine lovastatin methotrexate [UNK] omeprazole, score:  
0.0077405116

confidence of prediction: 0.534705  
Y\_true: [17 40 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
luq patient intubated in trauma bay left sided, score: 0.25670454  
tsicu intubated for observation, score: 0.06460993  
drowsy and impair your ability, score: 0.017449647

confidence of prediction: 0.683725  
Y\_true: [17 40 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
luq patient intubated in trauma bay left, score: 0.08247933  
tsicu intubated for observation, score: 0.030485388  
with a bandaid you may, score: 0.007361166

confidence of prediction: 0.927023  
Y\_true: [17 19 26 33 45 46 48 49]  
Y\_pred: [ 4 19 26 45 48 49]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
failure necessitating dialysis and fulminant liver failure and  
biliary, score: 0.05404709  
tolerated first dialysis today without, score: 0.04234322  
and hd initiated does, score: 0.01016837

confidence of prediction: 0.994887  
Y\_true: [17 19 26 33 45 46 48 49]  
Y\_pred: [ 4 19 26 45 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin who presented, score: 0.882742  
irregularly irregular s1 s2 no, score: 0.06206185  
atrial fibrillation not on anticoagulation, score: 0.0011330913

confidence of prediction: 0.946994  
Y\_true: [17 19 26 33 45 46 48 49]  
Y\_pred: [ 4 19 26 45 48 49]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
to start tpn today patient tolerated, score: 0.005845107  
initiated on tpn upon arrival to the, score: 0.0014491904  
breakthrough pain tpn discharge medications not, score:  
0.00039092763

confidence of prediction: 0.882492  
Y\_true: [17 19 26 33 45 46 48 49]  
Y\_pred: [ 4 19 26 45 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
of cad afib on, score: 0.0027156102  
abd pevliis lad this was, score: 0.0010687077  
cad s p cabg approx patient states, score: 0.00062831026

confidence of prediction: 0.555101  
Y\_true: [17 19 26 33 45 46 48 49]  
Y\_pred: [ 4 19 26 45 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin who presented with, score: 0.8525363  
lasix qday coumadin [UNK], score: 0.062754415  
afib previously on coumadin hld presents with, score: 0.0038052334

confidence of prediction: 0.920871  
Y\_true: [ 4 6 7 26 28 35 40 42]  
Y\_pred: [ 4 20 30 33 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history asthma copd htn hyperlipidemia h o prostate ca, score:  
0.0032489505  
post 4uprbc er 1uffp [UNK] egd done, score: 0.0010333501

confidence of prediction: 0.857744  
Y\_true: [ 4 6 7 26 28 35 40 42]  
Y\_pred: [ 4 20 30 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
abg patient intubated cv s1, score: 0.11963969  
on and intubation blood transfusions, score: 0.043233953

nebulizers treatment intubated in emergency, score: 0.03443642

confidence of prediction: 0.642807

Y\_true: [ 4 6 7 26 28 35 40 42]

Y\_pred: [ 4 20 30 33 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

abg patient intubated cv s1, score: 0.05434776

on and intubation blood transfusions, score: 0.014784548

nebulizers treatment intubated in emergency, score: 0.006214287

confidence of prediction: 0.736411

Y\_true: [ 4 24 27 40 42]

Y\_pred: [ 4 24 27 41]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

hyperlipidemia stable on statin medications, score: 0.23839535

history of hyperlipidemia cad, score: 0.09868372

hisotry of hyperlipidemia single vessel cad, score: 0.08805441

confidence of prediction: 0.990146

Y\_true: [ 4 24 27 40 42]

Y\_pred: [ 4 24 27 41]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

coronary artery disease chronic, score: 0.0665042

interventions cad s p lad stent, score: 0.04772183

lad lesion and he, score: 0.034005433

confidence of prediction: 0.966613

Y\_true: [ 4 24 27 40 42]

Y\_pred: [ 4 24 27 41]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

congestive heart failure hyperlipidemia, score: 0.38358828

systolic heart failure likely combination of, score: 0.14895412

systolic heart failure initially admitted for, score: 0.13570915

confidence of prediction: 0.953431

Y\_true: [20 26 47 48]

Y\_pred: [ 4 7 13 20 23 26 39 42 48]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

medical history hypertension hyperlipidemia apical hypertrophic  
cardiomyopathy, score: 0.16953433

rosuvastatin crestor mg po, score: 0.049624052

mellitus dyslipidemia hypertension cardiac history cad, score:  
0.04227627

confidence of prediction: 0.954840

Y\_true: [20 26 47 48]

Y\_pred: [ 4 7 13 20 23 26 39 42 48]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation who presents for, score: 0.22421685

atrial fibrillation s p pulmonary, score: 0.036031593

atrial fibrillation major surgical or, score: 0.024918888

confidence of prediction: 0.720259

Y\_true: [20 26 47 48]

Y\_pred: [ 4 7 13 20 23 26 39 42 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg atypical, score: 0.409385

severe 3vd cabg s p mi cabg x lima lad y graft, score: 0.050512224

quit following cabg etoh, score: 0.03539428

confidence of prediction: 0.651946

Y\_true: [40 42]

Y\_pred: [33 40 42]

top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

then intubated for airway protection, score: 0.19396557

sedated and intubated in, score: 0.085472934

post intubation abg was, score: 0.06191352

confidence of prediction: 0.842589

Y\_true: [40 42]

Y\_pred: [33 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

then intubated for airway protection, score: 0.17039312

was intubated for airway protection, score: 0.08237237

is intubated moving in, score: 0.07792801

confidence of prediction: 0.907279

Y\_true: [ 0 1 8 27 29]

Y\_pred: [ 1 11 20 27 29 34]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

fever levothyroxine mcg tablet sig one, score: 0.01792973

lidoderm patch levothyroxine 25mcg po qday prilosec 20mg, score:  
0.0017906157

methocarbamol meperidine hydrocodone attending, score: 0.00061154016

confidence of prediction: 0.970657

Y\_true: [ 0 1 8 27 29]

Y\_pred: [ 1 11 20 27 29 34]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

diastolic chf tte obtained this, score: 0.46479642

congestive heart failure with volume, score: 0.07456194

aaa and chronic back, score: 0.070658214

confidence of prediction: 0.798019

Y\_true: [ 0 1 8 27 29]

Y\_pred: [ 1 11 20 27 29 34]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

diagnosis pneumonia congestive heart, score: 0.36013135

to pneumonia and a, score: 0.19057444

though superimposed pneumonia be definitely, score: 0.07799648

confidence of prediction: 0.884526

Y\_true: [ 4 18 24]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

medical history hyperlipidemia rosacea rectal fissures in, score: 0.094489306

to lad hyperlipidemia rosacea rectal fissures in, score: 0.07402704

atenolol atorvastatin plavix doxycycline, score: 0.022534253

confidence of prediction: 0.986770

Y\_true: [ 4 18 24]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued per, score: 0.71451277

diuresed toward his preoperative, score: 0.033692904

cardiothoracic allergies patient recorded, score: 0.0032416102

confidence of prediction: 0.990383

Y\_true: [ 4 18 24]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease s p coronary artery bypass graft, score: 0.16771697

coronary bypass grafting x4, score: 0.1325422

coronary artery reverse saphenous, score: 0.09894042

confidence of prediction: 0.573410

Y\_true: [ 4 13 18 24]

Y\_pred: [ 4 13 18 24 29]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

medical history dyslipidemia oa of right shoulder, score: 0.2817615

1000am post bypass patient is apaced, score: 0.015239948

lima left anterior descending, score: 0.012058112

confidence of prediction: 0.989880

Y\_true: [ 4 13 18 24]

Y\_pred: [ 4 13 18 24 29]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft x with lima left, score: 0.69275874

coronary artery bypass graft x see, score: 0.10598146

and pacing wires were discontinued without, score: 0.0038560403

confidence of prediction: 0.986481

Y\_true: [ 4 13 18 24]

Y\_pred: [ 4 13 18 24 29]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.74539834

diuresed toward the preoperative, score: 0.021031434

cardiothoracic allergies no known, score: 0.0060273074

confidence of prediction: 0.999599

Y\_true: [ 4 13 18 24]

Y\_pred: [ 4 13 18 24 29]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass graft x with lima left, score: 0.71972764

coronary artery disease discharge condition, score: 0.15237099

coronary artery bypass graft x see, score: 0.0307386

confidence of prediction: 0.675816

Y\_true: [ 7 34]

Y\_pred: [ 7 28 34]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

history of present illness, score: 0.08714002

with bright red blood, score: 0.07565735

sized varix in distal, score: 0.058374554

confidence of prediction: 0.897455

Y\_true: [ 7 34]

Y\_pred: [ 7 28 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

blood transfusions gerd hypertension social history she, score: 0.013161977

varices she has no, score: 0.0033310263

hematemesis the patient has, score: 0.003308245

confidence of prediction: 0.887568

Y\_true: [ 0 2 4 12 16 17 21 23 24 27 29 30 31 33 36 40 43]

Y\_pred: [ 2 4 17 27 30 42]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

tid metformin 500mg qid simvastatin 40mg, score: 0.03079977

phtn copd dm cad evidence of, score: 0.020469412

and ckd who presents, score: 0.0012983177

confidence of prediction: 0.944407

Y\_true: [ 0 2 4 12 16 17 21 23 24 27 29 30 31 33 36 40 43]

Y\_pred: [ 2 4 17 27 30 42]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

copd cad hld and tracheostomy transfered, score: 0.10232318

history gout hld phtn copd dm cad, score: 0.092018284

simvastatin 40mg qhs zetia 10mg daily duonebs, score: 0.005987797

confidence of prediction: 0.765629

Y\_true: [ 0 2 4 12 16 17 21 23 24 27 29 30 31 33 36 40 43]

Y\_pred: [ 2 4 17 27 30 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

on cooling protocol but, score: 0.13391837

count of 5k with, score: 0.042425547

the cooling protocol she remained with, score: 0.016263181

confidence of prediction: 0.969619

Y\_true: [ 0 2 4 12 16 17 21 23 24 27 29 30 31 33 36 40 43]

Y\_pred: [ 2 4 17 27 30 42]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

with chf copd and ckd who presents, score: 0.018496852

extremely severe encephalopathy but it was, score: 0.0036999276

dm cad evidence of, score: 0.0012953401

confidence of prediction: 0.613821

Y\_true: [ 0 2 4 12 16 17 21 23 24 27 29 30 31 33 36 40 43]

Y\_pred: [ 2 4 17 27 30 42]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

with chf copd and ckd who presents, score: 0.11286405

woman with copd cad hld and tracheostomy, score: 0.0155650955

hld phtn copd dm cad evidence of, score: 0.011638428

confidence of prediction: 0.589697

Y\_true: [10 11 17]

Y\_pred: [10 11]

top three important windows for true positive code 10 (305.1: Tobacco use disorder)

dysfunction tobacco abuse depression social history, score: 0.0071028657

in [UNK] smokes ppd x years he, score: 0.0070379423

ambisone for 2weeks he was, score: 0.0042549986

confidence of prediction: 0.710772

Y\_true: [10 11 17]

Y\_pred: [10 11]

top three important windows for true positive code 11 (311: Depressive disorder, not elsewhere classified)

tobacco abuse depression social history lives with, score: 0.04164737

prn commit mg [UNK], score: 0.010525065

nameis underwent egd and, score: 0.005406721

confidence of prediction: 0.986860

Y\_true: [ 4 18 25]

Y\_pred: [18 20 25]

top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)



wires were discontinued without, score: 0.7487734  
diuresed toward the preoperative, score: 0.02112666  
cardiothoracic allergies no known, score: 0.0060545984

confidence of prediction: 0.807507  
Y\_true: [ 4 18 25]  
Y\_pred: [18 20 25]  
top three important windows for true positive code 25 (424.0: Mitral valve disorders)  
mitral valve prolapse elevated lipids, score: 0.3003736  
mitral valve prolapse elevated lipids, score: 0.26798227  
mitral valve repair as, score: 0.06426664

confidence of prediction: 0.972362  
Y\_true: [10 20]  
Y\_pred: [20 24]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
stenting secondary hypertension depression anxiety discharge, score: 0.31502423  
history of hypertension depression, score: 0.075863875  
blindness stroke tia etc, score: 0.07021514

confidence of prediction: 0.841385  
Y\_true: [ 4 5 13 18 20 23 24]  
Y\_pred: [ 4 5 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
[UNK] and hyperlipidemia hypertension hyperparathyroid s p, score: 0.1571313  
zetia 10mg qd hctz, score: 0.019142374  
ezetimibe mg tablet sig, score: 0.01562066

confidence of prediction: 0.802137  
Y\_true: [ 4 5 13 18 20 23 24]  
Y\_pred: [ 4 5 13 18 20 24]  
top three important windows for true positive code 5 (276.1: Hyposmolality and/or hyponatremia)  
for transient hyponatremia the patient received unit, score: 0.82596946  
to the operating room, score: 0.0028703944  
patient recorded as having no, score: 0.0028354197

confidence of prediction: 0.992022  
Y\_true: [ 4 5 13 18 20 23 24]  
Y\_pred: [ 4 5 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass x lima lad svg dx, score: 0.525623  
coronary artery bypass x overall, score: 0.08041226  
wires were discontinued without, score: 0.020934934

confidence of prediction: 0.986656  
Y\_true: [ 4 5 13 18 20 23 24]

Y\_pred: [ 4 5 13 18 20 24]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.74522144  
diuresed toward the preoperative, score: 0.02102644  
bypass x lima lad, score: 0.0058680265

confidence of prediction: 0.992336

Y\_true: [ 4 5 13 18 20 23 24]

Y\_pred: [ 4 5 13 18 20 24]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
and hyperlipidemia hypertension hyperparathyroid s p, score:  
0.14297791  
10mg qd hctz 25mg, score: 0.022282124  
dx svg om svg pda, score: 0.018703625

confidence of prediction: 0.998285

Y\_true: [ 4 5 13 18 20 23 24]

Y\_pred: [ 4 5 13 18 20 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass x, score: 0.49073625  
coronary artery disease s p coronary artery, score: 0.10389203  
rca was stented however multivessel, score: 0.099069685

confidence of prediction: 0.853957

Y\_true: [ 6 11 21 36]

Y\_pred: [ 6 21 36]

top three important windows for true positive code 6 (276.2:  
Acidosis)  
ag metabolic acidosis likely alcholic ketoacidosis, score:  
0.077471964  
myelos plt smr normal, score: 0.03305572  
gap metabolic acidosis the patient had an, score: 0.02228187

confidence of prediction: 0.826294

Y\_true: [ 6 11 21 36]

Y\_pred: [ 6 21 36]

top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
for kidney function within, score: 0.030928997  
hip chronic kidney disease baseline cr of social history, score:  
0.0053786607  
lost his job and started drinking, score: 0.0044297487

confidence of prediction: 0.747965

Y\_true: [ 6 11 21 36]

Y\_pred: [ 6 21 36]

top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease baseline cr of social history, score:  
0.09384918

for kidney function within, score: 0.054368135  
lost his job and started drinking, score: 0.007034204

confidence of prediction: 0.624255  
Y\_true: [ 1 26]  
Y\_pred: [ 1 17]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
hospital1 levothyroxine sodium mcg po daily, score: 0.4877384  
folate synthroid mcg daily lisinopril mg, score: 0.036134824  
the sicu patient was, score: 0.0037068042

confidence of prediction: 0.645120  
Y\_true: [ 4 5 8 13 18 20 24 37 39]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
borderline diabetes dyslipidemia hypertension cardiac history cabg,  
score: 0.34101552  
real estate broker lives, score: 0.020858064  
hospital1 cabg x1 htn renal calculi s, score: 0.02081892

confidence of prediction: 0.921386  
Y\_true: [ 4 5 8 13 18 20 24 37 39]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed patient was, score: 0.13184565  
cardiothoracic allergies avelox attending, score: 0.062480904  
descending thoracic aorta the, score: 0.007151147

confidence of prediction: 0.932498  
Y\_true: [ 4 5 8 13 18 20 24 37 39]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
cabg x1 htn renal calculi s p, score: 0.05746982  
retired real estate broker lives, score: 0.044096746  
diabetes dyslipidemia hypertension cardiac, score: 0.03645128

confidence of prediction: 0.927198  
Y\_true: [ 4 5 8 13 18 20 24 37 39]  
Y\_pred: [ 2 4 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
as cad s p hospital1 cabg, score: 0.08217807  
single vessel cad urinary incontinence, score: 0.05294475  
change change in appetite, score: 0.028432693

confidence of prediction: 0.911634  
Y\_true: [16 17 33 42]  
Y\_pred: [42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96

consecutive hours)  
unresponsive intubated cranial nerves, score: 0.70098096  
placement organ donation history, score: 0.12791805  
later her icp s, score: 0.010860608

confidence of prediction: 0.898894  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pmh hypertension hyperlipidemia obesity benign prostatic  
hypertrophy, score: 0.11474967  
fibrillation hypertension hyperlipidemia obesity benign prostatic  
hypertrophy, score: 0.031080002  
suitable for harvest if, score: 0.01607829

confidence of prediction: 0.990975  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left internal mammary left, score:  
0.73994106  
coronary artery bypass grafting to one, score: 0.02825956  
coronary artery bypass graft x atrial, score: 0.01808881

confidence of prediction: 0.963702  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.4767901  
cardiothoracic allergies patient recorded, score: 0.011751176  
bypass graft x atrial, score: 0.006934814

confidence of prediction: 0.998715  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
atrial fibrillation hypertension hyperlipidemia obesity benign  
prostatic, score: 0.04699872  
ligation pmh hypertension hyperlipidemia obesity benign prostatic,  
score: 0.023563663  
history retired non smoker, score: 0.021609843

confidence of prediction: 0.999350  
Y\_true: [ 4 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.6267587  
coronary artery disease s p coronary artery bypass graft, score:  
0.13268887

coronary artery disease and, score: 0.043479107

confidence of prediction: 0.923997

Y\_true: [ 4 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation hypertension hyperlipidemia obesity, score:  
0.13859469

atrial fibrillation heparin was started, score: 0.07359044

atrial fibrillation s p maze, score: 0.059900314

confidence of prediction: 0.798260

Y\_true: [ 5 7 19 20 26]

Y\_pred: [ 4 20 26 31 44]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

pmh of htn breast, score: 0.44798258

medical history htn diagnosed months ago, score: 0.15493584

remote tonsillectomy adenoidectomy social history, score:  
0.054203372

confidence of prediction: 0.842105

Y\_true: [ 5 7 19 20 26]

Y\_pred: [ 4 20 26 31 44]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib with rvr the patient, score: 0.35101536

atrial fibrillation to a hr, score: 0.027496269

amiodarone and beta blocker, score: 0.008608053

confidence of prediction: 0.976416

Y\_true: [10 17 20 26 34 48 49]

Y\_pred: [ 3 13 18 20 24 26 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

medical history hypertension hypercholesterolemia gastroesophageal  
reflux, score: 0.30569863

and ibuprofen incisions sternal healing well, score: 0.08255974

heaves obstipation but without, score: 0.05585837

confidence of prediction: 0.975189

Y\_true: [10 17 20 26 34 48 49]

Y\_pred: [ 3 13 18 20 24 26 34]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation was controlled and, score: 0.07795033

develop atrial fibrillation and was started, score: 0.014702264

atrial fibrillation inr goal, score: 0.0045553073

confidence of prediction: 0.823957

Y\_true: [10 17 20 26 34 48 49]

Y\_pred: [ 3 13 18 20 24 26 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

heaves obstipation but without, score: 0.020998133

retired tobacco lppd x50 yrs, score: 0.016301032

dyslipidemia gastric reflux ventral, score: 0.011185154

confidence of prediction: 0.982018

Y\_true: [ 3 13 18 20 24 39]

Y\_pred: [ 4 13 17 18 20 24]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

cabg x2 lima lad, score: 0.21404372

cabg x history of, score: 0.20507008

descending reverse saphenous vein graft, score: 0.13424349

confidence of prediction: 0.961776

Y\_true: [ 3 13 18 20 24 39]

Y\_pred: [ 4 13 17 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

lotions powders or ointments to, score: 0.29982904

incisions no baths or, score: 0.26079053

cabg x2 lima lad, score: 0.020230576

confidence of prediction: 0.935822

Y\_true: [ 3 13 18 20 24 39]

Y\_pred: [ 4 13 17 18 20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension dyslipidemia gout obesity

cerebrovascular, score: 0.23265834

underwent cabg x2 lima, score: 0.08189162

p cabg x2 discharge condition, score: 0.06425711

confidence of prediction: 0.980798

Y\_true: [ 3 13 18 20 24 39]

Y\_pred: [ 4 13 17 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease worsening, score: 0.12550959

cabg x history of, score: 0.09681963

disease with occlusion of, score: 0.055534527

confidence of prediction: 0.714744

Y\_true: [ 4 20 24 47]

Y\_pred: [ 4 20 24]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

hypertension cad dyslipidemia surgical history teeth, score:

0.44749853

nf amlodipine atorvastatin mg, score: 0.02623333

carvedilol mg po bid, score: 0.011262075

confidence of prediction: 0.995448

Y\_true: [ 4 20 24 47]

Y\_pred: [ 4 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of cad htn seizure who s, score: 0.40071416  
medical history hypertension cad dyslipidemia surgical history,  
score: 0.1974368  
astrocytoma he returns today, score: 0.0111152865

confidence of prediction: 0.572964  
Y\_true: [ 4 20 24 47]  
Y\_pred: [ 4 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
hypertension cad dyslipidemia surgical history teeth, score:  
0.066703804  
nf amlodipine atorvastatin mg, score: 0.035303444  
sided lesion this was followed, score: 0.0333252

confidence of prediction: 0.987620  
Y\_true: [20]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
disease arthritis hypertension discharge condition mental, score:  
0.2387751  
hydrochlorothiazide diovan hct prescribed by, score: 0.06165806  
valsartan hctz was started, score: 0.053253192

confidence of prediction: 0.867956  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia hemorrhoids sciatica in right,  
score: 0.17669441  
x hypertension hyperlipidemia sciatica in right leg, score:  
0.03709753  
simvastatin mg tablet sig, score: 0.0051073493

confidence of prediction: 0.990534  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x left, score: 0.4548  
descending artery reverse saphenous vein graft, score: 0.09508579  
mammary artery grafted to, score: 0.040688246

confidence of prediction: 0.690534  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization that revealed coronary, score: 0.027999323

varicosities none x neuro, score: 0.009309487  
cardiac cath which revealed severe, score: 0.008779102

confidence of prediction: 0.964292  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.49663106  
creams or powders to, score: 0.37775463  
bypass grafting x left internal, score: 0.025502706

confidence of prediction: 0.996726  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
occupation [UNK] banker last dental exam, score: 0.096820615  
hypertension hyperlipidemia sciatica in right, score: 0.08902482  
medical history hypertension hyperlipidemia hemorrhoids sciatica in,  
score: 0.081270084

confidence of prediction: 0.999329  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.43720612  
descending artery reverse saphenous vein, score: 0.18427931  
coronary artery disease s p coronary artery bypass graft, score:  
0.09255936

confidence of prediction: 0.778313  
Y\_true: [ 4 13 14 18 20 24 32 38 47]  
Y\_pred: [ 4 13 14 18 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cath coronary angiography in, score: 0.6796746  
varicosities none x neuro, score: 0.045894973  
marginal branch of the, score: 0.021694131

confidence of prediction: 0.587780  
Y\_true: [ 2 4 34 42]  
Y\_pred: [ 2 7 40 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily metformin mg tablet sig, score: 0.07005824  
day metformin q day discharge, score: 0.031242985  
medical history dm chronic alcohol use, score: 0.03103102

confidence of prediction: 0.880046  
Y\_true: [ 2 4 34 42]  
Y\_pred: [ 2 7 40 42]



top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
lastname was intubated prior to his, score: 0.013882555  
name tu fr iron ferrous sulfate mg, score: 0.002857062  
you required several blood products prior, score: 0.001197573

confidence of prediction: 0.938020

Y\_true: [ 4 20 34]

Y\_pred: [ 4 20 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

home hctz hyperlipidemia continued home simvastatin code, score:  
0.0971814

fracture hypertension hyperlipidemia pneumonia in back hemangioma,  
score: 0.027732583

thereafter simvastatin mg tablet tablet, score: 0.004882494

confidence of prediction: 0.948791

Y\_true: [ 4 20 34]

Y\_pred: [ 4 20 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

toe fracture hypertension hyperlipidemia pneumonia in back, score:  
0.59295285

his home hctz hyperlipidemia continued home simvastatin, score:  
0.02766144

penicillins morphine lisinopril sulfa, score: 0.007829725

confidence of prediction: 0.663268

Y\_true: [ 4 20 34]

Y\_pred: [ 4 20 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

knees gastroesophageal reflux disease abnormal psa, score:  
0.036657397

examination and toxoplasma seroconversion he, score: 0.017632598  
[UNK] and leukovorin first name11, score: 0.0167761

confidence of prediction: 0.949638

Y\_true: [ 2 4 10 21 36 48]

Y\_pred: [ 4 20 23 48]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

ago obesity hyperlipidemia s p carotid stent, score: 0.16099788

rosuvastatin mg qhs glipizide, score: 0.060813878

cabg who presents for, score: 0.05415642

confidence of prediction: 0.879279

Y\_true: [ 2 4 10 21 36 48]

Y\_pred: [ 4 20 23 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg who presents for, score: 0.47014984

s p cabg s p stent, score: 0.47014984  
s p mi and cabg s p stent, score: 0.0028160915

confidence of prediction: 0.828747  
Y\_true: [ 2 4 17 21 27 36 40 42 47 48]  
Y\_pred: [17 40 42 48]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line r picc basic coagulation, score: 0.31956008  
line r picc chemistry renal glucose, score: 0.31956008  
knee aspiration history of, score: 0.02424089

confidence of prediction: 0.821862  
Y\_true: [ 2 4 17 21 27 36 40 42 47 48]  
Y\_pred: [17 40 42 48]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
related to intubated status mucus, score: 0.030857733  
experienced witnessed gtc seizures he was, score: 0.024590729  
he was intubated for airway protection and, score: 0.013250183

confidence of prediction: 0.786880  
Y\_true: [ 2 4 17 21 27 36 40 42 47 48]  
Y\_pred: [17 40 42 48]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
related to intubated status mucus retention, score: 0.021063868  
he was intubated for airway protection and, score: 0.0031493593  
experienced witnessed gtc seizures he, score: 0.0029711514

confidence of prediction: 0.879048  
Y\_true: [ 2 4 17 21 27 36 40 42 47 48]  
Y\_pred: [17 40 42 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
history cad s p cabg cva, score: 0.0020383673  
left knee pseudo gout, score: 0.0010105135  
ago dm htn hld chf recent perf d, score: 0.0010080965

confidence of prediction: 0.784946  
Y\_true: [ 8 29 34 35 36]  
Y\_pred: [ 1 21 29 34 35 36]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
community acquired pneumonia during your, score: 0.07265473  
lobar pneumonia pneumonia patient presented to, score: 0.053128105  
staph pneumonia per fellows, score: 0.02081574

confidence of prediction: 0.845151  
Y\_true: [ 8 29 34 35 36]  
Y\_pred: [ 1 21 29 34 35 36]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)

hypercalcemia constipation gerd s p breast ca, score: 0.0113605885  
mg she got 1l, score: 0.0072320183  
and was sating on, score: 0.0068149487

confidence of prediction: 0.926320  
Y\_true: [ 8 29 34 35 36]  
Y\_pred: [ 1 21 29 34 35 36]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
likely pre renal improved to at, score: 0.11655446  
on chronic renal failure baseline, score: 0.05678397  
on chronic renal failure discharge condition, score: 0.05678397

confidence of prediction: 0.686628  
Y\_true: [ 8 29 34 35 36]  
Y\_pred: [ 1 21 29 34 35 36]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
chronic renal failure baseline prior, score: 0.14650634  
chronic renal failure discharge condition, score: 0.14650634  
with cri dementia presents with multi, score: 0.0174081

confidence of prediction: 0.681213  
Y\_true: [ 3 4 13 18 20 22 24 39]  
Y\_pred: [ 2 3 13 18 20 24 38]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
type hypertension hypercholesterolemia past coronary artery, score: 0.22025736  
cabgx3 with preop iabp hyperlipidemia hypertension diabetes, score: 0.029612493  
cabgx3 on iabp left, score: 0.023059504

confidence of prediction: 0.982342  
Y\_true: [ 3 4 13 18 20 22 24 39]  
Y\_pred: [ 2 3 13 18 20 24 38]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting to three vessels, score: 0.16817836  
cabgx3 on iabp left internal mammary artery, score: 0.15424366  
descending artery saphenous vein graft, score: 0.08303778

confidence of prediction: 0.931029  
Y\_true: [ 3 4 13 18 20 22 24 39]  
Y\_pred: [ 2 3 13 18 20 24 38]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.7576091  
cardiothoracic allergies patient recorded, score: 0.018672362  
descending thoracic aorta the, score: 0.0071070064

confidence of prediction: 0.912692  
Y\_true: [ 3 4 13 18 20 22 24 39]  
Y\_pred: [ 2 3 13 18 20 24 38]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension diabetes mellitus obesity discharge, score: 0.08323883  
mg daily glyburide mg twice a, score: 0.019811748  
s p cabgx3 with, score: 0.01714272

confidence of prediction: 0.997372  
Y\_true: [ 3 4 13 18 20 22 24 39]  
Y\_pred: [ 2 3 13 18 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cabgx3 on iabp left internal mammary artery, score: 0.17174067  
coronary artery disease s, score: 0.14956747  
coronary artery stenting and, score: 0.078817725

confidence of prediction: 0.911828  
Y\_true: [20]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
has essential hypertension which is difficult, score: 0.12414533  
hypertension and diabetes no, score: 0.120362945  
medical history hypertension social history tobacco, score:  
0.10123689

confidence of prediction: 0.937495  
Y\_true: [20]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
dementia psychosis htn psh unknown social history, score: 0.33032608  
feasible extensive atherosclerotic calcification ruq, score:  
0.024084656  
for htn trazodone mg tablet sig, score: 0.0052705756

confidence of prediction: 0.673381  
Y\_true: [ 4 7 20 24 28 35 47]  
Y\_pred: [ 7 20 28 37]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
dark black and bright red but, score: 0.35929975  
history of present illness, score: 0.09803636  
showed dark melenic appearing, score: 0.03197675

confidence of prediction: 0.930475  
Y\_true: [ 4 7 20 24 28 35 47]  
Y\_pred: [ 7 20 28 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension social history social history, score:  
0.054350622  
other occupation salesman retired marital status married, score:  
0.04814615  
nodes and subcentimeter hepatic, score: 0.025216358

confidence of prediction: 0.819399  
Y\_true: [ 4 7 20 24 28 35 47]  
Y\_pred: [ 7 20 28 37]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
history of present illness, score: 0.68770534  
dark black and bright, score: 0.027986495  
a upper endoscopy was performed on hospital, score: 0.013508735

confidence of prediction: 0.694885  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
with calcium cvl placed the next, score: 0.11025493  
omental flap closure history of, score: 0.073386915  
remained in septic shock, score: 0.049657356

confidence of prediction: 0.736393  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
hypertension obstructive sleep apnea, score: 0.3283091  
conclusions patient brought for, score: 0.124902606  
closure dressing placement of, score: 0.03377532

confidence of prediction: 0.776233  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
furosemide mg tablet sig, score: 0.021429364  
autopsy medications on admission, score: 0.019517027  
copd atrial fibrillation flutter newly diagnosed, score: 0.008690674

confidence of prediction: 0.686270  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
mvr mechanical copd atrial fibrillation flutter newly, score: 0.09649728  
autopsy medications on admission, score: 0.04408279  
mitral regurgitation hypertension obstructive sleep apnea obesity, score: 0.013142955

confidence of prediction: 0.856116  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
she was intubated for respiratory distress, score: 0.107215635

mssa and sputum grew klebsiella, score: 0.016344532  
support she developed a diffuse, score: 0.009842737

confidence of prediction: 0.838015  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
support she developed a diffuse, score: 0.11439155  
mssa and sputum grew klebsiella, score: 0.07354933  
feeding tube placed endoscopically, score: 0.049818367

confidence of prediction: 0.895732  
Y\_true: [12 17 20 26 28 30 35 40 43 46]  
Y\_pred: [ 0 17 20 26 30 39 40 41 43 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
to be admitted for, score: 0.049298022  
care after speaking with, score: 0.02581561  
septic shock on pressor support, score: 0.025547698

confidence of prediction: 0.948976  
Y\_true: [20 26 33 37 42]  
Y\_pred: [17 20 26 37 41 42 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
to threat pupils mm, score: 0.010393525  
collapsed they called and, score: 0.003424031  
details atrial fibrillation pacemaker hypertension social history  
previously, score: 0.0033612358

confidence of prediction: 0.902803  
Y\_true: [20 26 33 37 42]  
Y\_pred: [17 20 26 37 41 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation pacemaker hypertension social history, score:  
0.4270055  
expired on medications on, score: 0.004057082  
expired discharge diagnosis stroke, score: 0.003600973

confidence of prediction: 0.964391  
Y\_true: [20 26 33 37 42]  
Y\_pred: [17 20 26 37 41 42 43]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
have a uti for which she was, score: 0.04542443  
suddenly stopped speaking and collapsed, score: 0.007980494  
meeting was held with, score: 0.0068161422

confidence of prediction: 0.905345  
Y\_true: [20 26 33 37 42]  
Y\_pred: [17 20 26 37 41 42 43]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated and medflighted, score: 0.026205659  
sao2 intubated general intubated sedated but, score: 0.018899435  
was initially intubated for airway protection, score: 0.009681799

confidence of prediction: 0.579842  
Y\_true: [10 45]  
Y\_pred: [10 20]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
week smokes ppd x years smokes marijuana occasionally denies, score:  
0.0516228  
incisions avoid swimming and, score: 0.0009852843  
has continued smoking and she takes, score: 0.0008158959

confidence of prediction: 0.964473  
Y\_true: [ 7 20 34 37]  
Y\_pred: [ 7 20 37]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
extension ankle dorsiflexion and plantar, score: 0.34730116  
anemia urinary tract infection discharge, score: 0.15238371  
with psif as part of, score: 0.006864173

confidence of prediction: 0.996810  
Y\_true: [ 7 20 34 37]  
Y\_pred: [ 7 20 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
prilosec prozac hctz lisinopril po, score: 0.23112288  
history pmh htn headaches seizure d o, score: 0.2219577  
orthopaedics allergies patient recorded, score: 0.009719481

confidence of prediction: 0.919259  
Y\_true: [ 7 20 34 37]  
Y\_pred: [ 7 20 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
anemia urinary tract infection discharge condition, score: 0.0932009  
with a uti and given cipro, score: 0.017284079  
orif left heel orif, score: 0.009189407

confidence of prediction: 0.901885  
Y\_true: [ 8 9 10 31 34]  
Y\_pred: [31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
pneumonia with levo flagyl, score: 0.10282105  
likley aspiration event and briefly, score: 0.09814126  
flagyl pna aspiration had fever to, score: 0.0831652

confidence of prediction: 0.925828

Y\_true: [18 27]  
Y\_pred: [ 4 18 20 25 27 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies motrin attending, score: 0.0320838  
catheterization which showed clean, score: 0.0034796435  
pacing wires removed per protocol the, score: 0.0031791371  
  
confidence of prediction: 0.937278  
Y\_true: [18 27]  
Y\_pred: [ 4 18 20 25 27 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure rheumatic heart disease, score: 0.48584673  
decompensated heart failure and was diuresed, score: 0.0772699  
chf exacerbation she had, score: 0.0672189  
  
confidence of prediction: 0.951385  
Y\_true: [27]  
Y\_pred: [27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
history pmhx chf dementia prostate ca cataracts, score: 0.003505975  
non specific st t, score: 0.0013090101  
elderly demented male comfortable, score: 0.0012705195  
  
confidence of prediction: 0.923438  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
plavix dm social history denies, score: 0.16927439  
daily metformin 1000mg hospital1 gabapentin 100mg, score:  
0.102429375  
home dm pt d c d, score: 0.021165552  
  
confidence of prediction: 0.818133  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
home dose hyperlipidemia continue statin therapy chf, score:  
0.06303486  
jaundice restart coumadin on patient can, score: 0.026717074  
cabg and stent last, score: 0.011360675  
  
confidence of prediction: 0.961345  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
growing enterococcus faecium returned revealing vre, score:  
0.26971012



with selected penicillins or, score: 0.040426094  
level streptomycin screen resistant to 1000mcg ml, score: 0.02647435

confidence of prediction: 0.726257  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
chf cad s p cabg and stent last, score: 0.37511992  
unavailable currently cad s p cabg and stent placement, score:  
0.024106711  
avr years ago diabetes, score: 0.023884593

confidence of prediction: 0.987796  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib on coumadin discharge, score: 0.4445719  
fib chronic failed maze procedure, score: 0.17037122  
irregularly irregular rhythm normal, score: 0.014940191

confidence of prediction: 0.947621  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cad and chf admitted with obstructive [UNK], score: 0.13235967  
cad and chf admitted with acute, score: 0.13235967  
cad s p cabg, score: 0.10949383

confidence of prediction: 0.866209  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg and stent placement, score: 0.48431745  
porcine avr years ago diabetes, score: 0.013337097  
chf cad s p cabg and stent last, score: 0.0040683863

confidence of prediction: 0.845554  
Y\_true: [ 2 4 17 20 24 26 27 48 49]  
Y\_pred: [ 2 4 17 24 26 27 45 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fib on coumadin discharge condition, score: 0.87948346  
fibrillation his coumadin and, score: 0.06201056  
40mg daily coumadin 5mg, score: 0.009613983

confidence of prediction: 0.959359  
Y\_true: [ 2 4 13 18 21 24 26 36]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or

unspecified type, not stated as uncontrolled)  
diabetes mellitus chronic renal insufficiency, score: 0.14140227  
ghs metformin 1000mg hospital1 stopped last, score: 0.0452851  
diabetes history of tobacco, score: 0.034051318

confidence of prediction: 0.829931  
Y\_true: [ 2 4 13 18 21 24 26 36]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension dyslipidemia diabetes mellitus chronic renal,  
score: 0.09159375  
hypertension dyslipidemia diabetes mellitus chronic renal, score:  
0.07590359  
of hypertension dyslipidemia diabetes history of, score: 0.054182407

confidence of prediction: 0.991019  
Y\_true: [ 2 4 13 18 21 24 26 36]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.5812912  
descending saphenous vein graft to, score: 0.062102627  
coronary artery bypass graft x please, score: 0.0328321

confidence of prediction: 0.949767  
Y\_true: [ 2 4 13 18 21 24 26 36]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.5369812  
wires removed per protocol, score: 0.17919897  
diuresed toward his preop, score: 0.13755958

confidence of prediction: 0.999467  
Y\_true: [ 2 4 13 18 21 24 26 36]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.6601386  
coronary artery disease s p coronary artery bypass graft, score:  
0.1397556  
descending saphenous vein graft, score: 0.027965706

confidence of prediction: 0.943285  
Y\_true: [ 2 4 13 18 21 24 26 36]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
amiodarone mg tablet sig, score: 0.018636703  
a fib and was treated, score: 0.008606381  
obesity rheumatic fever as, score: 0.00786423

confidence of prediction: 0.911100

Y\_true: [ 4 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension dyslipidemia gastric ulcers pneumonia years,  
score: 0.110258  
disease hypertension dyslipidemia gastric ulcers pneumonia years,  
score: 0.08758818  
simvastatin mg tablet sig, score: 0.024923055

confidence of prediction: 0.982405  
Y\_true: [ 4 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.31092253  
diuresed towards his preoperative, score: 0.22596507  
bypass grafting please see operative, score: 0.012149842

confidence of prediction: 0.708485  
Y\_true: [ 4 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension dyslipidemia gastric ulcers pneumonia,  
score: 0.18253157  
artery disease hypertension dyslipidemia gastric ulcers pneumonia,  
score: 0.11203632  
and passed away from renal failure physical, score: 0.05849054

confidence of prediction: 0.999335  
Y\_true: [ 4 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.62669307  
coronary artery disease hypertension, score: 0.13267496  
coronary artery disease he was, score: 0.04347455

confidence of prediction: 0.522475  
Y\_true: [ 2 3 13 18 20 24]  
Y\_pred: [ 3 8 13 18 20 24]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
diagnosis hypertension hypercholesterolemia psoriasis coronary  
artery, score: 0.17195912  
history hypertension hypercholesterolemia psoriasis prostate cancer,  
score: 0.13139613  
x full rom x chest, score: 0.0047991257

confidence of prediction: 0.990036  
Y\_true: [ 2 3 13 18 20 24]  
Y\_pred: [ 3 8 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single

internal mammary-coronary artery bypass)  
s p cabgx3 lima lad rsvg om, score: 0.045484796  
wires were discontinued without, score: 0.037208088  
underwent cabgx3 lima lad svg om2, score: 0.022522995

confidence of prediction: 0.986660  
Y\_true: [ 2 3 13 18 20 24]  
Y\_pred: [ 3 8 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7392627  
diuresed toward the preoperative, score: 0.020858314  
cabgx3 lima lad svg om2, score: 0.00915434

confidence of prediction: 0.828045  
Y\_true: [ 2 3 13 18 20 24]  
Y\_pred: [ 3 8 13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hydrochlorothiazide mg tablet by, score: 0.17816904  
off a ladder social history race hispanic, score: 0.058152653  
hypertension hypercholesterolemia psoriasis coronary artery disease  
s, score: 0.05770271

confidence of prediction: 0.952020  
Y\_true: [ 2 3 13 18 20 24]  
Y\_pred: [ 3 8 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p cabgx3 lima lad, score: 0.37141466  
coronary artery disease s p cabg x discharge, score: 0.099659584  
coronary artery disease he is, score: 0.07042369

confidence of prediction: 0.878961  
Y\_true: [ 3 5 32]  
Y\_pred: [ 0 3 34 46]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
medical history hypercholesterolemia bilateral knee replacements in,  
score: 0.0077815144  
gallbladder ca hypercholesterolemia discharge condition mental,  
score: 0.0037462339  
ln s p ercp, score: 0.0013841437

confidence of prediction: 0.984127  
Y\_true: [16 18 24 39]  
Y\_pred: [13 18 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed on, score: 0.7435777  
lotions powders or ointments to, score: 0.09454278  
diuresed and his beta, score: 0.008235523

confidence of prediction: 0.999820

Y\_true: [16 18 24 39]

Y\_pred: [13 18 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting time one, score: 0.87932765  
coronary artery disease discharge condition, score: 0.03455382  
worsening stenosis therefore he was, score: 0.0042936495

confidence of prediction: 0.508251

Y\_true: [ 3 20]

Y\_pred: [ 3 17 20 24]

top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
l mca aneurysm coiling, score: 0.010864359  
l mca aneurysm she, score: 0.010503895  
medical history htn hypercholesterolemia social history haitian  
creole, score: 0.009797392

confidence of prediction: 0.998160

Y\_true: [ 3 20]

Y\_pred: [ 3 17 20 24]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hypercholesterolemia social history haitian  
creole speaking, score: 0.4528591  
more responsive after minutes, score: 0.013266332  
started on pressors to increase her blood, score: 0.005377655

confidence of prediction: 0.906550

Y\_true: [ 4 18 20 24 47]

Y\_pred: [ 4 18 20 24 38]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
plavix hypertension hyperlipidemia obesity arthritis gastric  
dyspepsia, score: 0.26276034  
zocor mg tablet sig, score: 0.003404918  
zocor 40mg daily aspirin, score: 0.0031292844

confidence of prediction: 0.979679

Y\_true: [ 4 18 20 24 47]

Y\_pred: [ 4 18 20 24 38]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
pacing wires on post op, score: 0.01872185  
diuresed towards his pre, score: 0.012752712  
cardiothoracic allergies patient recorded, score: 0.012505574

confidence of prediction: 0.994899

Y\_true: [ 4 18 20 24 47]

Y\_pred: [ 4 18 20 24 38]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
admission triamterene hctz 5mg, score: 0.15623678  
hypertension hyperlipidemia obesity arthritis gastric, score:

0.08923837

zocor 40mg daily aspirin, score: 0.045610674

confidence of prediction: 0.971749

Y\_true: [ 4 18 20 24 47]

Y\_pred: [ 4 18 20 24 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery stenosis normal, score: 0.14617777

coronary artery disease s p rca stent no, score: 0.13779987

coronary artery disease who, score: 0.045628566

confidence of prediction: 0.630202

Y\_true: [ 4 13 18 20 22 24 27]

Y\_pred: [ 1 4 13 18 20 22 24]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

on valium hyperlipidemia asthma bronchitis degenerative, score:

0.0759009

incisions sternal healing well, score: 0.0032806976

meq tablet er particles, score: 0.0027516335

confidence of prediction: 0.924739

Y\_true: [ 4 13 18 20 22 24 27]

Y\_pred: [ 1 4 13 18 20 22 24]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass grafting to four vessels, score: 0.30543187

cabgx4 history of present, score: 0.3015584

diuresed towards his preoperative, score: 0.015557479

confidence of prediction: 0.981913

Y\_true: [ 4 13 18 20 22 24 27]

Y\_pred: [ 1 4 13 18 20 22 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed towards his preoperative, score: 0.35127455

cardiothoracic allergies no known, score: 0.016149972

washing incisions gently with mild soap, score: 0.0059682257

confidence of prediction: 0.756284

Y\_true: [ 4 13 18 20 22 24 27]

Y\_pred: [ 1 4 13 18 20 22 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

difficulty resolved hypertension anxiety on valium, score:

0.17908925

myocardial infarction major surgical, score: 0.02755257

vessels and closure of, score: 0.0047645196

confidence of prediction: 0.689179

Y\_true: [ 4 13 18 20 22 24 27]

Y\_pred: [ 1 4 13 18 20 22 24]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)  
for nstemi with peak troponin, score: 0.19282363  
artery disease nstemi stroke with right side, score: 0.02589212  
a myocardial infarction and ejection, score: 0.019546403

confidence of prediction: 0.988642  
Y\_true: [ 4 13 18 20 22 24 27]  
Y\_pred: [ 1 4 13 18 20 22 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease nstemi stroke with right side, score:  
0.26391998  
cabgx4 history of present, score: 0.17252815  
coronary artery disease stroke, score: 0.103116944

confidence of prediction: 0.878196  
Y\_true: [ 1 4 7 20 34]  
Y\_pred: [1 4 7]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
hospital1 levothyroxine mg po daily lipitor, score: 0.7739022  
hours levothyroxine mcg tablet sig one, score: 0.012567836  
asthma hyperlipidemia hypothyroid social history denies family,  
score: 0.002503547

confidence of prediction: 0.830883  
Y\_true: [ 1 4 7 20 34]  
Y\_pred: [1 4 7]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
scoliosis asthma hyperlipidemia hypothyroid social history denies,  
score: 0.36730185  
atorvastatin mg tablet sig, score: 0.013071732  
advair hospital1 asa mg po, score: 0.00924107

confidence of prediction: 0.971532  
Y\_true: [ 1 4 7 20 34]  
Y\_pred: [1 4 7]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
extension ankle dorsiflexion and plantar, score: 0.35873187  
anemia hypotension discharge condition, score: 0.061591394  
l5 anterior fusion through, score: 0.02461939

confidence of prediction: 0.756906  
Y\_true: [ 4 42]  
Y\_pred: [ 4 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
medical history hyperlipidemia family history noncontributory,  
score: 0.37588888  
personal care matters your, score: 0.001946108  
barbitrt neg tricyclic neg, score: 0.0018649384

confidence of prediction: 0.942951  
Y\_true: [ 4 42]  
Y\_pred: [ 4 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
assess language intubated cranial nerves, score: 0.031436067  
remained intubated and sedated, score: 0.00725395  
he was intubated for airway protection, score: 0.0056375307

confidence of prediction: 0.757166  
Y\_true: [ 2 13 14 18 20 24 34 38]  
Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
type ii diabetes hypertension hyperlipidemia she, score: 0.0958987  
stent in diabetes diet controlled last a1c, score: 0.03997411  
hyperlipidemia niddm gerd colonic polyps s, score: 0.013283169

confidence of prediction: 0.997959  
Y\_true: [ 2 13 14 18 20 24 34 38]  
Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
p cabgx2 lima lad svg om history, score: 0.009446611  
underwent cabgx2 lima lad svg om and, score: 0.009284283  
circumflex artery lad mid lad stent, score: 0.0028366153

confidence of prediction: 0.586495  
Y\_true: [ 2 13 14 18 20 24 34 38]  
Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization s p cabgx2, score: 0.19501403  
lesion mid lcx stenosis, score: 0.07135803  
catheterization this morning there, score: 0.056812994

confidence of prediction: 0.966732  
Y\_true: [ 2 13 14 18 20 24 34 38]  
Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cabgx2 lima lad svg om and, score: 0.13665916  
cardiothoracic allergies penicillins latex, score: 0.05486471  
lotions powders or creams on, score: 0.05385903

confidence of prediction: 0.937624  
Y\_true: [ 2 13 14 18 20 24 34 38]  
Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ii diabetes hypertension hyperlipidemia she had a, score: 0.14990777  
hypertension sciatica lower gi bleed, score: 0.0727335



stent in diabetes diet, score: 0.048606444

confidence of prediction: 0.993927

Y\_true: [ 2 13 14 18 20 24 34 38]

Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

s p drug eluting, score: 0.15904678

coronary artery disease hyperlipidemia, score: 0.11091328

left circumflex stent in, score: 0.060179327

confidence of prediction: 0.962588

Y\_true: [ 2 13 14 18 20 24 34 38]

Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

hyperlipidemia niddm gerd colonic polyps s p, score: 0.018837763

last alc gerd history of nosebleeds d, score: 0.01014199

history of present illness, score: 0.0026347348

confidence of prediction: 0.852675

Y\_true: [ 2 13 14 18 20 24 34 38]

Y\_pred: [ 2 4 13 14 18 20 24 34 37 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization s p, score: 0.35505882

lesion mid lcx stenosis and, score: 0.074030645

cardiac catheterization that was performed, score: 0.052352548

confidence of prediction: 0.511440

Y\_true: [17 20 35]

Y\_pred: [ 0 4 17 20 35 37 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

gastric bypass low b12, score: 0.11119935

bacteria many yeast none, score: 0.032618705

rij was placed and repositioned, score: 0.031866085

confidence of prediction: 0.885103

Y\_true: [17 20 35]

Y\_pred: [ 0 4 17 20 35 37 46]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

19am lactate 19am hgb, score: 0.06463828

blue and pale in, score: 0.044761155

hypertension obesity s p, score: 0.03699174

confidence of prediction: 0.849196

Y\_true: [17 20 35]

Y\_pred: [ 0 4 17 20 35 37 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

11am lactate 11am hgb calchct, score: 0.14063814

19am lactate 19am hgb, score: 0.07057345

version acute renal failure resolved prerenal in setting, score:  
0.016276034

confidence of prediction: 0.555131

Y\_true: [ 2 3 4 8 18 20 26 47 49]

Y\_pred: [ 3 4 18 20]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)

discharge diagnosis hypercholesterolemia s p lithotripsy aortic stenosis hypertension s p aortic, score: 0.07356417

x full rom x chest, score: 0.012473622

medical history hypertension hyperlipidemia, score: 0.008639765

confidence of prediction: 0.853036

Y\_true: [ 2 3 4 8 18 20 26 47 49]

Y\_pred: [ 3 4 18 20]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history hypertension hyperlipidemia aortic stenosis social history, score: 0.20713359

aortic stenosis hypertension s p aortic, score: 0.007737666

avr dr last name, score: 0.0047509014

confidence of prediction: 0.979578

Y\_true: [ 2 3 4 8 18 20 26 47 49]

Y\_pred: [ 3 4 18 20]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed per, score: 0.3970015

cardiothoracic allergies shellfish derived, score: 0.09853935

diuresed towards his preoperative, score: 0.02547789

confidence of prediction: 0.995788

Y\_true: [ 2 3 4 8 18 20 26 47 49]

Y\_pred: [ 3 4 18 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hyperlipidemia aortic stenosis social, score: 0.2115592

aortic stenosis hypertension s p aortic, score: 0.12748997

post bypass study 10am, score: 0.022980988

confidence of prediction: 0.662339

Y\_true: [13 18 24 25 30]

Y\_pred: [13 18 20 24 25 30]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft x please, score: 0.085847236

mammary artery to left, score: 0.065877624

incisions gently with mild, score: 0.032245856

confidence of prediction: 0.979429

Y\_true: [13 18 24 25 30]

Y\_pred: [13 18 20 24 25 30]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards her pre, score: 0.17569731  
pacing wires were removed per, score: 0.0068707634  
washing incisions gently with mild soap, score: 0.004351116

confidence of prediction: 0.678122  
Y\_true: [13 18 24 25 30]  
Y\_pred: [13 18 20 24 25 30]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
secondary to asbestos exposure, score: 0.083108984  
coronary artery bypass graft, score: 0.04685512  
mammary artery to left, score: 0.026886124

confidence of prediction: 0.759193  
Y\_true: [13 18 24 25 30]  
Y\_pred: [13 18 20 24 25 30]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve repair coronary, score: 0.3314063  
severe mitral regurgitation there is, score: 0.11187326  
mitral valve repair and, score: 0.04593056

confidence of prediction: 0.670931  
Y\_true: [13 18 24 25 30]  
Y\_pred: [13 18 20 24 25 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
mitral regurgitation copd secondary to asbestos exposure, score:  
0.35906515  
medical history copd secondary to asbestos exposure, score:  
0.011260283  
dental exam upper dentures, score: 0.0005928528

confidence of prediction: 0.760556  
Y\_true: [ 4 5 8 13 14 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia gastroesophageal reflux disease  
social, score: 0.19081894  
history hypertension hyperlipidemia gastroesophageal reflux disease  
discharge, score: 0.19081894  
hypertension and hyperlipidemia with complaints, score: 0.10817881

confidence of prediction: 0.990560  
Y\_true: [ 4 5 8 13 14 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.57341707  
descending saphenous vein graft to, score: 0.06126139  
coronary artery bypass graft, score: 0.03238736

confidence of prediction: 0.980854

Y\_true: [ 4 5 8 13 14 18 20 24 34]

Y\_pred: [ 4 13 18 20 24 34 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

lotions powders or ointments to, score: 0.15323591

marginal saphenous vein graft, score: 0.013034147

pacing wires were removed on, score: 0.0063175615

confidence of prediction: 0.962668

Y\_true: [ 4 5 8 13 14 18 20 24 34]

Y\_pred: [ 4 13 18 20 24 34 38]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hyperlipidemia gastroesophageal reflux,

score: 0.1241637

systemic arterial hypertension with central aortic, score:

0.121595435

history of hypertension and hyperlipidemia with complaints, score:

0.10924961

confidence of prediction: 0.999163

Y\_true: [ 4 5 8 13 14 18 20 24 34]

Y\_pred: [ 4 13 18 20 24 34 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass graft, score: 0.49669915

coronary artery disease s p coronary artery bypass graft, score:

0.10515442

coronary artery disease the, score: 0.100100674

confidence of prediction: 0.924098

Y\_true: [ 4 5 8 13 14 18 20 24 34]

Y\_pred: [ 4 13 18 20 24 34 38]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

hyperlipidemia gastroesophageal reflux disease social history race

[UNK] lives, score: 0.036865123

hyperlipidemia gastroesophageal reflux disease discharge condition

good, score: 0.036865123

underwent appropriate pre operative, score: 0.0010582394

confidence of prediction: 0.539848

Y\_true: [ 2 6 12 17 20 29 32 34 37 40 42]

Y\_pred: [12 20 34 40 42]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)

of bronchial staple line with intercostal, score: 0.14836976

bronchoscopy flexible bronchoscopy flexible bronchoscopy with

therapeutic, score: 0.08355222

on bal and wbc, score: 0.070231624

confidence of prediction: 0.985273

Y\_true: [ 2 6 12 17 20 29 32 34 37 40 42]  
Y\_pred: [12 20 34 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension gerd dm ii dx, score: 0.24515902  
medical history htn gerd dm ii dx, score: 0.13490888  
valsartan hydrochlorothiazide mg tablet sig, score: 0.04594642

confidence of prediction: 0.906930  
Y\_true: [ 2 6 12 17 20 29 32 34 37 40 42]  
Y\_pred: [12 20 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
history htn gerd dm ii dx years, score: 0.014878773  
lobectomy hypertension gerd dm ii dx years, score: 0.013218744  
node dissection buttressing of, score: 0.0069664097

confidence of prediction: 0.910186  
Y\_true: [ 2 6 12 17 20 29 32 34 37 40 42]  
Y\_pred: [12 20 34 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
required re intubation in the pacu, score: 0.11334846  
muscle flap flexible bronchoscopy, score: 0.0039114146  
titles daily bronchoscopy as, score: 0.0027761965

confidence of prediction: 0.834555  
Y\_true: [ 2 6 12 17 20 29 32 34 37 40 42]  
Y\_pred: [12 20 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
required re intubation in the, score: 0.14502403  
miconazole nitrate powder sig, score: 0.009425259  
gnrs on bal and wbc remained, score: 0.004332281

confidence of prediction: 0.771521  
Y\_true: [ 2 5 6 16 17 20 33 35 40 41 43 46]  
Y\_pred: [ 0 2 17 19 33 35 40 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
qday metformin mg tablet tabs qday, score: 0.03369321  
insulin dependent diabetes mellitus htn pylorus preserving  
pancreaticoduodenectomy, score: 0.007489429  
cvvh on dm2 he was initially, score: 0.0064183543

confidence of prediction: 0.803950  
Y\_true: [ 2 5 6 16 17 20 33 35 40 41 43 46]  
Y\_pred: [ 0 2 17 19 33 35 40 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
as described above biliary, score: 0.16336627  
was placed and he, score: 0.09340851

patient became bacteremic during, score: 0.084022544

confidence of prediction: 0.917009

Y\_true: [ 2 5 6 16 17 20 33 35 40 41 43 46]

Y\_pred: [ 0 2 17 19 33 35 40 46]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

developed respiratory failure on and was intubated his cxr

continued, score: 0.30264524

he was intubated for respiratory failure on, score: 0.031675655

expired respiratory failure the, score: 0.014889156

confidence of prediction: 0.805273

Y\_true: [ 2 5 6 16 17 20 33 35 40 41 43 46]

Y\_pred: [ 0 2 17 19 33 35 40 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

patient s arf is likely, score: 0.08611726

his family arf the patient s cr, score: 0.08066077

began gemcitabine 2wks on wk, score: 0.016232425

confidence of prediction: 0.831255

Y\_true: [ 2 5 6 16 17 20 33 35 40 41 43 46]

Y\_pred: [ 0 2 17 19 33 35 40 46]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

he was intubated for respiratory failure on, score: 0.11710563

developed respiratory failure on and was intubated his cxr

continued, score: 0.012900621

in his rlq did, score: 0.0030939823

confidence of prediction: 0.641993

Y\_true: [ 2 5 6 16 17 20 33 35 40 41 43 46]

Y\_pred: [ 0 2 17 19 33 35 40 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

to severe sepsis as described above biliary, score: 0.073711194

placed on levophed vasopressin neosynepherine on he, score:

0.04786668

drain placement sepsis the patient presented with, score:

0.034189172

confidence of prediction: 0.922696

Y\_true: [16 17 19 20 26 35 40 41 43 45]

Y\_pred: [17 20 26 42 44 45]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

cx yeast ascites pending, score: 0.13037144

cx yeast bcx no, score: 0.08354198

sputum cx budding yeast bcx pending ucx, score: 0.030644545

confidence of prediction: 0.927594

Y\_true: [16 17 19 20 26 35 40 41 43 45]

Y\_pred: [17 20 26 42 44 45]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn obesity stage iv colon, score: 0.049032692  
pacing by cardiology this, score: 0.010408438  
smear occasional schistocytes and, score: 0.008007803

confidence of prediction: 0.990133  
Y\_true: [16 17 19 20 26 35 40 41 43 45]  
Y\_pred: [17 20 26 42 44 45]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib requiring cardioversion and started, score: 0.79691935  
irregularly irregular no murmurs no, score: 0.1676591  
fib with rvr hr converted, score: 0.018331127

confidence of prediction: 0.922112  
Y\_true: [16 17 19 20 26 35 40 41 43 45]  
Y\_pred: [17 20 26 42 44 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
in place tpn was started on lfts, score: 0.16515005  
stopped continued tpn episode of a fib, score: 0.049065635  
cx budding yeast bcx, score: 0.003078857

confidence of prediction: 0.500289  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
urosepsis she has also, score: 0.0904003  
primary septic shock due to uti e, score: 0.045528095  
pressor requirement her hct, score: 0.04047852

confidence of prediction: 0.943829  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia from gi bleed source, score: 0.60139036  
infection and bleeding from, score: 0.089829326  
anemia due to gi, score: 0.049408413

confidence of prediction: 0.770950  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
evaultation required dobhoff placement repeat s, score: 0.109594114  
changed to ceftriaxone with, score: 0.061076824  
hospital picc placement had abdominal, score: 0.042963516

confidence of prediction: 0.728411  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]

top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
on chronic renal insufficiency hypernatremia secondary, score:  
0.029752549  
acute renal failure on chronic renal insufficiency creatinine at  
admission, score: 0.0078360345  
citalopram risperdal psychiatric hospitalization, score:  
0.0068239914

confidence of prediction: 0.696558  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
celexa acute renal failure on chronic renal insufficiency creatinine  
at admission, score: 0.051094417  
acute renal failure on chronic renal insufficiency, score:  
0.049819577  
hypotension pressor requirement her hct, score: 0.0080252625

confidence of prediction: 0.904340  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
acute renal failure on chronic renal insufficiency creatinine at  
admission, score: 0.0072001717  
failure on chronic renal insufficiency hypernatremia secondary,  
score: 0.0031704786

confidence of prediction: 0.979961  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
to uti e coli and, score: 0.10685614  
urinary tract infection and sepsis, score: 0.07853253  
with uti grew e coli, score: 0.065676205

confidence of prediction: 0.601341  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
received units prbc had guaiac, score: 0.24052255  
with u prbcs but decreased, score: 0.11894997  
required blood transfusions stool or, score: 0.07577227

confidence of prediction: 0.598018  
Y\_true: [ 0 7 17 21 35 36 37 41 44 46]  
Y\_pred: [ 0 7 17 21 35 36 37 44 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)



urosepsis she has also been, score: 0.08963353  
presented with uti grew, score: 0.061010987  
pressor requirement her hct, score: 0.043722864

confidence of prediction: 0.986355  
Y\_true: [18 21 36]  
Y\_pred: [18 21]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7489623  
diuresed toward the preoperative, score: 0.021131989  
cardiothoracic allergies no known, score: 0.0060561253

confidence of prediction: 0.546658  
Y\_true: [18 21 36]  
Y\_pred: [18 21]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
history chronic kidney disease congenital deafness uses, score:  
0.023373807  
pmh chronic kidney disease congenital deafness uses, score:  
0.0046314513  
to the operating room, score: 0.0028920537

confidence of prediction: 0.738668  
Y\_true: [ 0 31 33 35]  
Y\_pred: [ 0 29 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
meeting and goals of care, score: 0.30553803  
demetia pneumonia sepsis asthma dysphagia discharge condition,  
score: 0.027809016  
and new sepsis presentation, score: 0.02615916

confidence of prediction: 0.909654  
Y\_true: [ 1 8 17 20 26 27 30 35 49]  
Y\_pred: [ 0 1 20 24 26 30 40 42 46 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
coumadin hypothyroidism and recent gram negative, score: 0.7254437  
hospital1 levothyroxine mcg po daily multivitamin, score: 0.09723805  
comfort care measures only patient, score: 0.0016408681

confidence of prediction: 0.609799  
Y\_true: [ 1 8 17 20 26 27 30 35 49]  
Y\_pred: [ 0 1 20 24 26 30 40 42 46 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypothyroidism copd ibs legally blind gad social history, score:  
0.043280188  
with htn copd mild aortic, score: 0.029133853  
percutaneous coronary interventions cardiac cath, score:  
0.0152189145

confidence of prediction: 0.997573  
Y\_true: [ 1 8 17 20 26 27 30 35 49]  
Y\_pred: [ 0 1 20 24 26 30 40 42 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin hypothyroidism, score: 0.95574224  
atrial fibrillation hypertension sepsis, score: 0.009967818  
fib and history of, score: 0.007980835

confidence of prediction: 0.913581  
Y\_true: [ 1 8 17 20 26 27 30 35 49]  
Y\_pred: [ 0 1 20 24 26 30 40 42 46 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
with htn copd mild aortic stenosis paroxysmal, score: 0.01284847  
copd ibs legally blind gad social history, score: 0.0010127687  
mild cognitive impairment paroxysmal, score: 0.00085046113

confidence of prediction: 0.778576  
Y\_true: [ 1 8 17 20 26 27 30 35 49]  
Y\_pred: [ 0 1 20 24 26 30 40 42 46 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin hypothyroidism, score: 0.9180157  
on admission warfarin mg 2mg valsartan mg, score: 0.04658375  
for a fib and history of, score: 0.0027816466

confidence of prediction: 0.531809  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic shock pneumonia appears to be, score: 0.031857893  
criteria for ards cxr, score: 0.017916571  
septic shock other potential etiologies for, score: 0.010581249

confidence of prediction: 0.904463  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure ejection fraction per, score: 0.093551405  
congestive heart failure who is, score: 0.054693066  
congestive heart failure meets, score: 0.051178094

confidence of prediction: 0.671352  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd on 3l home oxygen, score: 0.1192196  
history of copd on 3l o2 lung, score: 0.028865565

confidence of prediction: 0.946554  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
with aspiration bilateral pleural effusions, score: 0.01605669  
made cmo communication wife, score: 0.0063254707  
c f aspiration pna patient extubated on, score: 0.006010773

confidence of prediction: 0.955631  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure and hypotension, score: 0.21130876  
hypoxemic respiratory failure patient with, score: 0.12976806  
hypoxic respiratory failure requiring, score: 0.04472351

confidence of prediction: 0.695512  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
post intubation was on, score: 0.13086316  
immediately intubated for hypoxic respiratory, score: 0.10922687  
was intubated sedated and, score: 0.08174467

confidence of prediction: 0.715463  
Y\_true: [ 0 16 17 27 30 31 33 42 46]  
Y\_pred: [ 0 27 30 31 33 40 42 43 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock pneumonia appears to be, score: 0.024517998  
shock patient with subjective, score: 0.020431494  
meets criteria for ards cxr, score: 0.014681196

confidence of prediction: 0.577497  
Y\_true: [ 2 3 11 20 23 24 26 39]  
Y\_pred: [ 2 3 18 20 24 26]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
rca stent sleep apnea, score: 0.049589753  
ablation diabetes hypertension hypercholesterolemia and depression,  
score: 0.028510995  
extensive atherosclerotic disease at the, score: 0.025795069

confidence of prediction: 0.552179  
Y\_true: [ 2 3 11 20 23 24 26 39]  
Y\_pred: [ 2 3 18 20 24 26]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
diabetes hypertension hypercholesterolemia and depression her,

score: 0.3547983  
diabetes hypertension hypercholesterolemia and depression discharge,  
score: 0.3547983  
liver and spleen consistent, score: 0.024769513

confidence of prediction: 0.929100  
Y\_true: [ 2 3 11 20 23 24 26 39]  
Y\_pred: [ 2 3 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ablation diabetes hypertension hypercholesterolemia and depression  
her, score: 0.22319701  
ablation diabetes hypertension hypercholesterolemia and depression  
discharge, score: 0.22319701  
atrial fibrillation colchicine and, score: 0.19568917

confidence of prediction: 0.962681  
Y\_true: [ 2 3 11 20 23 24 26 39]  
Y\_pred: [ 2 3 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
status post rca stent sleep, score: 0.16134776  
vessel coronary artery disease in, score: 0.04575275  
cad status post rca stent sleep, score: 0.044541325

confidence of prediction: 0.939127  
Y\_true: [ 2 3 11 20 23 24 26 39]  
Y\_pred: [ 2 3 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial arrhythmias which include, score: 0.14425403  
atrial fibrillation colchicine and nsaids, score: 0.10840819  
atrial fibrillation major surgical or, score: 0.073415145

confidence of prediction: 0.863153  
Y\_true: [ 8 41 49]  
Y\_pred: [20 41 49]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
perill dysarthric moves right side, score: 0.014707104  
dysphagia requiring feeding tube placement discharge condition,  
score: 0.013762162  
swallow examinations this was placed, score: 0.009991552

confidence of prediction: 0.635871  
Y\_true: [ 8 41 49]  
Y\_pred: [20 41 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
was on coumadin therapy for a, score: 0.43657273  
7m on coumadin for, score: 0.29819155  
diovan tramadol coumadin [UNK] tylenol discharge, score: 0.0917235

confidence of prediction: 0.862108

Y\_true: [ 2 17 20 35]  
Y\_pred: [ 7 17 20 44]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
sigmoidoscopy x central line placement history of, score: 0.024614442  
floor from micu vitals, score: 0.015786968  
disease were responsible for, score: 0.013282384

confidence of prediction: 0.867795  
Y\_true: [ 2 17 20 35]  
Y\_pred: [ 7 17 20 44]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
diabetes mellitus hypertension hepatocellular carcinoma followed, score: 0.24786402  
carcinoma asthma hypertension discharge condition hemodynamically, score: 0.15548044  
of hypertension diovan and diltiazem were, score: 0.10448139

confidence of prediction: 0.611942  
Y\_true: [ 2 4 20 24 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
s diabetes his home oral medications, score: 0.10713327  
daily glyburide mg tablet sig, score: 0.050130103  
diabetes and known cad, score: 0.04714735

confidence of prediction: 0.904500  
Y\_true: [ 2 4 20 24 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
history hypertension hyperlipidemia nsvt asymptomatic carotid, score: 0.08857066  
of hypertension hyperlipidemia diabetes and known, score: 0.05282898  
mellitus hypertension hyperlipidemia discharge condition good, score: 0.05235179

confidence of prediction: 0.945736  
Y\_true: [ 2 4 20 24 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
diabetes mellitus hypertension hyperlipidemia discharge condition good, score: 0.2644197  
medical history hypertension hyperlipidemia, score: 0.06635348  
stent placment history of, score: 0.054361545

confidence of prediction: 0.832909  
Y\_true: [ 2 4 20 24 47]  
Y\_pred: [ 2 4 20 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
htn cad s p rca stent now, score: 0.06214669  
pt developed word finding, score: 0.026040541  
known cad s p cypher stenting, score: 0.019232104

confidence of prediction: 0.962891

Y\_true: [ 4 20 27 30]

Y\_pred: [20 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn right tkr sarcoidosis, score: 0.4638296  
were managed non operatively she was, score: 0.012428241  
sarcoidosis copd djd osteoporosis irritable bowel, score:  
0.008375752

confidence of prediction: 0.840376

Y\_true: [ 2 19 28 29 30 35]

Y\_pred: [ 8 19 29 30 31 35]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
consideration of cvvh initiation prior, score: 0.04109873  
function temp hd line was, score: 0.035807338  
despite midodrine octreotide and albumin, score: 0.017239636

confidence of prediction: 0.756989

Y\_true: [ 2 19 28 29 30 35]

Y\_pred: [ 8 19 29 30 31 35]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
hospital acquired pneumonia the patient s, score: 0.1382724  
hospital acquired pneumonia discharge condition mental, score:  
0.10482512  
from aspiration bibasilar opacities likely atelectasis, score:  
0.014725799

confidence of prediction: 0.635345

Y\_true: [ 2 19 28 29 30 35]

Y\_pred: [ 8 19 29 30 31 35]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
pancreatitis and copd who presented from hospital, score:  
0.023867492  
pancreatitis and copd who was transferred to, score: 0.016994165  
per daughters copd s p nephrectomy for, score: 0.01535579

confidence of prediction: 0.658490

Y\_true: [ 2 19 28 29 30 35]

Y\_pred: [ 8 19 29 30 31 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
for hepato renal syndrome a temporary, score: 0.12584259  
likely hepato renal syndrome the, score: 0.087355696  
distress heent pearla mucous, score: 0.066725045

confidence of prediction: 0.845088  
Y\_true: [ 2 4 8 20 26]  
Y\_pred: [ 4 20 26 44]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension arthritis hyperlipidemia discharge condition stable  
tolerating, score: 0.26832777  
fibrillation hypertension hyperlipidemia arthritis vertigo spinal  
stenosis, score: 0.046401303  
simvastatin atenolol verapamil alprazolam, score: 0.013272693

confidence of prediction: 0.996523  
Y\_true: [ 2 4 8 20 26]  
Y\_pred: [ 4 20 26 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
atrial fibrillation hypertension hyperlipidemia arthritis vertigo  
spinal, score: 0.054255363  
atrial fibrillation hypertension arthritis hyperlipidemia discharge  
condition, score: 0.054255363  
prolapse right rotator cuff, score: 0.014716374

confidence of prediction: 0.955401  
Y\_true: [ 2 4 8 20 26]  
Y\_pred: [ 4 20 26 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation her heart rate, score: 0.379443  
atrial fibrillation hypertension hyperlipidemia arthritis, score:  
0.10697446  
atrial fibrillation hypertension arthritis hyperlipidemia, score:  
0.10697446

confidence of prediction: 0.690832  
Y\_true: [ 2 5 7 16 17 19 26 28 33 35 40 42 44]  
Y\_pred: [17 19 28 33 40 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
pan cultured ruq u, score: 0.05507038  
bacteri mod yeast many epi 31am, score: 0.054508872  
was performed on due, score: 0.047453687

confidence of prediction: 0.727623  
Y\_true: [ 2 5 7 16 17 19 26 28 33 35 40 42 44]  
Y\_pred: [17 19 28 33 40 42 43]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
started on cvvh and lactulose, score: 0.34689763  
organ worsening liver failure steadily, score: 0.010282809  
esophageal varices and encephalopathy, score: 0.010205485

confidence of prediction: 0.615756  
Y\_true: [ 2 5 7 16 17 19 26 28 33 35 40 42 44]

Y\_pred: [17 19 28 33 40 42 43]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
have irreversible liver and, score: 0.078892864  
egd was performed which showed, score: 0.074609324  
the hematemesis egd revealed non bleeding grade, score: 0.05340424

confidence of prediction: 0.907097  
Y\_true: [ 2 5 7 16 17 19 26 28 33 35 40 42 44]  
Y\_pred: [17 19 28 33 40 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
in discussion with the, score: 0.045605086  
which necessitated intubation was stabilized hemodynamically but,  
score: 0.042552806  
parents had diabetes her, score: 0.040298503

confidence of prediction: 0.910335  
Y\_true: [ 2 5 7 16 17 19 26 28 33 35 40 42 44]  
Y\_pred: [17 19 28 33 40 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
which necessitated intubation was stabilized hemodynamically but,  
score: 0.12507357  
was intubated and transferred, score: 0.06072645  
she was intubated and required levophed and, score: 0.037035618

confidence of prediction: 0.663736  
Y\_true: [ 2 5 7 16 17 19 26 28 33 35 40 42 44]  
Y\_pred: [17 19 28 33 40 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated and transferred, score: 0.061630405  
which necessitated intubation was stabilized hemodynamically but,  
score: 0.038284782  
strep sepsis source thought, score: 0.008507555

confidence of prediction: 0.935669  
Y\_true: [ 4 16 20 26 31 33 37 40 41 42 47]  
Y\_pred: [ 2 4 17 20 26 28 31 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
upper extremity hyperlipidemia hypertension social history per,  
score: 0.11877564  
and antral ulcerations erosion s p, score: 0.012046271  
simvastatin mg po ng, score: 0.007987463

confidence of prediction: 0.983780  
Y\_true: [ 4 16 20 26 31 33 37 40 41 42 47]  
Y\_pred: [ 2 4 17 20 26 28 31 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
extremity hyperlipidemia hypertension social history per omr, score:



0.41217768

lansoprazole oral disintegrating tab mg g, score: 0.110914454  
tigecycline was added for, score: 0.03711749

confidence of prediction: 0.959098

Y\_true: [ 4 16 20 26 31 33 37 40 41 42 47]

Y\_pred: [ 2 4 17 20 26 28 31 41]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib with rvr at which, score: 0.19172344

his afib with rvr was intermittent, score: 0.0018365094

his hypotension responded to, score: 0.0015083371

confidence of prediction: 0.930851

Y\_true: [ 4 16 20 26 31 33 37 40 41 42 47]

Y\_pred: [ 2 4 17 20 26 28 31 41]

top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)

eval aspiration pneumonia s p, score: 0.3885814

presumed aspiration event resulting in intubation, score: 0.16529307

your endoscopy this endoscopy showed, score: 0.013780591

confidence of prediction: 0.854372

Y\_true: [ 4 16 20 26 31 33 37 40 41 42 47]

Y\_pred: [ 2 4 17 20 26 28 31 41]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

extubated tube feeds were stopped medications, score: 0.09953441

only and tube feeds were stopped no, score: 0.012883983

further investigation information was, score: 0.011137028

confidence of prediction: 0.867886

Y\_true: [ 7 20 47]

Y\_pred: [ 7 20]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

alk tbil tagged rbc, score: 0.13205542

red and brighter red blood, score: 0.052849174

non bleeding severe diverticulosis, score: 0.048028164

confidence of prediction: 0.973280

Y\_true: [ 7 20 47]

Y\_pred: [ 7 20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

74m with htn and, score: 0.19298597

74m with htn who p w, score: 0.16316424

medical history htn prostate ca s, score: 0.10110722

confidence of prediction: 0.976948

Y\_true: [18]

Y\_pred: [18 20]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies lotions creams adhesive attending first,  
score: 0.015154504  
conclusions pre bypass no spontaneous echo, score: 0.011145092  
washing incisions gently with mild soap, score: 0.00951938

confidence of prediction: 0.959231  
Y\_true: [26 33 40 42]  
Y\_pred: [ 2 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation purportedly remote history, score: 0.56345737  
atrial fibrillation not on coumadin, score: 0.017655158  
contract normally lvef right, score: 0.008323612

confidence of prediction: 0.944528  
Y\_true: [13 14 18 21 24 26 36 38]  
Y\_pred: [ 4 13 14 18 20 24 26 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafts x lima dg svg, score: 0.09025094  
wires were discontinued without, score: 0.053626444  
coronary artery bypass grafts hyperlipidemia, score: 0.03291506

confidence of prediction: 0.754052  
Y\_true: [13 14 18 21 24 26 36 38]  
Y\_pred: [ 4 13 14 18 20 24 26 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
emergent coronary artery bypass, score: 0.0075271265  
pump in place the, score: 0.007476656  
heart rrr x irregular, score: 0.0058985413

confidence of prediction: 0.986703  
Y\_true: [13 14 18 21 24 26 36 38]  
Y\_pred: [ 4 13 14 18 20 24 26 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.74552953  
diuresed toward the preoperative, score: 0.021035135  
cardiothoracic allergies patient recorded, score: 0.0033823275

confidence of prediction: 0.983367  
Y\_true: [13 14 18 21 24 26 36 38]  
Y\_pred: [ 4 13 14 18 20 24 26 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
p coronary stents angioplasties hypertension, score: 0.10895401  
in stent restenosis including, score: 0.103345476  
cad rca pci lad pci lad, score: 0.08163906

confidence of prediction: 0.757184  
Y\_true: [13 14 18 21 24 26 36 38]  
Y\_pred: [ 4 13 14 18 20 24 26 38]  
top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

amiodarone mg tablet sig, score: 0.082678355

develop post op atrial fibrillation and was treated, score:  
0.05885203

furosemide mg tablet sig, score: 0.0061825835

confidence of prediction: 0.917784

Y\_true: [13 14 18 21 24 26 36 38]

Y\_pred: [ 4 13 14 18 20 24 26 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

iabp setting the ai, score: 0.016907496

emergent coronary artery bypass, score: 0.015030376

heart rrr x irregular, score: 0.01201336

confidence of prediction: 0.770102

Y\_true: [ 2 4 11]

Y\_pred: [ 4 11]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

ulcerative colitis hyperlipidemia social history lives with, score:  
0.27655393

mirtazapine mg hs doxepin mg, score: 0.10973466

mg daily simvastatin mg daily ibuprofen mg, score: 0.025121823

confidence of prediction: 0.589919

Y\_true: [ 2 4 11]

Y\_pred: [ 4 11]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

continued balsalazide depression no evidence, score: 0.7961522

mg hs doxepin mg q8h omeprazole mg, score: 0.021576568

luck in dealing with your, score: 0.007298622

confidence of prediction: 0.952101

Y\_true: [ 4 20 26]

Y\_pred: [ 4 20]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history pmh psh htn hl pelvic fracture social, score: 0.014107344

warfarin or plavix clopidogrel, score: 0.006796783

discharge medications simvastatin mg tablet sig, score: 0.0035746165

confidence of prediction: 0.996563

Y\_true: [ 4 20 26]

Y\_pred: [ 4 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

pmh psh htn hl pelvic fracture social, score: 0.8007256

htn sent by her, score: 0.03163348

hctz mg po daily, score: 0.011084695

confidence of prediction: 0.707321

Y\_true: [42]

Y\_pred: [40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

was intubated electively for transport he, score: 0.53788334

he was intubated and was on an, score: 0.008395916

the icu intubated imaging on, score: 0.0024227302

confidence of prediction: 0.933303

Y\_true: [26 42]

Y\_pred: [20 26 48]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation s p maze, score: 0.054970607

fib left chest tube, score: 0.046466235

amiodarone mg tablet sig, score: 0.008919517

confidence of prediction: 0.974192

Y\_true: [ 6 27 33]

Y\_pred: [27 30 33]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

secondary chf discharge condition mentating, score: 0.05592093

hx of dchf ef per records pt, score: 0.02969791

copd with hx of, score: 0.0028150927

confidence of prediction: 0.600745

Y\_true: [ 6 27 33]

Y\_pred: [27 30 33]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

high carbon dioxide levels, score: 0.0259982

with hypercarbic respiratory failure requiring cpap, score:  
0.02250661

of hypercarbic respiratory failure complete records, score:  
0.01789219

confidence of prediction: 0.734563

Y\_true: [ 0 3 17 26 29 34 35]

Y\_pred: [ 1 2 4 20 26 34 35 37]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation not on coumadin, score: 0.18921776

fibrillation not anticoagulated and, score: 0.1664756

pneumonia if clinically feasible, score: 0.023243738

confidence of prediction: 0.793284

Y\_true: [ 0 3 17 26 29 34 35]

Y\_pred: [ 1 2 4 20 26 34 35 37]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

of hypertension gerd atrial fibrillation not, score: 0.063077845

medical history gerd htn atrial fibrillation, score: 0.04728224

hr92 bp100 rr25 [UNK] on admission, score: 0.028840618

confidence of prediction: 0.601052  
Y\_true: [ 0 3 17 26 29 34 35]  
Y\_pred: [ 1 2 4 20 26 34 35 37]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
hr92 bp100 rr25 [UNK] on, score: 0.036505446  
to and bolstered her, score: 0.031565063  
and elevated lactate in the, score: 0.024076473

confidence of prediction: 0.737494  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
seizure hypertension dyslipidemia coronary artery disease social, score: 0.09053491  
carvedilol mg daily coenzyme q10 cyanocobalamin mcg daily, score: 0.025560139  
atorvastatin mg tablet sig, score: 0.01637027

confidence of prediction: 0.988147  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
accident seizure hypertension dyslipidemia coronary artery disease social history, score: 0.32324004  
mg daily carvedilol mg daily coenzyme q10 cyanocobalamin mcg, score: 0.014966665

confidence of prediction: 0.749010  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
general intubated sedated heent et, score: 0.20479633  
already intubated and was, score: 0.05271446  
bp intubated r o2, score: 0.05052761

confidence of prediction: 0.868041  
Y\_true: [ 8 21 23 26 30 36 48]  
Y\_pred: [ 4 17 20 24 26 35 48]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation chronic ileus chemical, score: 0.72037643  
atrial fibrillation and lower extremity, score: 0.053914767  
nutritious food options high, score: 0.02376833

confidence of prediction: 0.679194  
Y\_true: [ 8 21 23 26 30 36 48]  
Y\_pred: [ 4 17 20 24 26 35 48]  
top three important windows for true positive code 48 (V45.81:

Aortocoronary bypass status)  
ivc filter placement retroperitoneal, score: 0.0027015295  
history cad s p vessel cabg lima to lad svg to ramus svg to om svg,  
score: 0.0016857217

confidence of prediction: 0.833845  
Y\_true: [ 4 8 20 47]  
Y\_pred: [ 4 12 20 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history htn hld h o mrsa bacteremia, score: 0.18341833  
he smoked 2ppd x30 years but, score: 0.0070699533  
uti s p nasal, score: 0.006425372

confidence of prediction: 0.988770  
Y\_true: [ 4 8 20 47]  
Y\_pred: [ 4 12 20 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hld h o mrsa, score: 0.37928283  
a retired critical care nurse he, score: 0.074387826  
atrial fibrillation he remained, score: 0.03844132

confidence of prediction: 0.915929  
Y\_true: [ 2 3 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn not, score: 0.122031435  
history dmii htn hld social history smokes, score: 0.092855096  
of htn dmii and hld he, score: 0.056306392

confidence of prediction: 0.710740  
Y\_true: [ 2 19 20]  
Y\_pred: [ 2 7 19 37 40 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hemodialysis since then underwent, score: 0.045836978  
on allopurinol dm on glipizide social history lives, score:  
0.014729908  
temporary dialysis line was removed, score: 0.010024443

confidence of prediction: 0.870763  
Y\_true: [ 2 19 20]  
Y\_pred: [ 2 7 19 37 40 42]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
temporary dialysis line was, score: 0.102152504  
glomerulonephritis on hemodialysis since then, score: 0.059846003  
intubation and cvvh many blood, score: 0.03731864

confidence of prediction: 0.918260  
Y\_true: [ 4 21 36]

Y\_pred: [ 4 20 21 24 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia home niacin and atorvastatin, score: 0.35213554  
secondary hypertension hyperlipidemia discharge condition mental,  
score: 0.07565771  
htn hl recently started on, score: 0.061313774

confidence of prediction: 0.594041  
Y\_true: [ 4 21 36]  
Y\_pred: [ 4 20 21 24 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
renal insufficiency cr of not far, score: 0.6962674  
federal bank job but still, score: 0.04241229  
called famotidine which is, score: 0.021005804

confidence of prediction: 0.895850  
Y\_true: [ 4 21 36]  
Y\_pred: [ 4 20 21 24 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
federal bank job but still, score: 0.02811678  
niacin while having these, score: 0.0045243436  
chronic renal insufficiency cr of not far from, score: 0.0027183755

confidence of prediction: 0.764943  
Y\_true: [ 2 9 20]  
Y\_pred: [ 9 20]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
anemia and thrombocytopenia likely related, score: 0.63709694  
vs blast crisis or, score: 0.031890318  
of following leukophoresis and, score: 0.0239524

confidence of prediction: 0.990856  
Y\_true: [ 2 9 20]  
Y\_pred: [ 9 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn on hctz and acei at, score: 0.5309241  
medical history hypertension hyperglycemia hgba1c no, score:  
0.037581507  
vs blast crisis or, score: 0.0254202

confidence of prediction: 0.980405  
Y\_true: [ 5 8 15 18 20 25 27 38 49]  
Y\_pred: [18 20 25 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies patient recorded, score: 0.010577743  
washing incisions gently with mild soap, score: 0.006967078  
mitral valve repair with, score: 0.003711555

confidence of prediction: 0.995483  
Y\_true: [ 5 8 15 18 20 25 27 38 49]  
Y\_pred: [18 20 25 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension with symptom observation, score: 0.136538  
regurgitation htn ehlers danlos syndrome history, score: 0.025932614  
scallop with wide open, score: 0.025878694

confidence of prediction: 0.853178  
Y\_true: [ 5 8 15 18 20 25 27 38 49]  
Y\_pred: [18 20 25 38]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve prolapse the mitral regurgitation vena contracta,  
score: 0.29294962  
mitral valve regurgitation htn ehlers, score: 0.13953598  
severe mitral regurgitation given these, score: 0.065054394

confidence of prediction: 0.698894  
Y\_true: [ 5 8 15 18 20 25 27 38 49]  
Y\_pred: [18 20 25 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization selective coronary angiography of this,  
score: 0.2138454  
urgent mitral valve repair with, score: 0.09235302  
catheterization history of present, score: 0.06817203

confidence of prediction: 0.752577  
Y\_true: [ 6 20 30]  
Y\_pred: [ 6 20 30]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
bs metabolic acidosis patient had marked anion, score: 0.19431335  
medication cachexia suspect this, score: 0.014551911  
of the diaphragms consistent, score: 0.00858011

confidence of prediction: 0.579255  
Y\_true: [ 6 20 30]  
Y\_pred: [ 6 20 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
longstanding undiagnosed htn no, score: 0.8382427  
metabolic acidosis patient had, score: 0.03634396  
banana bags x 4l he, score: 0.02128855

confidence of prediction: 0.668539  
Y\_true: [ 6 20 30]  
Y\_pred: [ 6 20 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
consistent with copd emphysema there is no, score: 0.31769302



as above copd per patient self diagnosis, score: 0.011645723  
ra bs pleasant oriented, score: 0.0003837941

confidence of prediction: 0.637874  
Y\_true: [ 1 2 4 7 10 11 17 30 34]  
Y\_pred: [ 2 7 17 30 34 44]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
on treatment dm diet controlled hiatal hernia, score: 0.0050924695  
falls were unprovoked the, score: 0.0027590937  
1000mg intravenous q 24h every, score: 0.002599806

confidence of prediction: 0.835252  
Y\_true: [ 1 2 4 7 10 11 17 30 34]  
Y\_pred: [ 2 7 17 30 34 44]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia her vancomycin dose, score: 0.23046936  
anemia discharge condition stable, score: 0.10493227  
femur fracture [UNK] left, score: 0.057773247

confidence of prediction: 0.686925  
Y\_true: [ 1 2 4 7 10 11 17 30 34]  
Y\_pred: [ 2 7 17 30 34 44]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
had a picc line placed for long, score: 0.112047225  
femoral component plate and, score: 0.04924761  
hernia gerd on ppi chronic lbp, score: 0.027701527

confidence of prediction: 0.765878  
Y\_true: [ 1 2 4 7 10 11 17 30 34]  
Y\_pred: [ 2 7 17 30 34 44]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd 30pack years hypothyroidism, score: 0.85036623  
with global hip precautions, score: 0.0038935794  
replacement on who fell, score: 0.001910128

confidence of prediction: 0.652253  
Y\_true: [ 1 2 4 7 10 11 17 30 34]  
Y\_pred: [ 2 7 17 30 34 44]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
therapy to improve her, score: 0.011488587  
femur fracture [UNK] left, score: 0.0082432395  
dm diet controlled hiatal hernia gerd on ppi chronic lbp, score:  
0.008224449

confidence of prediction: 0.992651  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single

internal mammary-coronary artery bypass)  
coronary artery bypass x lima lad svg diag, score: 0.44494045  
descending reverse saphenous vein graft, score: 0.10167159  
wires were discontinued without, score: 0.017721444

confidence of prediction: 0.986647  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.6686953  
diuresed towards his preoperative, score: 0.117608346  
bypass x lima lad, score: 0.005265444

confidence of prediction: 0.961268  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of lipitor hypertension past surgical history, score: 0.32529297  
history of hypertension and severe hyperlipidemia intolerant, score:  
0.07749538  
exertional angina major surgical, score: 0.05313817

confidence of prediction: 0.999353  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass x lima lad, score: 0.54848045  
coronary artery disease exertional angina severe, score: 0.11611685  
coronary artery disease exertional angina severe, score: 0.045368355

confidence of prediction: 0.813951  
Y\_true: [ 3 10 11 34]  
Y\_pred: [ 4 7 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gerd tobacco etoh day spinal, score: 0.14079136  
anxiety hld gerd st depressions intraop on, score: 0.083287954  
orthopaedics allergies patient recorded, score: 0.01120541

confidence of prediction: 0.924762  
Y\_true: [31 42]  
Y\_pred: [31 40 42]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
to aspiration pneumonitis he never, score: 0.22384402  
for aspiration pneumonia his pneumonitis should, score: 0.14794326  
status aspiration pneumonitis on imaging, score: 0.021113712

confidence of prediction: 0.692098  
Y\_true: [31 42]  
Y\_pred: [31 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and intubation this was, score: 0.22754931  
was intubated for airway protection given, score: 0.104687005  
he was intubated for airway protection, score: 0.05325048

confidence of prediction: 0.883411  
Y\_true: [ 4 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
breast reconstruction harvest of deep inferior, score: 0.01598867  
pedicle left harvest of, score: 0.013785665  
lumpectomy x hypertension hyperlipidemia social history she works,  
score: 0.007740351

confidence of prediction: 0.999651  
Y\_true: [ 4 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
lumpectomy x hypertension hyperlipidemia social history she, score:  
0.24343759  
lumpectomies which found invasive, score: 0.0021510366  
breast reconstruction harvest of deep inferior, score: 0.0019692054

confidence of prediction: 0.839442  
Y\_true: [ 4 11 20]  
Y\_pred: [ 4 20 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
depression anxiety htn hyperlipidemia social history widowed works,  
score: 0.015382098  
eager for d c, score: 0.009906161  
[UNK] trazodone qhs proair, score: 0.0064622117

confidence of prediction: 0.975473  
Y\_true: [ 4 11 20]  
Y\_pred: [ 4 20 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
stumbling difficulty writing pt, score: 0.14621127  
depression anxiety htn hyperlipidemia social history widowed, score:  
0.08760491  
eager for d c her, score: 0.043698158

confidence of prediction: 0.989223  
Y\_true: [26 47 49]  
Y\_pred: [26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
rectus diastasis ext 10x10, score: 0.0008757875  
resumed your coumadin and, score: 0.00069589604

rectus diastasis prior h, score: 0.00068903336

confidence of prediction: 0.701255

Y\_true: [26 47 49]

Y\_pred: [26 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

on admission coumadin 3mg, score: 0.08792379

resumed your coumadin and, score: 0.064999506

coumadin was resumed at, score: 0.020279743

confidence of prediction: 0.724081

Y\_true: [ 4 28 34]

Y\_pred: [ 4 7 20 28 34]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

as htn hyperlipidemia arthritis gout gerd bph, score: 0.06197995

mild as hld htn bph pancreatic cancer, score: 0.010999062

suspected recurrent ugib mr known, score: 0.0077859582

confidence of prediction: 0.662933

Y\_true: [ 4 28 34]

Y\_pred: [ 4 7 20 28 34]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

had an endoscopy which showed a bleeding, score: 0.10034682

complaint melena major surgical, score: 0.057725374

by hospital1 egd no other, score: 0.0411067

confidence of prediction: 0.929214

Y\_true: [ 4 28 34]

Y\_pred: [ 4 7 20 28 34]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

arthritis gout gerd bph metastatic pancreatic ca, score: 0.08687296

gastroduodenal artery embolization blood, score: 0.006353756

having multiple falls hit his, score: 0.002819403

confidence of prediction: 0.978209

Y\_true: [20]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

medical history hypertension latent tb infection s, score: 0.10240274

significant for hypertension recently started on, score: 0.08299705

retired assembly line worker, score: 0.075205475

confidence of prediction: 0.584288

Y\_true: [40 42]

Y\_pred: [40]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

and somnolence intubated in ed bay sustained, score: 0.6960066

but protecting airway heent lacerations, score: 0.037194926  
bp palp resp o, score: 0.0038894669

confidence of prediction: 0.794512  
Y\_true: [17 20 29 33 41 42]  
Y\_pred: [20 41 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history pmhx hypertension diastolic dysfunction distant history of,  
score: 0.09396458  
significant for hypertension diastolic dysfunction distant history  
of, score: 0.05873132  
mg hospital1 diovan mg day, score: 0.018517118

confidence of prediction: 0.915887  
Y\_true: [17 20 29 33 41 42]  
Y\_pred: [20 41 42]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
her tube feeds and was transferred, score: 0.42247692  
a peg tube she tolerated, score: 0.020656405  
plegic moves rue spont, score: 0.0069418815

confidence of prediction: 0.527564  
Y\_true: [17 20 29 33 41 42]  
Y\_pred: [20 41 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was intubated and transferred, score: 0.18076071  
her tube feeds and was, score: 0.12701814  
gen intubated heent pupils 2mm min, score: 0.0926013

confidence of prediction: 0.961453  
Y\_true: [45 46]  
Y\_pred: [17 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
his tpn was weaned off and, score: 0.3906253  
his tpn continued as he began, score: 0.35600808  
since for tpn his picc line was, score: 0.0069521624

confidence of prediction: 0.851487  
Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
disease hypothyroidism vitreous hemorrhage hemorrhoids colonic,  
score: 0.32132664  
daily levothyroxine mcg tablet sig one, score: 0.038110867  
kidney disease hypothyroidism gastric esophageal reflux, score:  
0.00089220586

confidence of prediction: 0.988423

Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass times with, score: 0.72944295  
coronary artery bypass graft surgery see, score: 0.04119991  
artery and reverse saphenous vein graft, score: 0.030184425

confidence of prediction: 0.986051  
Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.74433196  
cardiothoracic allergies no known, score: 0.006686207  
washing incisions gently with mild soap, score: 0.0024708891

confidence of prediction: 0.838376  
Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease which peaked, score: 0.087886184  
diabetes mellitus type neuropathy, score: 0.013569942  
un kidney disease hypothyroidism gastric, score: 0.010920749

confidence of prediction: 0.999306  
Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass times with left, score: 0.64283836  
coronary artery disease s p cabg diabetes, score: 0.13609304  
coronary artery disease and, score: 0.010881411

confidence of prediction: 0.868692  
Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
adenoma diverticulosis gerd pancytopenia without bone marrow, score:  
0.113705404  
gastric esophageal reflux disease discharge condition alert, score:  
0.010042474  
notch and fatigue after, score: 0.007743921

confidence of prediction: 0.732345  
Y\_true: [ 1 8 13 18 21 24 34 36 47]  
Y\_pred: [ 1 2 4 5 13 18 21 24 34 35 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease which peaked, score: 0.11289023  
widespread st depression with, score: 0.013091069

un kidney disease hypothyroidism gastric, score: 0.01270955

confidence of prediction: 0.928351

Y\_true: [28 34]

Y\_pred: [ 7 28 34]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

history of present illness, score: 0.512298

had an endoscopy which showed, score: 0.050316047

hematemesis had egd which showed, score: 0.021880219

confidence of prediction: 0.887148

Y\_true: [28 34]

Y\_pred: [ 7 28 34]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

hemophilia a gerd hx of hip and, score: 0.28308603

history of present illness, score: 0.007740884

villi in duodenum otherwise normal, score: 0.004611062

confidence of prediction: 0.934565

Y\_true: [ 4 5 8 13 18 24 25 26]

Y\_pred: [ 4 13 18 24 25 26]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

mitral regurgitation hyperlipidemia emphysema coronary artery disease, score: 0.13934198

on admission simvastatin mg tablet tablet, score: 0.0041775294

simvastatin mg tablet sig, score: 0.003881208

confidence of prediction: 0.997246

Y\_true: [ 4 5 8 13 18 24 25 26]

Y\_pred: [ 4 13 18 24 25 26]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting x4 see, score: 0.025621181

wires were discontinued without, score: 0.015987024

artery bypass grafts x4 mitral, score: 0.01189123

confidence of prediction: 0.988424

Y\_true: [ 4 5 8 13 18 24 25 26]

Y\_pred: [ 4 13 18 24 25 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.65942425

incisions gently with mild soap, score: 0.17285898

diuresed toward the preoperative, score: 0.018605672

confidence of prediction: 0.957340

Y\_true: [ 4 5 8 13 18 24 25 26]

Y\_pred: [ 4 13 18 24 25 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease major, score: 0.17911784

coronary artery disease s p coronary artery bypass grafts x4 mitral,  
score: 0.17911784  
coronary artery disease social, score: 0.103047974

confidence of prediction: 0.794954  
Y\_true: [ 4 5 8 13 18 24 25 26]  
Y\_pred: [ 4 13 18 24 25 26]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve repair resection, score: 0.20059161  
severe mitral regurgitation coronary artery, score: 0.14726558  
mitral regurgitation he had, score: 0.070638314

confidence of prediction: 0.981457  
Y\_true: [ 4 5 8 13 18 24 25 26]  
Y\_pred: [ 4 13 18 24 25 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation was ambulating freely, score: 0.18688439  
atrial fibrillation on two other, score: 0.030208964  
atrial fibrillation which converted to, score: 0.023320783

confidence of prediction: 0.714421  
Y\_true: [ 4 20 23 42 48]  
Y\_pred: [ 4 20 23 31 40 42 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pancreatitis htn hl dementia h o hysterectomy, score: 0.30318773  
cabg h o mi in, score: 0.04034318  
p cabg gallstones pancreatitis and, score: 0.028995244

confidence of prediction: 0.998304  
Y\_true: [ 4 20 23 42 48]  
Y\_pred: [ 4 20 23 31 40 42 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
gallstones pancreatitis htn hl dementia h o, score: 0.3793818  
which they agreed to, score: 0.009856776  
p cabg dementia presenting initially, score: 0.00862289

confidence of prediction: 0.744070  
Y\_true: [ 4 20 23 42 48]  
Y\_pred: [ 4 20 23 31 40 42 48]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
medical history cad s p cabg h o mi in the past gallstones, score:  
0.015480989  
history of cad s p cabg gallstones, score: 0.004675683  
history of cad s p cabg dementia, score: 0.004675683

confidence of prediction: 0.844135  
Y\_true: [ 4 20 23 42 48]  
Y\_pred: [ 4 20 23 31 40 42 48]  
top three important windows for true positive code 42 (96.71:



Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
intubation and extubation history of, score: 0.3649935  
was intubated for airway protection, score: 0.21624511  
seizures intubated for airway protection, score: 0.12773961

confidence of prediction: 0.884847  
Y\_true: [ 4 20 23 42 48]  
Y\_pred: [ 4 20 23 31 40 42 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg gallstones pancreatitis and, score: 0.3290973  
s p cabg dementia presenting initially, score: 0.3290973  
cad s p cabg h o mi, score: 0.0007311247

confidence of prediction: 0.952085  
Y\_true: [ 6 8 17 26 34 35 49]  
Y\_pred: [26]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation post op hiatal, score: 0.18021034  
fib with rvr on which, score: 0.06759422  
showed afib with rvr she, score: 0.017984765

confidence of prediction: 0.615008  
Y\_true: [17 27 33 35 40 42 45]  
Y\_pred: [33 45]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
was called intubated the patient three, score: 0.054862387  
pneumonia difficult crossmatch due, score: 0.0439687  
vanc and cefepime after, score: 0.02151772

confidence of prediction: 0.953337  
Y\_true: [17 27 33 35 40 42 45]  
Y\_pred: [33 45]  
top three important windows for true positive code 45 (99.15: Parenteral infusion of concentrated nutritional substances)  
given this limitation pt, score: 0.0010788344  
her oncologist stopped taking, score: 0.00014456022  
pca for pain control and tpn to maintain adequate nutrition, score: 0.00013713133

confidence of prediction: 0.862798  
Y\_true: [ 2 4 8 20 26 35 45]  
Y\_pred: [ 4 20 26 40 43]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
unknown details psh b l tkr, score: 0.007605389  
medications pravastatin lisinopril amlodipine, score: 0.005932256  
history former pipe smoker, score: 0.005593874

confidence of prediction: 0.997289  
Y\_true: [ 2 4 8 20 26 35 45]

Y\_pred: [ 4 20 26 40 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history pmh htn hemorrhoids oa dm hld htn constipation prostate,  
score: 0.026180174  
extremely deconditioned he was evaluated, score: 0.008641773  
he became delirious on, score: 0.0038310955

confidence of prediction: 0.934725  
Y\_true: [ 2 4 8 20 26 35 45]  
Y\_pred: [ 4 20 26 40 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation he was rate, score: 0.27329725  
amiodarone mg tablet sig, score: 0.006089322  
he was sent to, score: 0.0013286509

confidence of prediction: 0.955235  
Y\_true: [ 4 20 30]  
Y\_pred: [ 4 20 30 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
fronal brain tumor diagnosed to, score: 0.009276992  
medical history copd htn hyperlipidemia shingles social history  
patient, score: 0.0014274464  
admission metoprolol prilosec decadron, score: 0.0010226134

confidence of prediction: 0.987211  
Y\_true: [ 4 20 30]  
Y\_pred: [ 4 20 30 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
fronal brain tumor diagnosed, score: 0.05397494  
tobacco etoh ivd family history non contributory, score:  
0.0022001858  
medical history copd htn hyperlipidemia shingles social history,  
score: 0.0017884825

confidence of prediction: 0.942075  
Y\_true: [ 4 20 30]  
Y\_pred: [ 4 20 30 41]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd htn hyperlipidemia shingles social history  
patient denies, score: 0.12120863  
service who was discharged, score: 0.001002679  
frontal surgical cavity has filled with fluid, score: 0.00054238364

confidence of prediction: 0.995612  
Y\_true: [ 3 8 20 29 33]  
Y\_pred: [11 20 29 33]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
thickening suggesting multifocal pneumonia, score: 0.04224548

carcinoma recurrent multifocal bronchioalveolar carcinoma cannot,  
score: 0.023701016  
schizophrenia depression htn hypercholesterolemia social history  
location, score: 0.018665062

confidence of prediction: 0.825953  
Y\_true: [ 3 8 20 29 33]  
Y\_pred: [11 20 29 33]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia she presented, score: 0.086667955  
multilobar pna discharge condition, score: 0.062367268  
pna persistent hypoxia hx, score: 0.055619158

confidence of prediction: 0.838867  
Y\_true: [ 3 8 20 29 33]  
Y\_pred: [11 20 29 33]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
multilobar pna discharge condition stable, score: 0.030002791  
pneumonia persistent hypoxia history, score: 0.021785513  
pna persistent hypoxia hx, score: 0.020536164

confidence of prediction: 0.837440  
Y\_true: [ 0 4 17 21 24 29 35 36 46 47]  
Y\_pred: [ 4 17 21 29 35 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
radical prostatectomy hld aaa sick sinus syndrome, score: 0.4686836  
daily rosuvastatin mg tablet sig, score: 0.014547238  
mg qd rosuvastatin mg, score: 0.014482538

confidence of prediction: 0.945051  
Y\_true: [ 0 4 17 21 24 29 35 36 46 47]  
Y\_pred: [ 4 17 21 29 35 36]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous catheter placement history of, score: 0.5820656  
venous catheter and foley, score: 0.10753325  
instructions dear mr known lastname it, score: 0.009200928

confidence of prediction: 0.771389  
Y\_true: [ 0 4 17 21 24 29 35 36 46 47]  
Y\_pred: [ 4 17 21 29 35 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic renal failure resolved with, score: 0.17424989  
cad ckd bl htn hd and, score: 0.13974424  
p ppm ckd htn s p l, score: 0.011723295

confidence of prediction: 0.846668  
Y\_true: [ 0 4 17 21 24 29 35 36 46 47]  
Y\_pred: [ 4 17 21 29 35 36]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia the patient, score: 0.13019744  
community acquired pneumonia discharge condition, score: 0.10047488  
to pneumonia he had, score: 0.04758893

confidence of prediction: 0.643259  
Y\_true: [ 0 4 17 21 24 29 35 36 46 47]  
Y\_pred: [ 4 17 21 29 35 36]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure resolved with fluid, score: 0.423137  
recorded as having no, score: 0.03709034  
myelos 00pm hypochrom normal, score: 0.0151337795

confidence of prediction: 0.724951  
Y\_true: [ 0 4 17 21 24 29 35 36 46 47]  
Y\_pred: [ 4 17 21 29 35 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal failure resolved with, score: 0.20241614  
cad ckd bl htn hd and, score: 0.18676624  
p ppm ckd htn s p l, score: 0.007655272

confidence of prediction: 0.666872  
Y\_true: [ 3 10 16 20 23 24 41 42]  
Y\_pred: [10 20 23 24]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
from incisions bleeding from groin, score: 0.007721699  
social history smokes ppd x years drinks, score: 0.0051283557  
history htn hypercholesterol cad, score: 0.0007994405

confidence of prediction: 0.799123  
Y\_true: [ 3 10 16 20 23 24 41 42]  
Y\_pred: [10 20 23 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hypercholesterol cad s p mi, score: 0.14664301  
history of htn and cad who presents, score: 0.1336502  
cocaine retired defense planner family, score: 0.08161264

confidence of prediction: 0.706998  
Y\_true: [ 3 10 16 20 23 24 41 42]  
Y\_pred: [10 20 23 24]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
htn hypercholesterol cad s p mi years ago social history, score:  
0.0014116996  
htn and cad who presents with acute, score: 0.00037348337

confidence of prediction: 0.818071  
Y\_true: [ 3 10 16 20 23 24 41 42]  
Y\_pred: [10 20 23 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
htn hypercholesterol cad s p mi years ago social history, score:  
0.026569508  
htn and cad who presents with acute, score: 0.017430477

confidence of prediction: 0.867686  
Y\_true: [ 3 5 7 27 30 35 48]  
Y\_pred: [ 2 7 27 35 36 48]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia acute renal failure, score: 0.6754721  
anemia secondary to hematuria, score: 0.059196334  
placed a way foley, score: 0.033649024

confidence of prediction: 0.977367  
Y\_true: [ 3 5 7 27 30 35 48]  
Y\_pred: [ 2 7 27 35 36 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf exacerbation thought to, score: 0.10000218  
systolic heart failure stable history, score: 0.058638126  
systolic chf ef s p, score: 0.04143866

confidence of prediction: 0.938125  
Y\_true: [ 3 5 7 27 30 35 48]  
Y\_pred: [ 2 7 27 35 36 48]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
renal failure cr baseline, score: 0.3998669  
related to arf resolved acute blood, score: 0.083443284  
acute renal failure secondary anemia, score: 0.0709958

confidence of prediction: 0.874605  
Y\_true: [ 3 5 7 27 30 35 48]  
Y\_pred: [ 2 7 27 35 36 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg cva, score: 0.84084433  
p 4v cabg in dm2 with, score: 0.044022717  
history 4v cabg lima lad svg d1, score: 0.021848314

confidence of prediction: 0.858985  
Y\_true: [ 4 34]  
Y\_pred: [ 4 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history asthma hyperlipidemia gerd h o [UNK], score: 0.2915234  
prn simvastatin omeprazole discharge medications fluticasone, score:  
0.009546409  
identified although wide mediastinum is noted, score: 0.004184284

confidence of prediction: 0.970226  
Y\_true: [ 4 34]

Y\_pred: [ 4 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
asthma hyperlipidemia gerd h o [UNK] social, score: 0.07467755  
celsius any change in, score: 0.0029845475  
surgery allergies patient recorded as having no, score: 0.0012736267

confidence of prediction: 0.894677  
Y\_true: [ 1 2 20 24]  
Y\_pred: [ 1 2 4 20 24]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
limits hypothyroidism pt noted to, score: 0.08349628  
showed hypothyroidism ruling out, score: 0.07699881  
on levothyroxine 25mcg which you, score: 0.04804049

confidence of prediction: 0.658322  
Y\_true: [ 1 2 20 24]  
Y\_pred: [ 1 2 4 20 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dmii chronic headaches followed by, score: 0.068587415  
hypomagnesemia diabetes mellitus type controlled with, score:  
0.037093155  
metformin mg tablet sig, score: 0.026148595

confidence of prediction: 0.960935  
Y\_true: [ 1 2 20 24]  
Y\_pred: [ 1 2 4 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
lad stent hypertension hyperlipidemia dmii chronic, score:  
0.11361235  
upon discharge htn his bp was, score: 0.052901708  
75m w cad s p, score: 0.040593788

confidence of prediction: 0.907832  
Y\_true: [ 1 2 20 24]  
Y\_pred: [ 1 2 4 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
w cad s p lad stent dmii, score: 0.029324524  
cad s p lad stent hypertension, score: 0.025793929  
cad s p lad stent dmii, score: 0.024591876

confidence of prediction: 0.939028  
Y\_true: [10 11 20 27]  
Y\_pred: [20 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
chf ef htn and depression brought by, score: 0.05713348  
chf ef htn and depression coming, score: 0.05713348  
ef htn depression osteoporosis eating, score: 0.052166782

confidence of prediction: 0.796196  
Y\_true: [10 11 20 27]  
Y\_pred: [20 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
emphysema chf ef htn and depression, score: 0.17580765  
last year chf ef htn depression, score: 0.02781392  
severe emphysema chf ef htn and depression, score: 0.010782783

confidence of prediction: 0.858995  
Y\_true: [34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hemophilia a gerd hx of hip and, score: 0.19127256  
history of gerd he was asked to, score: 0.05191487  
acid blocker omeprazole we, score: 0.006809835

confidence of prediction: 0.530322  
Y\_true: [ 2 4 20 27]  
Y\_pred: [ 2 4 20 27 29]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dmii the patient s blood, score: 0.11083096  
type ii diabetes mellitus discharge condition stable, score:  
0.06238313  
diet controlled dmii htn and hl, score: 0.026611267

confidence of prediction: 0.842726  
Y\_true: [ 2 4 20 27]  
Y\_pred: [ 2 4 20 27 29]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
htn hl dmii chf, score: 0.20767154  
her admission hyperlipidemia she was continued, score: 0.072257504  
htn and hl who presents with cold, score: 0.056042276

confidence of prediction: 0.925358  
Y\_true: [ 2 4 20 27]  
Y\_pred: [ 2 4 20 27 29]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
controlled dmii htn and hl who, score: 0.14957453  
of dmii htn hl and asthma who, score: 0.10788119  
htn hl dmii chf ef, score: 0.07554213

confidence of prediction: 0.969043  
Y\_true: [ 2 4 20 27]  
Y\_pred: [ 2 4 20 27 29]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
mg chf ef has diastolic dysfunction appeared dry on exam, score:

0.0062955343

dmii chf ef with mild pah, score: 0.003945996

confidence of prediction: 0.894873

Y\_true: [ 0 3 34 37]

Y\_pred: [34 37]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

and c septicum bacteroides, score: 0.020941295

past medical history pmh ibs gerd high cholesterol high blood, score: 0.006486486

30pm plt smr normal, score: 0.0047818865

confidence of prediction: 0.970386

Y\_true: [ 0 3 34 37]

Y\_pred: [34 37]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)

a urinary infection which was, score: 0.04483698

cholecystitis urinary tract infection discharge condition, score: 0.029575624

a klebsiella uti she had problems, score: 0.017202662

confidence of prediction: 0.848266

Y\_true: [ 7 17 42 44]

Y\_pred: [17 41 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

a picc line was placed for, score: 0.12276622

extubated a dobbhoff was placed and, score: 0.10924653

subarachnoid hemorrhage multiple subdural, score: 0.020482624

confidence of prediction: 0.841360

Y\_true: [ 7 17 42 44]

Y\_pred: [17 41 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

rr o2sats intubated gen intubated sedated paralyzed with, score: 0.038149714

was intubated after he, score: 0.033686113

status intubated and sedated cranial nerves, score: 0.011643296

confidence of prediction: 0.958194

Y\_true: [20 35 40 42]

Y\_pred: [33 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

intubated intubated 45am lactate 47am, score: 0.6041881

tube projects cm above, score: 0.03343006

therefore were intubated had a tube in, score: 0.010851588

confidence of prediction: 0.998066



Y\_true: [21 22 24 25 36 37]  
Y\_pred: [ 2 4 17 24 27 35 36 37]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cad vessel cad lmca lad occlusion after d1, score: 0.08437645  
cad vessel cad lmca lad occlusion after, score: 0.08437645  
rca ostial disease no, score: 0.048748538

confidence of prediction: 0.608611  
Y\_true: [21 22 24 25 36 37]  
Y\_pred: [ 2 4 17 24 27 35 36 37]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
as above ckd baseline cr likely now, score: 0.08621361  
and nephropathy ckd pvd s p b, score: 0.039371867  
nph units qam units qpm, score: 0.028935924

confidence of prediction: 0.771010  
Y\_true: [21 22 24 25 36 37]  
Y\_pred: [ 2 4 17 24 27 35 36 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
day urinary tract infection the patient, score: 0.14599276  
events as above ckd baseline, score: 0.093324795  
mg qday flexeril mg tid acidophilus cap tid, score: 0.009823285

confidence of prediction: 0.933780  
Y\_true: [ 4 7 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia sleep apnea unable, score:  
0.108084224  
seasonal allergic rhinitis general, score: 0.013672016  
mg hospital1 aspirin mg, score: 0.006195984

confidence of prediction: 0.987140  
Y\_true: [ 4 7 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x3 left internal mammary artery to  
left, score: 0.5920492  
coronary artery bypass graft x please, score: 0.033439726  
coronary artery bypass graft x past, score: 0.014473404

confidence of prediction: 0.977694  
Y\_true: [ 4 7 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards his pre, score: 0.23242591  
cardiothoracic allergies no known, score: 0.010685864  
mcg spray spray hospital1, score: 0.006973662

confidence of prediction: 0.999424  
Y\_true: [ 4 7 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hyperlipidemia sleep apnea unable,  
score: 0.11584286  
ef was he was, score: 0.008537625  
bypass the patient is, score: 0.0043618255

confidence of prediction: 0.999214  
Y\_true: [ 4 7 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.6368203  
coronary artery disease s p coronary artery bypass graft, score:  
0.13481897  
coronary artery disease and, score: 0.020763187

confidence of prediction: 0.872021  
Y\_true: [ 4 7 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
duodenal ulcer gerd seasonal allergic rhinitis general, score:  
0.083184816  
social history race caucasian, score: 0.0041686785  
oral analgesics incisions sternal, score: 0.001217121

confidence of prediction: 0.976993  
Y\_true: [ 2 3 15 18 20 25 27 33 38 39 42]  
Y\_pred: [14 18 25 33 38 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
pacing wires and foley were, score: 0.014539492  
cardiothoracic allergies patient recorded, score: 0.013207387  
pressors were weaned off, score: 0.008707782

confidence of prediction: 0.865955  
Y\_true: [ 2 3 15 18 20 25 27 33 38 39 42]  
Y\_pred: [14 18 25 33 38 42]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve prolapse presented, score: 0.32028875  
mitral valve regurgitation atrial septal, score: 0.15255798  
mitral valve regurgitation she underwent, score: 0.11142311

confidence of prediction: 0.573004  
Y\_true: [ 2 3 15 18 20 25 27 33 38 39 42]  
Y\_pred: [14 18 25 33 38 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

she was intubated for respiratory distress, score: 0.047652245  
intubated on arrival family history unknown intubated on arrival  
physical, score: 0.035719685  
subsequently was intubated for increasing work, score: 0.026446506

confidence of prediction: 0.902365  
Y\_true: [ 2 3 15 18 20 25 27 33 38 39 42]  
Y\_pred: [14 18 25 33 38 42]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
catheterization coronary angiogram left ventriculogram, score:  
0.754505  
urgent mitral valve replacement st, score: 0.056767974  
pump history of present, score: 0.026940763

confidence of prediction: 0.625756  
Y\_true: [ 2 3 15 18 20 25 27 33 38 39 42]  
Y\_pred: [14 18 25 33 38 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
general intubated skin dry x, score: 0.13919917  
was intubated for increasing work, score: 0.10911602  
unknown intubated on arrival, score: 0.049331024

confidence of prediction: 0.869380  
Y\_true: [ 4 7 20 23 48]  
Y\_pred: [ 4 7 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
above htn hyperlipidemia social history patient is, score:  
0.13161269  
of mi cabg x melanoma as, score: 0.010508383  
simvastatin mg tablet sig, score: 0.006967958

confidence of prediction: 0.934758  
Y\_true: [ 4 7 20 23 48]  
Y\_pred: [ 4 7 20]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia resolving paraplegia discharge condition, score: 0.73792416  
m service orthopaedics allergies septa attending first, score:  
0.009024536  
with retropulsion into the, score: 0.0055101737

confidence of prediction: 0.999494  
Y\_true: [ 4 7 20 23 48]  
Y\_pred: [ 4 7 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
his l axilla he then had, score: 0.05913584  
as above htn hyperlipidemia social history patient, score:  
0.029578065  
simvastatin famotidine discharge medications, score: 0.016134566

confidence of prediction: 0.926658

Y\_true: [37 40 42]

Y\_pred: [11 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

ml escherichia coli ampicillin, score: 0.01441274

a burst suppression pattern, score: 0.012306603

to have uti and completed a, score: 0.006895147

confidence of prediction: 0.981824

Y\_true: [ 9 14 20 27 31 33 38 42 47]

Y\_pred: [17 20 31 33]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn anxiety depression has had, score: 0.10639413

cad and htn who presented from, score: 0.07630979

failure secondary hypertension discharge condition mental, score:

0.017354285

confidence of prediction: 0.953719

Y\_true: [ 9 14 20 27 31 33 38 42 47]

Y\_pred: [17 20 31 33]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

primary aspiration pneumonia respiratory failure secondary, score:

0.35002553

monitor aspiration pna pt with fever, score: 0.13535404

of aspiration pneumonia we treated your, score: 0.061816864

confidence of prediction: 0.885289

Y\_true: [ 9 14 20 27 31 33 38 42 47]

Y\_pred: [17 20 31 33]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

respiratory failure secondary hypertension, score: 0.1825437

for respiratory failure in, score: 0.16175054

with respiratory failure requiring intubation likely secondary to,

score: 0.11708596

confidence of prediction: 0.801867

Y\_true: [ 9 28 33 42]

Y\_pred: [ 7 28 40 42 44]

top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)

history of present illness, score: 0.25893772

otherwise normal egd to antrum recommendations successful, score:

0.10585943

visualization to antrum no, score: 0.037148878

confidence of prediction: 0.806679

Y\_true: [ 9 28 33 42]

Y\_pred: [ 7 28 40 42 44]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

was intubated in the, score: 0.28679138

pt intubated for airway protection he, score: 0.056039352

ranging ventilator settings were ac vt, score: 0.049940877

confidence of prediction: 0.816863

Y\_true: [17 24 30 34 40]

Y\_pred: [17 19 30 34 40 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

of femoral central venous line history of, score: 0.0654176

a femoral line placed for access, score: 0.039441086

femoral cvl skin cyanotic, score: 0.035647925

confidence of prediction: 0.568232

Y\_true: [17 24 30 34 40]

Y\_pred: [17 19 30 34 40 42]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

anemia gout copd recent left brachial vein, score: 0.40819317

morphine mg ml syringe, score: 0.017471878

to micu patient once, score: 0.0056722183

confidence of prediction: 0.542678

Y\_true: [17 24 30 34 40]

Y\_pred: [17 19 30 34 40 42]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

guaiac positive brown stool, score: 0.012058133

sepsis as well as, score: 0.008616113

venous line history of, score: 0.008267509

confidence of prediction: 0.683996

Y\_true: [17 24 30 34 40]

Y\_pred: [17 19 30 34 40 42]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

cool neuro intubated no spontaneous, score: 0.18702662

and updates family in, score: 0.025930464

skin heent intubated and sedated, score: 0.02427777

confidence of prediction: 0.950577

Y\_true: [ 2 4 13 18 20 23 24 26 49]

Y\_pred: [ 2 4 13 18 20 24 26]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

noninsulin dependent diabetes mellitus dyslipidemia hypertension, score: 0.10209703

daily metformin 1000mg hospital1 lisinopril 40mg, score: 0.0702311

diabetes mellitus dyslipidemia hypertension, score: 0.03748831

confidence of prediction: 0.823715

Y\_true: [ 2 4 13 18 20 23 24 26 49]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
diabetes mellitus dyslipidemia hypertension left and right, score:  
0.25156656  
diabetes mellitus dyslipidemia hypertension s p bilateral, score:  
0.05710407  
simvastatin 40mg daily metformin, score: 0.01332815

confidence of prediction: 0.990086  
Y\_true: [ 2 4 13 18 20 23 24 26 49]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass x, score: 0.53577834  
coronary artery bypass graft x please, score: 0.08196587  
descending saphenous vein graft to, score: 0.05724023

confidence of prediction: 0.977085  
Y\_true: [ 2 4 13 18 20 23 24 26 49]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
marginal saphenous vein graft, score: 0.028907808  
cardiothoracic allergies plavix attending, score: 0.025225235  
washing incisions gently with mild soap, score: 0.008873147

confidence of prediction: 0.961305  
Y\_true: [ 2 4 13 18 20 23 24 26 49]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
mellitus dyslipidemia hypertension left and right, score: 0.06368932  
mellitus dyslipidemia hypertension s p bilateral, score: 0.06368932  
glyburide mg tablet sig, score: 0.059683576

confidence of prediction: 0.998079  
Y\_true: [ 2 4 13 18 20 23 24 26 49]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass x, score: 0.48241597  
coronary artery disease s, score: 0.10213058  
coronary artery disease s p non stemi s p stent to, score:  
0.039903738

confidence of prediction: 0.915826  
Y\_true: [ 2 4 13 18 20 23 24 26 49]  
Y\_pred: [ 2 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paroxysmal atrial fibrillation with ventricular rates in, score:  
0.014600415

amiodarone mg tablet sig, score: 0.006870728  
resumed he continued to be, score: 0.003429014

confidence of prediction: 0.889551  
Y\_true: [ 2 3 13 18 20 24 26 32]  
Y\_pred: [ 2 18 20 24 26]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus hyperlipidemia discharge  
condition, score: 0.09063685  
residua noninsulin dependent diabetes mellitus hypercholesterolemia  
social history, score: 0.0012085078  
radiata likely from an, score: 0.0008706606

confidence of prediction: 0.976459  
Y\_true: [ 2 3 13 18 20 24 26 32]  
Y\_pred: [ 2 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.59747803  
cardiothoracic allergies penicillins attending, score: 0.01326443  
cabg x2 lima lad svg om history, score: 0.0025837363

confidence of prediction: 0.972019  
Y\_true: [ 2 3 13 18 20 24 26 32]  
Y\_pred: [ 2 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
dense coronary calcifications are, score: 0.16664547  
medical history hypertension s p right, score: 0.112950705  
artery disease hypertension s p right, score: 0.069328174

confidence of prediction: 0.719849  
Y\_true: [ 2 3 13 18 20 24 26 32]  
Y\_pred: [ 2 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease major surgical, score: 0.15227035  
aortic stenosis coronary artery disease hypertension s, score:  
0.030984152  
disease and critical aortic, score: 0.028274499

confidence of prediction: 0.819736  
Y\_true: [ 2 3 13 18 20 24 26 32]  
Y\_pred: [ 2 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation which was treated, score: 0.0761441  
amiodarone mg tablet sig, score: 0.056389887  
amiodarone with conversion to, score: 0.026516004

confidence of prediction: 0.810824  
Y\_true: [10 12 16 17 22 33 37 41 43]

Y\_pred: [17]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

left subclavian tlc placement right axillar a line history of,  
score: 0.23703998

requiring vasopressor support an, score: 0.022735914

and sedation she eventually developed fevers, score: 0.02186946

confidence of prediction: 0.734463

Y\_true: [17 28 34 44]

Y\_pred: [17 28 29]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

micafungin and acyclovir her hickmann line was, score: 0.1625174

placement removal picc line placement endoscopy intubation, score:  
0.0759882

pas and gms stains, score: 0.033685155

confidence of prediction: 0.871076

Y\_true: [17 28 34 44]

Y\_pred: [17 28 29]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

otherwise normal egd to second part of, score: 0.6357557

gms stains endoscopy doctor first, score: 0.09714851

usually is susceptible to, score: 0.022050897

confidence of prediction: 0.792125

Y\_true: [ 0 2 6 17 20 26 46]

Y\_pred: [ 2 20 26 31 37]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

type ii dm and paget dz, score: 0.12908627

type ii dm htn paget disease presents, score: 0.046550345

htn dm2 social history currently, score: 0.046241105

confidence of prediction: 0.927234

Y\_true: [ 0 2 6 17 20 26 46]

Y\_pred: [ 2 20 26 31 37]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

s disease htn dm2 social history currently, score: 0.16845539

htn type ii dm and, score: 0.03747829

ii dm htn paget disease presents with, score: 0.035592996

confidence of prediction: 0.514083

Y\_true: [ 0 2 6 17 20 26 46]

Y\_pred: [ 2 20 26 31 37]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

pleural effusions note is, score: 0.06188876

daughter who lives in, score: 0.0505065

a fib with rvr and received, score: 0.022801718



confidence of prediction: 0.958230

Y\_true: [ 2 4 18 20]

Y\_pred: [ 2 4 18]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus fibromyalgia kidney stone, score: 0.016721297  
prn metformin glucophage xr prescribed by, score: 0.015002456  
weekly glipizide glucotrol xl prescribed by, score: 0.012901318

confidence of prediction: 0.795508

Y\_true: [ 2 4 18 20]

Y\_pred: [ 2 4 18]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
medical history hyperlipidemia diabetes mellitus fibromyalgia  
kidney, score: 0.11172426  
valve replacement presents today for, score: 0.006081572

confidence of prediction: 0.976864

Y\_true: [ 2 4 18 20]

Y\_pred: [ 2 4 18]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies no known, score: 0.026030898  
diuresed towards her preoperative, score: 0.012147662  
washing incisions gently with mild soap, score: 0.009619725

confidence of prediction: 0.882515

Y\_true: [34]

Y\_pred: [34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
migraine headache gerd social history she lives, score: 0.0636403  
and has gerd her paternal grandfather, score: 0.048154328  
progressive neoplastic disease and likely, score: 0.009359289

confidence of prediction: 0.977462

Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]

Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
daily levothyroxine 150mcg po daily lisinopril, score: 0.0049280412  
chronic pancreatitis hypothyroidism hyperlipidemia cad s, score:  
0.0038139683  
aspiration pneumonia hypothyroidism history of hodgkin s, score:  
0.00038205629

confidence of prediction: 0.841104

Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]

Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

pancreatitis hypothyroidism hyperlipidemia cad s p cabg  
degenerative, score: 0.053199466  
prn prilosec 40mg po bid, score: 0.013414674  
small vessel infarcts without, score: 0.0049237018

confidence of prediction: 0.879700  
Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib satting on 3l, score: 0.3981786  
atrial fibrillation on the monitor, score: 0.14776674  
zosyn augmentin diltiazem metoprolol, score: 0.0035280455

confidence of prediction: 0.896117  
Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
chronic aspiration pneumonia hypothyroidism, score: 0.21583742  
to an aspiration event the patient was, score: 0.025769403  
lobe pneumonia bilateral pleural, score: 0.006676792

confidence of prediction: 0.736375  
Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
unresponsiveness etomidate succ for intubation propofol, score:  
0.06567097  
he was intubated and, score: 0.0628783  
he was called out, score: 0.04891362

confidence of prediction: 0.832289  
Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
iron neutraphos lansoprazole medications at home, score:  
0.0033782036  
temporal horns nph should, score: 0.0033560342  
joint disease gerd zenker s diverticulum social history, score:  
0.0021114508

confidence of prediction: 0.800429  
Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was intubated for airway protection, score: 0.24525303  
fi02 gen intubated sedated and, score: 0.13581176  
he was intubated and transferred, score: 0.11455272

confidence of prediction: 0.831719

Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for airway protection, score: 0.24358103  
and intubated on arrival, score: 0.12410706  
he was intubated and transferred, score: 0.0530149

confidence of prediction: 0.882392  
Y\_true: [ 1 2 4 8 17 26 31 32 33 34 35 40 41 42 43 48]  
Y\_pred: [ 1 4 26 27 31 33 34 40 42 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
appears to correspond roughly, score: 0.0027790193  
small vessel infarcts without acute, score: 0.0009879812  
consistent with chf digoxin, score: 0.00060485036

confidence of prediction: 0.516126  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
turned off and she was, score: 0.009237672  
on arimidex copd sacral decubitus, score: 0.00695562  
lantus insulin unknown dose, score: 0.006668364

confidence of prediction: 0.829880  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
also had hyponatremia that improved with fluid, score: 0.6635134  
recorded as having no, score: 0.03548504  
diuresis with ionotropic support in the micu, score: 0.012364552

confidence of prediction: 0.964547  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease baseline obesity hypertension diverticulosis  
anemia, score: 0.016323522  
injury with cr and baseline cr which, score: 0.0075042206  
shock shock felt to, score: 0.0043378463

confidence of prediction: 0.935603  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
versus viral cardiomyopathy per notes, score: 0.023909833

history cad s p stenting in, score: 0.0064313975  
vessel ischemic disease ruq u s, score: 0.0043260097

confidence of prediction: 0.992114  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib hr lad q waves, score: 0.92560184  
atrial fibrillation diabetes and heart, score: 0.0117086945  
expired, score: 0.0016887555

confidence of prediction: 0.947848  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure either, score: 0.4889752  
chf tricuspid regurgitation atrial fibrillation, score: 0.19018888  
congestive heart failure other, score: 0.020945553

confidence of prediction: 0.520248  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
on arimidex copd sacral decubitus ulcer noted, score: 0.3056278  
so po metolazone alternating, score: 0.02607449  
sludge surgery felt no, score: 0.0012536008

confidence of prediction: 0.940259  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease baseline obesity hypertension, score:  
0.017606776  
shock shock felt to, score: 0.007563131  
renal failure attending pcp, score: 0.0024329273

confidence of prediction: 0.546048  
Y\_true: [ 0 2 5 6 8 17 21 24 26 27 30 33 36 46 47]  
Y\_pred: [ 2 5 21 24 26 27 30 35 36 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
shock she was transferred, score: 0.0516316  
was afebrile and labs, score: 0.04060107  
shock the patient reviewed, score: 0.031643406

confidence of prediction: 0.747027  
Y\_true: [ 5 19 35 41]  
Y\_pred: [17 19 35 41]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)

perfusion started cvvh on swithed to hd on last hd on, score:  
0.045696195  
required a tunneled line for hemodialysis as he developed acute,  
score: 0.020286331  
and glipizide he will, score: 0.003994875

confidence of prediction: 0.565150  
Y\_true: [ 5 19 35 41]  
Y\_pred: [17 19 35 41]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure secondary diagnosis, score: 0.21421537  
renal artery injury with no, score: 0.074763976  
by the renal service, score: 0.029199688

confidence of prediction: 0.897820  
Y\_true: [ 5 19 35 41]  
Y\_pred: [17 19 35 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
g tube feedings post op, score: 0.08534501  
and gastrostomy feeding tube placement ercp history, score:  
0.034194548  
a feeding tube right into your, score: 0.02859231

confidence of prediction: 0.979038  
Y\_true: [20]  
Y\_pred: [10 20 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn social history lives with, score: 0.17860232  
a furniture store she smokes about cigarettes, score: 0.03368067  
t2 hyper iso to, score: 0.0120840585

confidence of prediction: 0.541123  
Y\_true: [ 4 20 22 27]  
Y\_pred: [ 4 20 22 27 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
advair hospital11 crestor 40mg daily, score: 0.1989824  
amaryl [UNK] prilosec 20mg, score: 0.07757942  
januvia 50mg daily mgoxide 400mg, score: 0.064301364

confidence of prediction: 0.866337  
Y\_true: [ 4 20 22 27]  
Y\_pred: [ 4 20 22 27 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
fem pt bpg with toe amputation historyof htn historyof systolic,  
score: 0.09049622  
compensated historyof dyslipdemia history, score: 0.06296658  
januvia 50mg daily mgoxide, score: 0.054945864

confidence of prediction: 0.708259

Y\_true: [ 4 20 22 27]  
Y\_pred: [ 4 20 22 27 48]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
non st elevation myocardial infarction discharge condition unstable,  
score: 0.029015323  
catheterization our attending dr, score: 0.010782469  
emergent stemi that required intervention, score: 0.0071315495

confidence of prediction: 0.968895  
Y\_true: [ 4 20 22 27]  
Y\_pred: [ 4 20 22 27 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf exacerbation with iv, score: 0.122115396  
systolic [UNK] chf chronic compensated historyof dyslipdemia, score:  
0.013941647  
chf with iv diuresis amt, score: 0.0127878655

confidence of prediction: 0.925661  
Y\_true: [12 20 30 34 47]  
Y\_pred: [12 30]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
involved the region of, score: 0.0084380265  
fh of lung disease, score: 0.005930191  
at university college no, score: 0.004275228

confidence of prediction: 0.647405  
Y\_true: [12 20 30 34 47]  
Y\_pred: [12 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd rll lung mass found, score: 0.60930353  
infection yrs ago chronic rhinitis osteoarthritis s p, score:  
0.0034738528  
pathology on brushings washings, score: 0.0032703616

confidence of prediction: 0.575767  
Y\_true: [ 4 20 27 44 48]  
Y\_pred: [ 4 20 23 24 27 38 44 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
rosuvastatin mg tablet sig, score: 0.09026988  
[UNK] hospital1 rosuvastatin 20mgm daily spirolactone, score:  
0.06411592  
mirtazapine [UNK] hs lasix, score: 0.060688984

confidence of prediction: 0.874023  
Y\_true: [ 4 20 27 44 48]  
Y\_pred: [ 4 20 23 24 27 38 44 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn history, score: 0.055095322

fem pt bpg with toe amputation historyof htn historyof systolic,  
score: 0.055043835  
fem pt bpg and, score: 0.055043835

confidence of prediction: 0.983572  
Y\_true: [ 4 20 27 44 48]  
Y\_pred: [ 4 20 23 24 27 38 44 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic diastolic chf compensated ef postoperative hypotension,  
score: 0.01667781  
systolic [UNK] chf chronic compensated historyof dyslipdemia, score:  
0.0041209906  
40mg hospital1 ntg patch, score: 0.003681347

confidence of prediction: 0.558821  
Y\_true: [ 4 20 27 44 48]  
Y\_pred: [ 4 20 23 24 27 38 44 48]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
gtt iv transfused 4units prbc [UNK] to icu, score: 0.13635255  
p transfusion corrected discharge condition, score: 0.021501549  
rt femoral and graft pulse dopperable, score: 0.0156056145

confidence of prediction: 0.861668  
Y\_true: [ 4 20 27 44 48]  
Y\_pred: [ 4 20 23 24 27 38 44 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg [UNK], score: 0.6091382  
s p cabg [UNK] s p, score: 0.2907592  
coronary artery diseas he presents, score: 0.018492067

confidence of prediction: 0.995992  
Y\_true: [16 17 20 42]  
Y\_pred: [20 40 41 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn cocaine abuse social history, score: 0.16500631  
[UNK] embo therapy study, score: 0.0038245255  
abuse family history unknown, score: 0.0025320647

confidence of prediction: 0.967987  
Y\_true: [ 4 14 24 27 38]  
Y\_pred: [15 20 24 38 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad lesion then had xience, score: 0.12918805  
rca stenosis lcx had, score: 0.06911054  
cardiac catheterization with name, score: 0.050944664

confidence of prediction: 0.882727  
Y\_true: [ 4 14 24 27 38]  
Y\_pred: [15 20 24 38 49]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with name prefix, score: 0.6052031  
rca stenosis lcx had, score: 0.13988644  
rca history of present, score: 0.0583139

confidence of prediction: 0.621611  
Y\_true: [ 3 8 13 18 20 24 34]  
Y\_pred: [ 3 13 18 20 24 34]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
hypertension and hypercholesterolemia who was referred, score:  
0.2471573  
history hypertension hypercholesterolemia gastroesophageal reflux  
disease, score: 0.16918454  
hypertension dyslipidemia gastric reflux, score: 0.027372459

confidence of prediction: 0.990185  
Y\_true: [ 3 8 13 18 20 24 34]  
Y\_pred: [ 3 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
bypass grafting x3 with a, score: 0.13513918  
bypass grafting x3 hypertension dyslipidemia, score: 0.13513918  
coronary artery reverse saphenous vein graft, score: 0.12260204

confidence of prediction: 0.985521  
Y\_true: [ 3 8 13 18 20 24 34]  
Y\_pred: [ 3 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.53952277  
bypass grafting x3 with a, score: 0.024177633  
bypass grafting x3 hypertension dyslipidemia, score: 0.024177633

confidence of prediction: 0.990005  
Y\_true: [ 3 8 13 18 20 24 34]  
Y\_pred: [ 3 13 18 20 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hypercholesterolemia gastroesophageal  
reflux, score: 0.28413904  
history of hypertension and hypercholesterolemia who was, score:  
0.13442066  
and ibuprofen incisions sternal healing well, score: 0.07673716

confidence of prediction: 0.996903  
Y\_true: [ 3 8 13 18 20 24 34]  
Y\_pred: [ 3 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p coronary artery bypass grafting, score:  
0.15345055  
coronary artery reverse saphenous, score: 0.15092471



three vessel coronary artery bypass grafting, score: 0.10260315

confidence of prediction: 0.832937

Y\_true: [ 3 8 13 18 20 24 34]

Y\_pred: [ 3 13 18 20 24 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

retired tobacco lppd x50 yrs, score: 0.016636154

dyslipidemia gastric reflux ventral, score: 0.011415102

hypercholesterolemia gastroesophageal reflux disease social history

race hispanic lives, score: 0.006672539

confidence of prediction: 0.544723

Y\_true: [ 0 9 37]

Y\_pred: [ 0 33 37]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

patient with uti growing enterococcus sensitive, score: 0.5862326

precipitating present decompensation on, score: 0.02888163

uti causing sepsis and triggering his altered, score: 0.022424199

confidence of prediction: 0.824726

Y\_true: [ 0 9 37]

Y\_pred: [ 0 33 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

patient with uti growing enterococcus sensitive, score: 0.064794764

likely has uti causing sepsis, score: 0.03699039

precipitating present decompensation on abx, score: 0.019871786

confidence of prediction: 0.831020

Y\_true: [10 31 34 35 44]

Y\_pred: [34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

injury and gerd with h o esophageal, score: 0.09897694

with renal recovery we addressed his, score: 0.025333459

asthma copd gerd barrett s esophagus cocaine, score: 0.0068108677

confidence of prediction: 0.856442

Y\_true: [ 4 15 18 38]

Y\_pred: [ 4 8 18 24 38]

top three important windows for true positive code 4 (272.4: Other

and unspecified hyperlipidemia)

aortic stenosis hyperlipidemia past surgical history s, score:

0.15720153

medical history hyperlipidemia s p appendectomy s, score: 0.11441029

simvastatin mg tablet sig, score: 0.025670646

confidence of prediction: 0.979890

Y\_true: [ 4 15 18 38]

Y\_pred: [ 4 8 18 24 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed towards her pre, score: 0.02161486  
cardiothoracic allergies aspirin levaquin, score: 0.021344468  
csru pm chest portable, score: 0.01570824

confidence of prediction: 0.664828  
Y\_true: [ 4 15 18 38]  
Y\_pred: [ 4 8 18 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cath selective coronary angiography of this, score: 0.2929783  
lmca lad lcx and rca, score: 0.04939331  
cardiac cath history of present, score: 0.041954778

confidence of prediction: 0.772909  
Y\_true: [ 4 10 30 34 41 42]  
Y\_pred: [17 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd oa meniere s anxiety, score: 0.65920967  
on her leukocytosis resolved, score: 0.0006033061  
that night and had, score: 0.00048519237

confidence of prediction: 0.707906  
Y\_true: [ 4 20 24 26 27]  
Y\_pred: [ 4 20 24 26 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
qsun tues thurs sat warfarin mg, score: 0.0522257  
cad who presents with, score: 0.0246535  
cardioversion x hypertension mitral, score: 0.013182072

confidence of prediction: 0.922158  
Y\_true: [ 4 20 24 26 27]  
Y\_pred: [ 4 20 24 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
qsun tues thurs sat warfarin mg, score: 0.2355035  
three medications hypertension discharged, score: 0.043936107  
cardioversion x hypertension mitral, score: 0.020574223

confidence of prediction: 0.527696  
Y\_true: [ 4 20 24 26 27]  
Y\_pred: [ 4 20 24 26 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
pacemaker placement history of, score: 0.07748481  
who presented with dizziness, score: 0.052942194  
bradycardia coronary artery disease chronic diastolic, score:  
0.038303588

confidence of prediction: 0.942078  
Y\_true: [ 4 20 24 26 27]  
Y\_pred: [ 4 20 24 26 27]  
top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib he will need, score: 0.1723364

fib cad who presents with, score: 0.14091748

fib cad who presented with, score: 0.14091748

confidence of prediction: 0.952536

Y\_true: [ 4 20 24 26 27]

Y\_pred: [ 4 20 24 26 27]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic congestive heart failure discharge condition good, score: 0.22997546

chronic congestive heart failure no, score: 0.01449127

medical history chf lvef pna colon ca, score: 0.0074285357

confidence of prediction: 0.919174

Y\_true: [ 4 7 9 18 21 25 26 35 36]

Y\_pred: [ 4 18 21 25 26]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

regurgitation anemia hyperlipidemia hypertension hearing loss benign, score: 0.20649743

50mg daily zocor 20mg, score: 0.011439114

cabg in her late, score: 0.0048224395

confidence of prediction: 0.985401

Y\_true: [ 4 7 9 18 21 25 26 35 36]

Y\_pred: [ 4 18 21 25 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.7065975

cardiothoracic allergies codeine metformin, score: 0.039107874

diuresed toward their preoperative, score: 0.038757563

confidence of prediction: 0.513980

Y\_true: [ 4 7 9 18 21 25 26 35 36]

Y\_pred: [ 4 18 21 25 26]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

coronary artery disease mother, score: 0.003037859

was increased coumadin therapy, score: 0.002744741

hypertrophy chronic kidney disease peripheral neuropathy, score: 0.0026085745

confidence of prediction: 0.802764

Y\_true: [ 4 7 9 18 21 25 26 35 36]

Y\_pred: [ 4 18 21 25 26]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

mitral valve regurgitation s, score: 0.1663622

severe mitral regurgitation with bileaflet, score: 0.11496647

mitral valve regurgitation tricuspid, score: 0.10366859

confidence of prediction: 0.803102  
Y\_true: [ 4 7 9 18 21 25 26 35 36]  
Y\_pred: [ 4 18 21 25 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation and was loaded, score: 0.23430626  
amiodarone mg tablet s, score: 0.1646394  
furosemide mg tablet s, score: 0.025701353

confidence of prediction: 0.942711  
Y\_true: [ 4 7 14 20 22 38]  
Y\_pred: [ 4 14 20 22 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia macular degeneration social history, score:  
0.43552098  
factors diabetes dyslipidemia hypertension cardiac history, score:  
0.1042803  
htn hld who presented with, score: 0.027086029

confidence of prediction: 0.516394  
Y\_true: [ 4 7 14 20 22 38]  
Y\_pred: [ 4 14 20 22 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization with balloon [UNK], score: 0.7091885  
cardiac cath with balloon angioplasty to, score: 0.018620651  
catheterization and a balloon, score: 0.013709707

confidence of prediction: 0.998924  
Y\_true: [ 4 7 14 20 22 38]  
Y\_pred: [ 4 14 20 22 24 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
40mg hospital1 hypertension started metoprolol succinate, score:  
0.054288596  
diovan discontinued his home hctz medications on admission, score:  
0.032596394  
ibs hypertension hyperlipidemia macular degeneration social, score:  
0.03206182

confidence of prediction: 0.951406  
Y\_true: [ 4 7 14 20 22 38]  
Y\_pred: [ 4 14 20 22 24 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
catheterization with balloon [UNK] of, score: 0.007671133  
non st elevation mi discharge condition, score: 0.00296447  
to have nstemi nstemi patient with chest, score: 0.0025830725

confidence of prediction: 0.893768  
Y\_true: [ 4 7 14 20 22 38]  
Y\_pred: [ 4 14 20 22 24 38]  
top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)  
cardiac catheterization with balloon [UNK], score: 0.82026786  
catheterization and a balloon, score: 0.009931102  
cardiac cath with balloon angioplasty to, score: 0.009476043

confidence of prediction: 0.998879  
Y\_true: [20 42]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hyperlipidemia social history lives, score:  
0.24247447  
records patient was helmeted driver, score: 0.04366201  
with vague curvilinear areas, score: 0.0071572335

confidence of prediction: 0.816669  
Y\_true: [20 42]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
to painful stimuli reflexes, score: 0.12447661  
3t gen intubated large r, score: 0.075118236  
was subsequently intubated for airway protection transferred, score:  
0.055316973

confidence of prediction: 0.992244  
Y\_true: [ 3 13 17 18 20 24 34]  
Y\_pred: [ 2 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x4 left, score: 0.48465133  
coronary artery bypass grafting to four, score: 0.07414422  
artery and reverse saphenous vein graft, score: 0.020054923

confidence of prediction: 0.979180  
Y\_true: [ 3 13 17 18 20 24 34]  
Y\_pred: [ 2 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires and chest tubes, score: 0.104977384  
bypass grafting x4 left internal, score: 0.060345158  
washing incisions gently with mild soap, score: 0.007486236

confidence of prediction: 0.986435  
Y\_true: [ 3 13 17 18 20 24 34]  
Y\_pred: [ 2 13 18 20 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh diabetes hypertension high cholesterol obesity gout, score:  
0.15483168  
known diabetes hypertension high cholesterol, score: 0.053337276  
occupation disabled cigarettes smoked, score: 0.014809181

confidence of prediction: 0.999211  
Y\_true: [ 3 13 17 18 20 24 34]  
Y\_pred: [ 2 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting x4 left, score: 0.5776038  
coronary artery disease pmh, score: 0.12228245  
coronary artery disease pmh, score: 0.047777336

confidence of prediction: 0.731266  
Y\_true: [ 3 13 17 18 20 24 34]  
Y\_pred: [ 2 13 18 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gout gastroesophageal reflux hx of renal stone, score: 0.16272847  
occupation disabled cigarettes smoked no, score: 0.014663601

confidence of prediction: 0.622635  
Y\_true: [20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
fe gerd htn social history social history, score: 0.34731412  
cords of nonbleeding grade, score: 0.065118  
records the patient was, score: 0.059458204

confidence of prediction: 0.859610  
Y\_true: [20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
on discharge gerd she was initially on, score: 0.015694182  
iv fe gerd htn social history social, score: 0.00401681  
egd showed cords of nonbleeding grade, score: 0.0027486286

confidence of prediction: 0.636174  
Y\_true: [ 6 7 9 14 15 16 18 26 27 33 34 38 39 40 41 43]  
Y\_pred: [ 6 17 19 34 39 41 43]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
ac [UNK] peep fiO2, score: 0.039034784  
patient remined intubated and critically ill, score: 0.020428827  
reintubation a repeat echo, score: 0.019580537

confidence of prediction: 0.514836  
Y\_true: [ 6 7 9 14 15 16 18 26 27 33 34 38 39 40 41 43]  
Y\_pred: [ 6 17 19 34 39 41 43]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
pressors and inotropes the patient, score: 0.08654733  
medical history gerd arthritis rheumatoid s p, score: 0.059242096  
intubated comments cath lab, score: 0.0064707417

confidence of prediction: 0.776077

Y\_true: [ 6 7 9 14 15 16 18 26 27 33 34 38 39 40 41 43]  
Y\_pred: [ 6 17 19 34 39 41 43]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
cardiothoracic allergies no known allergies, score: 0.048931837  
leaflet no ps physiologic, score: 0.015388703  
diuresed over several days, score: 0.014834483  
  
confidence of prediction: 0.882890  
Y\_true: [ 6 7 9 14 15 16 18 26 27 33 34 38 39 40 41 43]  
Y\_pred: [ 6 17 19 34 39 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
line feeding tube are unchanged, score: 0.029500332  
anuric and required reintubation a repeat echo, score: 0.0263698  
patient remined intubated and, score: 0.008326938  
  
confidence of prediction: 0.973315  
Y\_true: [ 6 7 9 14 15 16 18 26 27 33 34 38 39 40 41 43]  
Y\_pred: [ 6 17 19 34 39 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
anuric and required reintubation a repeat echo, score: 0.09329703  
ac [UNK] peep fiO2, score: 0.03851316  
patient remined intubated and critically, score: 0.02336988  
  
confidence of prediction: 0.892748  
Y\_true: [ 1 4 13 17 18 24 26 33 34 35 43]  
Y\_pred: [ 1 4 13 18 20 24 34]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
left kidney hypothyroidism mild dementia social history, score:  
0.0016215821  
left kidney hypothyroidism mild dementia discharge condition, score:  
0.0016215821  
inotropic support post cpb, score: 0.00038261584  
  
confidence of prediction: 0.901401  
Y\_true: [ 1 4 13 17 18 24 26 33 34 35 43]  
Y\_pred: [ 1 4 13 18 20 24 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disease hypertension hyperlipidemia h o non hodgkins, score:  
0.07717901  
grafts hypertension hyperlipidemia h o non hodgkins, score:  
0.070721224  
lipitor simvastatin pravastatin cocaine aricept, score: 0.01686029  
  
confidence of prediction: 0.918896  
Y\_true: [ 1 4 13 17 18 24 26 33 34 35 43]  
Y\_pred: [ 1 4 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass grafts x lima to lad svg, score: 0.07773715  
coronary artery bypass grafts hypertension, score: 0.037046935  
cardiothoracic allergies lipitor simvastatin, score: 0.028996008

confidence of prediction: 0.978362  
Y\_true: [ 1 4 13 17 18 24 26 33 34 35 43]  
Y\_pred: [ 1 4 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies lipitor simvastatin, score: 0.106391184  
washing incisions gently with mild soap, score: 0.008440776  
bypass grafts x lima to, score: 0.0075549637

confidence of prediction: 0.971677  
Y\_true: [ 1 4 13 17 18 24 26 33 34 35 43]  
Y\_pred: [ 1 4 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease with a, score: 0.25319538  
coronary artery bypass grafts, score: 0.1094621  
daughter spending much time, score: 0.0870174

confidence of prediction: 0.856989  
Y\_true: [ 1 4 13 17 18 24 26 33 34 35 43]  
Y\_pred: [ 1 4 13 18 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
therapy gastroesophageal reflux s p splenectomy, score: 0.030702014  
sterile dressings and ace wrap, score: 0.0036997763  
hypothyroidism mild dementia social, score: 0.0031914844

confidence of prediction: 0.957831  
Y\_true: [ 5 20 35]  
Y\_pred: [ 5 20 35]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
failure and hyponatremia altered mental status anion, score:  
0.49719062  
for hydronephrosis hyponatremia na hypovolemia given poor, score:  
0.1922444  
detecting influenza infection by dfa, score: 0.008792945

confidence of prediction: 0.878816  
Y\_true: [ 5 20 35]  
Y\_pred: [ 5 20 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
per patient htn anxiety social history tobacco, score: 0.39553544  
hydrochlorothiazide mg tablet sig, score: 0.06463917  
failure baseline cr cr on admission renal was, score: 0.0122272475

confidence of prediction: 0.896020  
Y\_true: [ 5 20 35]  
Y\_pred: [ 5 20 35]



top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
and acute renal failure this resolved, score: 0.031548202  
discharge acute renal failure baseline cr, score: 0.026211035  
hypotension acute renal failure and hyponatremia, score: 0.017532375

confidence of prediction: 0.677234

Y\_true: [ 7 17 20 26]

Y\_pred: [ 7 17 26 40 42]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
anemia secondary diagnoses hepatitis, score: 0.38926345  
of the t12 vertebral, score: 0.06587434  
of packed red blood cells post, score: 0.034185883

confidence of prediction: 0.504015

Y\_true: [ 7 17 20 26]

Y\_pred: [ 7 17 26 40 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
floor she developed asymptomatic, score: 0.23398489  
r scapula fx and multiple rib fractures were identified, score: 0.10236508  
liver laceration she was, score: 0.03319952

confidence of prediction: 0.914089

Y\_true: [ 7 17 20 26]

Y\_pred: [ 7 17 26 40 42]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation resolved acute blood, score: 0.36265075  
atrial fibrillation to 120bpm again she, score: 0.15777646  
amiodarone her current dose is, score: 0.056041393

confidence of prediction: 0.917967

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
hypotension hypothyroidism osteoporosis anasarca hyperlipidemia, score: 0.2370364  
discontinued hypothyroidism continue synthroid hyperlipidemia lipitor, score: 0.17605095  
disease hypothyroidism hyperlipidemia chronic, score: 0.03844233

confidence of prediction: 0.851429

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
osteoporosis anasarca hyperlipidemia chronic kidney disease gastroesophageal, score: 0.1465229  
disease hypothyroidism hyperlipidemia chronic kidney disease cr, score: 0.06755102

synthroid hyperlipidemia lipitor currently held due, score:  
0.026364097

confidence of prediction: 0.737577

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)

pm bronchoalveolar lavage gram stain final, score: 0.15305993

support sputum gram stain, score: 0.031764463

and a tracheostomy was performed steroids were, score: 0.023564873

confidence of prediction: 0.941512

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation on she developed atrial fibrillation with rapid  
ventricular, score: 0.041061603

expired followup instructions expired first name8 namepattern2,  
score: 0.003120137

pneumonia atrial fibrillation with rapid ventricular, score:  
0.0020005063

confidence of prediction: 0.795472

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

community acquired pneumonia her pneumonia had initally, score:  
0.10068498

community acquired pneumonia and hypotension, score: 0.08083927

bronchoalveolar lavage gram stain final, score: 0.05955113

confidence of prediction: 0.605889

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)

obstructive pulmonary disease pseudomonas, score: 0.13696761

medical history copd w preserved fev1 of, score: 0.052640546

history of copd interstitial lung disease who, score: 0.01274538

confidence of prediction: 0.533011

Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]

Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

disease gastroesophageal reflux disease discharge condition expired,  
score: 0.16286995

fractures gerd interstitial lung disease pulmonary, score:  
0.028536886

issues gerd ppi fen on, score: 0.011851352

confidence of prediction: 0.847047  
Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]  
Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease cr osteoporosis hx, score: 0.055947606  
chronic kidney disease cr improved from, score: 0.0410099  
hyperlipidemia chronic kidney disease gastroesophageal reflux,  
score: 0.018033203

confidence of prediction: 0.923820  
Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]  
Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
on tube feeds at osh, score: 0.59213316  
ventilatory support sputum gram stain, score: 0.024650015  
aeruginosa ventilator associated pneumonia atrial, score:  
0.014524527

confidence of prediction: 0.981539  
Y\_true: [ 1 4 12 26 29 30 34 36 41 43 44]  
Y\_pred: [ 1 4 6 12 17 21 26 29 30 33 34 35 36 40 41 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
and a tracheostomy was, score: 0.05615688  
aeruginosa ventilator associated pneumonia atrial, score:  
0.045310747  
ventilator associated pneumonia with increased, score: 0.04101607

confidence of prediction: 0.872254  
Y\_true: [ 2 4 8 18 26]  
Y\_pred: [ 2 4 11 18 20 26]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
type ii diabetes erectile dysfunction depression, score: 0.08158346  
daily metformin 500mg twice daily, score: 0.028476387  
hours metformin mg tabletsig, score: 0.023391536

confidence of prediction: 0.789323  
Y\_true: [ 2 4 8 18 26]  
Y\_pred: [ 2 4 11 18 20 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
branch block dyslipidemia type ii diabetes erectile dysfunction  
depression mgus monoclonal, score: 0.13514161

confidence of prediction: 0.986603  
Y\_true: [ 2 4 8 18 26]  
Y\_pred: [ 2 4 11 18 20 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.75167245  
diuresed toward the preoperative, score: 0.021208456  
cardiothoracic allergies paxil attending, score: 0.0027529995

confidence of prediction: 0.864818  
Y\_true: [ 2 4 8 18 26]  
Y\_pred: [ 2 4 11 18 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation which was managed, score: 0.3759188  
irregular murmur systolic ejection murmur abdomen, score:  
0.027399281  
amiodarone due to a, score: 0.0045032217

confidence of prediction: 0.686460  
Y\_true: [ 7 16 17 41 42]  
Y\_pred: [17 35 41 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
of metallic fixation devices, score: 0.16235097  
right cvl placed increased dilantin dosing, score: 0.09708989  
discontinued vanc ceftaz flagyl and started, score: 0.06245758

confidence of prediction: 0.563351  
Y\_true: [ 7 16 17 41 42]  
Y\_pred: [17 35 41 42]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
restarted tfs goal changed right a, score: 0.2583938  
with manipulation washout and closure right, score: 0.1258387  
r thigh oozing blood, score: 0.057594612

confidence of prediction: 0.674564  
Y\_true: [ 7 16 17 41 42]  
Y\_pred: [17 35 41 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated by rsi, score: 0.10774656  
normal constitutional intubated heent pupils mm, score: 0.077398576  
with manipulation washout and closure right, score: 0.0632715

confidence of prediction: 0.952461  
Y\_true: [ 4 20 26 30]  
Y\_pred: [ 4 20 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
statin unknown asa mg po, score: 0.001993539  
lobe tumor with air, score: 0.0019607558  
history copd htn hyperlipidemia shingles social history patient,  
score: 0.0017323059

confidence of prediction: 0.980164  
Y\_true: [ 4 20 26 30]

Y\_pred: [ 4 20 30]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
history copd htn hyperlipidemia shingles social history, score: 0.14217517  
lung disease elevated pulmonary, score: 0.023522891  
tumor with air fluid, score: 0.009535224  
  
confidence of prediction: 0.942709  
Y\_true: [ 4 20 26 30]  
Y\_pred: [ 4 20 30]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
medical history copd htn hyperlipidemia shingles social history patient denies, score: 0.121238485  
on admission combivent advair antihypertensive medication unknown, score: 0.00017220415  
  
confidence of prediction: 0.921111  
Y\_true: [ 4 18 20 27 32]  
Y\_pred: [ 4 18 20]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
aortic stenosis hyperlipidemia hypertension social history ms, score: 0.10583878  
aortic stenosis hyperlipidemia hypertension s p avr, score: 0.06813359  
incisions sternal healing well, score: 0.0019143167  
  
confidence of prediction: 0.986034  
Y\_true: [ 4 18 20 27 32]  
Y\_pred: [ 4 18 20]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7357032  
diuresed toward the preoperative, score: 0.020757882  
cardiothoracic allergies erythromycin base, score: 0.018663833  
  
confidence of prediction: 0.991520  
Y\_true: [ 4 18 20 27 32]  
Y\_pred: [ 4 18 20]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
stenosis hyperlipidemia hypertension social history ms, score: 0.06335625  
stenosis hyperlipidemia hypertension s p avr replacement porcine aortotomy discharge, score: 0.06335625  
avr replacement porcine aortotomy, score: 0.027256256  
  
confidence of prediction: 0.618117  
Y\_true: [ 2 16 17 27 35 48]  
Y\_pred: [ 2 17 21 27 35 36 37 48]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or

unspecified type, not stated as uncontrolled)  
ii diabetes mellitus hold glipizide monitor, score: 0.1473405  
type ii diabetes mellitus cad s p, score: 0.030287772  
dialysis torsemide and valsartan, score: 0.025516577

confidence of prediction: 0.649614  
Y\_true: [ 2 16 17 27 35 48]  
Y\_pred: [ 2 17 21 27 35 36 37 48]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line a line history of, score: 0.30062494  
cxr post picc placement impression left picc line terminating at the, score: 0.034936655  
given positive ua but, score: 0.021855013

confidence of prediction: 0.857884  
Y\_true: [ 2 16 17 27 35 48]  
Y\_pred: [ 2 17 21 27 35 36 37 48]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
h o chf ef p w falls, score: 0.0373703  
impression moderate chf kub portable ap, score: 0.020153565  
unless acute drop [UNK], score: 0.009239127

confidence of prediction: 0.951395  
Y\_true: [ 2 16 17 27 35 48]  
Y\_pred: [ 2 17 21 27 35 36 37 48]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
hyperkalemia likely arf on cri he, score: 0.19790989  
arf on cri baseline cr, score: 0.049016662  
was continued renal diet, score: 0.048035346

confidence of prediction: 0.881332  
Y\_true: [ 2 16 17 27 35 48]  
Y\_pred: [ 2 17 21 27 35 36 37 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg single chamber ppm ef p, score: 0.32745525  
s p cabg in, score: 0.32745525  
chf ef p w, score: 0.0006075496

confidence of prediction: 0.906308  
Y\_true: [28 31]  
Y\_pred: [31]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
aspiration pneumonia on ct scan, score: 0.10725567  
secondary aspiration pneumonia discharge condition, score: 0.09290498  
of aspiration pneumonia upon arrival to, score: 0.056372724

confidence of prediction: 0.641613  
Y\_true: [ 8 11 40 41 42 43 47]

Y\_pred: [11 33 37 40 42]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
110s depression continued venlafaxine osteoporosis continued, score:  
0.05991803  
oxygen osteoporosis depression social history per pcg, score:  
0.059646025  
depression osteoporosis discharge condition mental, score:  
0.010345776

confidence of prediction: 0.865041  
Y\_true: [ 8 11 40 41 42 43 47]  
Y\_pred: [11 33 37 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
she was intubated due to her, score: 0.032295715  
s p intubation and successful, score: 0.019210769  
failed an extubation attempt on, score: 0.00830943

confidence of prediction: 0.793906  
Y\_true: [ 8 11 40 41 42 43 47]  
Y\_pred: [11 33 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
s p intubation and successful, score: 0.01748499  
she was intubated due to her, score: 0.0077980855  
failed an extubation attempt on and was, score: 0.005839204

confidence of prediction: 0.803099  
Y\_true: [ 4 13 20 24]  
Y\_pred: [ 4 13 18 20 24 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
daily coenzyme q10 prescribed by, score: 0.158838  
patient hypertension hyperlipidemia non hodgkin, score: 0.05127457  
daily ezetimibe zetia prescribed, score: 0.032058857

confidence of prediction: 0.940690  
Y\_true: [ 4 13 20 24]  
Y\_pred: [ 4 13 18 20 24 30]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
off pump coronary artery bypass graft x3 left internal mammary  
artery to left, score: 0.086308315  
wires were discontinued without, score: 0.060886607  
artery and saphenous vein graft, score: 0.025280107

confidence of prediction: 0.817520  
Y\_true: [ 4 13 20 24]  
Y\_pred: [ 4 13 18 20 24 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
per patient hypertension hyperlipidemia non hodgkin, score:

0.20343733

of pvd hypertension hyperlipidemia and recent abnormal, score:

0.06472501

ezetimibe zetia prescribed by, score: 0.03635359

confidence of prediction: 0.993900

Y\_true: [ 4 13 20 24]

Y\_pred: [ 4 13 18 20 24 30]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

off pump coronary artery bypass graft, score: 0.30584183

coronary artery disease pmh pvd, score: 0.29726633

descending artery and saphenous, score: 0.021141458

confidence of prediction: 0.717676

Y\_true: [ 1 7 11 20 24]

Y\_pred: [ 1 2 7 11 20 28]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

wet hypothyroidism varicose veins osteomyelitis, score: 0.37730315

daily levothyroxine mcg daily lovastatin mg, score: 0.0731272

daily levothyroxine mcg tablet sig, score: 0.052220695

confidence of prediction: 0.539265

Y\_true: [ 1 7 11 20 24]

Y\_pred: [ 1 2 7 11 20 28]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

a scope egd revealed a, score: 0.19578347

a 1u prbc in the er and, score: 0.11841371

of packed red blood, score: 0.030682515

confidence of prediction: 0.723233

Y\_true: [ 1 7 11 20 24]

Y\_pred: [ 1 2 7 11 20 28]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

cont [UNK] depression cont venlafaxine code full, score: 0.15466991

mg daily triamterene hydrochlorothiazid, score: 0.01054356

defic depression obesity breast cancer [UNK], score: 0.009590673

confidence of prediction: 0.970010

Y\_true: [ 1 7 11 20 24]

Y\_pred: [ 1 2 7 11 20 28]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

ii neuropathy htn coronary artery dx in, score: 0.11011833

maxide and hctz this, score: 0.06622805

cad dm htn recurrent [UNK] osa, score: 0.05010698

confidence of prediction: 0.986372

Y\_true: [ 8 9 14 18 20 26 38]

Y\_pred: [18 26 27 49]

top three important windows for true positive code 18 (39.61:



Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.75012606  
diuresed toward the preoperative, score: 0.021164825  
cardiothoracic allergies penicillins attending, score: 0.004030154

confidence of prediction: 0.933772  
Y\_true: [ 8 9 14 18 20 26 38]  
Y\_pred: [18 26 27 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
coagulated with coumadin coreg, score: 0.23623435  
afib and hypotensive admitted, score: 0.08606149  
fibrillation just prior to, score: 0.0743894

confidence of prediction: 0.796388  
Y\_true: [ 6 19 21 23 27 35 36 40 48]  
Y\_pred: [ 2 4 19 21 24 25 36 48]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
started on cvvh his device, score: 0.17296539  
start on cvvh and a, score: 0.03372128  
thereafter despite multiple attempts, score: 0.024024788

confidence of prediction: 0.511813  
Y\_true: [ 6 19 21 23 27 35 36 40 48]  
Y\_pred: [ 2 4 19 21 24 25 36 48]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
x in hospital1 s, score: 0.035717018  
crt d [UNK] s p, score: 0.025085637  
neuropathy chronic renal insufficiency history of, score:  
0.009783158

confidence of prediction: 0.738902  
Y\_true: [ 6 19 21 23 27 35 36 40 48]  
Y\_pred: [ 2 4 19 21 24 25 36 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal insufficiency discharge condition expired, score:  
0.12568349  
x in hospital1 s, score: 0.014672462  
md crt d [UNK] s p, score: 0.0071396595

confidence of prediction: 0.788568  
Y\_true: [ 6 19 21 23 27 35 36 40 48]  
Y\_pred: [ 2 4 19 21 24 25 36 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg x in hospital1, score: 0.6985146  
sternotomy and cabg surgical, score: 0.14993952  
saphenous vein harvest right, score: 0.03662674

confidence of prediction: 0.791172

Y\_true: [ 3 7 10 20]

Y\_pred: [20 28]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of essential hypertension and etoh abuse, score: 0.20357007  
patient was scoped urgently in the, score: 0.084284894  
on discharge hypertension patient, score: 0.08166965

confidence of prediction: 0.935091

Y\_true: [ 5 20 35]

Y\_pred: [ 5 6 17 35]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
a [UNK] hyponatremia the patient responded well, score: 0.8954805  
his last bm was, score: 0.005306282  
acid base disorder with, score: 0.0031650483

confidence of prediction: 0.839414

Y\_true: [ 5 20 35]

Y\_pred: [ 5 6 17 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure secondary to, score: 0.57209724  
sodium elevated cr teh patient s, score: 0.038528167  
his last bm was, score: 0.007921576

confidence of prediction: 0.907011

Y\_true: [ 4 10 18 20 26]

Y\_pred: [ 4 18 20 26]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
insufficiency hypertension dyslipidemia discharge condition alert,  
score: 0.2792317  
history hypertension dyslipidemia social history lives with, score:  
0.12713547  
mg tid hydrochlorathiazide mg, score: 0.0071074395

confidence of prediction: 0.986513

Y\_true: [ 4 10 18 20 26]

Y\_pred: [ 4 18 20 26]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without complication, score: 0.7692722  
cardiothoracic allergies patient recorded, score: 0.0034900436  
washing incisions gently with mild soap, score: 0.0022987325

confidence of prediction: 0.997940

Y\_true: [ 4 10 18 20 26]

Y\_pred: [ 4 18 20 26]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
aortic insufficiency hypertension dyslipidemia discharge condition  
alert, score: 0.27601272  
medical history hypertension dyslipidemia social history lives,

score: 0.21036999  
amiodarone mg tablet sig, score: 0.009080958

confidence of prediction: 0.936245  
Y\_true: [ 4 10 18 20 26]  
Y\_pred: [ 4 18 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation and junctional rhythm, score: 0.034119673  
atrial fibrillation tablets twice daily, score: 0.010257317  
urges to smoke for, score: 0.010055244

confidence of prediction: 0.800974  
Y\_true: [20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of her ibs but, score: 0.0454725  
bowel syndrome hypertension b12 deficiency social history, score:  
0.007464224  
initiation of metoprolol she is, score: 0.0034691049

confidence of prediction: 0.887749  
Y\_true: [20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
of dementia gerd who presents from osh, score: 0.06145698  
medical history gerd alzheimers irritable bowel syndrome, score:  
0.03475725  
converses and arousable skin, score: 0.003712793

confidence of prediction: 0.715012  
Y\_true: [ 1 49]  
Y\_pred: [ 1 38 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
of hypothyroidism continue thyroxine anxiety continue, score:  
0.42687166  
medications levothyroxine sodium mcg po daily, score: 0.10003355  
patient levothyroxine sodium mcg po daily, score: 0.03666011

confidence of prediction: 0.570986  
Y\_true: [ 1 49]  
Y\_pred: [ 1 38 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
increase her warfarin dose, score: 0.2347519  
on chronic coumadin and svt s, score: 0.21397164  
was stopped coumadin to, score: 0.20519641

confidence of prediction: 0.790373  
Y\_true: [ 7 17 18 25 27 33 40 43 48]  
Y\_pred: [13 17 18 24 25 27]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
[UNK] annuloplasty ring model serial, score: 0.08923228  
following days picc was placed for access, score: 0.05330844  
norepi and milrinone severe, score: 0.03920004

confidence of prediction: 0.986308  
Y\_true: [ 7 17 18 25 27 33 40 43 48]  
Y\_pred: [13 17 18 24 25 27]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7439274  
diuresed toward the preoperative, score: 0.02098993  
cardiothoracic allergies patient recorded, score: 0.003375059

confidence of prediction: 0.797419  
Y\_true: [ 7 17 18 25 27 33 40 43 48]  
Y\_pred: [13 17 18 24 25 27]  
top three important windows for true positive code 25 (424.0: Mitral valve disorders)  
mitral valve repair with, score: 0.18503726  
severe mitral regurgitation severe cardiomyopathy dyslipidemia, score: 0.09549387  
severe mitral regurgitation is seen, score: 0.08830004

confidence of prediction: 0.955036  
Y\_true: [ 7 17 18 25 27 33 40 43 48]  
Y\_pred: [13 17 18 24 25 27]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
systolic heart failure s p, score: 0.10897847  
cardiomyopathy congestive heart failure and, score: 0.086826235  
congestive heart failure severe mitral regurgitation severe cardiomyopathy dyslipidemia, score: 0.06414743

confidence of prediction: 0.918597  
Y\_true: [12 16 17 28 41]  
Y\_pred: [12 41 43]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
bronchoscopy and bal were performed and patient, score: 0.14330101  
positive bal cultures on the patient, score: 0.12629873  
collar for continuous hours, score: 0.027144542

confidence of prediction: 0.902100  
Y\_true: [12 16 17 28 41]  
Y\_pred: [12 41 43]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
fiber tube feeds on and was, score: 0.18905227  
trach and peg history, score: 0.042764906  
trach and peg discharge, score: 0.042764906

confidence of prediction: 0.965018

Y\_true: [20 26 27 32]  
Y\_pred: [17 20 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
secondary diagnoses htn diverticulitis lactose, score: 0.24109796  
medical history hypertension diverticulitis lactose, score:  
0.1446694  
atenolol hctz qday prednisone 10mg, score: 0.13642249

confidence of prediction: 0.751019  
Y\_true: [20 26 27 32]  
Y\_pred: [17 20 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
rapid atrial fibrillation unresponsive to lopressor she, score:  
0.015039682  
ejection fraction diastolic heart, score: 0.0045260587  
chronic right sided rib, score: 0.0039836518

confidence of prediction: 0.836834  
Y\_true: [20 26 27 32]  
Y\_pred: [17 20 26 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
acutely from chf her echo from demonstrated, score: 0.07414365  
a poor historian but, score: 0.016677916  
scan but appeared to, score: 0.0097945025

confidence of prediction: 0.910500  
Y\_true: [ 7 12 20 26 28 32 41]  
Y\_pred: [12 26 28 41]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
bronchoscopy with bronchoalveolar lavage he transfer to, score:  
0.095344156  
low s bal pmn, score: 0.03098319  
sennosides docusate sodium mg tablet, score: 0.004512699

confidence of prediction: 0.791856  
Y\_true: [ 7 12 20 26 28 32 41]  
Y\_pred: [12 26 28 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with hypotension amiodarone mg bolus converted  
to, score: 0.3517645  
fat pmns gpcs from, score: 0.04755222  
amiodarone load of g, score: 0.018278876

confidence of prediction: 0.888933  
Y\_true: [ 7 12 20 26 28 32 41]  
Y\_pred: [12 26 28 41]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.6357305

of lung esophagogastroduodenoscopy and bronchoscopy with  
bronchoalveolar, score: 0.033404358  
and esophagogastroduodenoscopy he was extubated in, score:  
0.023518752

confidence of prediction: 0.943979  
Y\_true: [ 7 12 20 26 28 32 41]  
Y\_pred: [12 26 28 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tolerated tube feeds replete full strength, score: 0.04839139  
log feed tube site leave, score: 0.011746089  
low s bal pmn, score: 0.0066736853

confidence of prediction: 0.644344  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
and renal hypoperfusion as above there, score: 0.24022283  
despite the levophed requiring, score: 0.096489586  
progressing to sepsis and thus on the, score: 0.04429513

confidence of prediction: 0.945574  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
vein arterial line placement, score: 0.04480517  
right subclavian cvl was placed and he, score: 0.02936793  
and thus on the, score: 0.022956971

confidence of prediction: 0.710702  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation this was a, score: 0.06737632  
a fib and lung ca, score: 0.060069706  
amiodarone daily until metoprolol, score: 0.023876345

confidence of prediction: 0.697250  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
was made cmo per above, score: 0.055123884  
he was intubated in the late, score: 0.047834426  
acute renal failure his, score: 0.04160914

confidence of prediction: 0.722870  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 35 (584.9: Acute

kidney failure, unspecified)  
hypoperfusion acute renal failure his creatinine rose, score:  
0.06251617  
death the arf was likely, score: 0.05631222  
q4 albuterol q2 xopenex, score: 0.03180938

confidence of prediction: 0.783388  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
day once intubated he maintained, score: 0.11391581  
he was intubated in the, score: 0.06882944  
rebreather hypoxemia respiratory distress, score: 0.0098017845

confidence of prediction: 0.690620  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated in the, score: 0.038815424  
day once intubated he maintained, score: 0.03188474  
a sputum culture which had, score: 0.03130484

confidence of prediction: 0.832168  
Y\_true: [ 0 12 16 17 26 29 30 33 35 40 41 42 46]  
Y\_pred: [ 0 17 26 27 33 35 40 42 43 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
despite the levophed requiring, score: 0.10226162  
and renal hypoperfusion as above there, score: 0.04972068  
on three pressors with, score: 0.039996747

confidence of prediction: 0.626359  
Y\_true: [ 6 8 20 29]  
Y\_pred: [ 6 8 29]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
ll rml sating speaking full sentences, score: 0.14440492  
she was aggressively hydrated, score: 0.10696964  
returning by car from, score: 0.021527901

confidence of prediction: 0.574811  
Y\_true: [ 6 8 20 29]  
Y\_pred: [ 6 8 29]  
top three important windows for true positive code 8 (285.9: Anemia,  
unspecified)  
discharge anemia normocytic anemia with no previous, score:  
0.1898072  
on anemia outstanding labs, score: 0.025863247  
ll rml sating speaking, score: 0.025368389

confidence of prediction: 0.866242

Y\_true: [ 6 8 20 29]

Y\_pred: [ 6 8 29]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

with pneumonia pneumonia the fevers rigors, score: 0.52640295

have bilateral pneumonia you were, score: 0.013103861

the pneumonia followup instructions, score: 0.012755311

confidence of prediction: 0.947567

Y\_true: [ 2 21 27 35 36]

Y\_pred: [27 41]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

pancreatic leak chf iddm anxiety discharge condition, score:

0.008470566

cholangitis unchanged appearance of the, score: 0.0026664499

anxiety acute renal failure chf c diff colitis, score: 0.0016383306

confidence of prediction: 0.986049

Y\_true: [26 27]

Y\_pred: [14 24 26 27 38]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation who was admitted, score: 0.26040792

atrial fibrillation with lbbb st, score: 0.22131431

afib dx d s, score: 0.15917902

confidence of prediction: 0.957821

Y\_true: [26 27]

Y\_pred: [14 24 26 27 38]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

systolic heart failure ef the pt, score: 0.28976777

cardiomyopathy with ef chronic, score: 0.021938404

amiodarone cozaar coreg given, score: 0.014595659

confidence of prediction: 0.716029

Y\_true: [ 4 11 34 47]

Y\_pred: [ 4 8 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

age gerd hld possible sleep apnea depression, score: 0.53821015

p traumatic amputation social history the, score: 0.011534829

ezetimibe mg tablet sig, score: 0.011368103

confidence of prediction: 0.854056

Y\_true: [ 4 11 34 47]

Y\_pred: [ 4 8 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

at age gerd hld possible sleep apnea, score: 0.027720714

spreads slightly to the, score: 0.019090299

kidney stones thought to be, score: 0.009957416



confidence of prediction: 0.508900

Y\_true: [ 3 20]

Y\_pred: [ 3 20]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)

medical history hypercholesterolemia diet control mild hypertension

social history assistant manager, score: 0.4189073

which showed xanthochromia he, score: 0.0015802627

to sequela of previous, score: 0.001362308

confidence of prediction: 0.990855

Y\_true: [ 3 20]

Y\_pred: [ 3 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

on the gradient echo, score: 0.0074122343

discoloration at right ac, score: 0.0049109664

planes was repeated following the, score: 0.0025514693

confidence of prediction: 0.777258

Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]

Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

noninsulin dependent diabetes mellitus gout h o, score: 0.12880507

noninsulin dependent diabetes mellitus gout h o, score: 0.05755088

metformin mg oral tablet, score: 0.046430543

confidence of prediction: 0.991680

Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]

Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafts x4 lima lad svg dg svg, score: 0.51059455

quadruple bypass grafting was performed, score: 0.015702374

coronary artery bypass grafts chronic, score: 0.01248214

confidence of prediction: 0.772131

Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]

Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

catheterization past medical history, score: 0.043838985

balloon pump was removed due, score: 0.016056515

iabp left heart catheterization coronary angiogram history of, score: 0.015670085

confidence of prediction: 0.978239

Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]

Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

bypass grafting was performed an, score: 0.022217903  
cardiothoracic allergies penicillins attending, score: 0.016049465  
bypass grafts x4 lima lad, score: 0.013385119

confidence of prediction: 0.814323  
Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]  
Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension glaucoma social history tobacco, score: 0.34063035  
hypertension glaucoma discharge condition, score: 0.056607604  
noninsulin dependent diabetes mellitus, score: 0.02956774

confidence of prediction: 0.998856  
Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]  
Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafts x4 lima lad, score: 0.58584434  
coronary artery disease s p coronary artery bypass grafts, score:  
0.124027036  
coronary artery disease major, score: 0.032847725

confidence of prediction: 0.976463  
Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]  
Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation on postoperative day, score: 0.1904772  
afib levofloxacin mg tablet sig, score: 0.14007188  
atrial fibrillation and recently diagnosed, score: 0.07841772

confidence of prediction: 0.884001  
Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]  
Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure noninsulin dependent diabetes, score:  
0.23497096  
severe systolic dysfunction with an ef, score: 0.007115417  
left heart catheterization coronary angiogram history, score:  
0.0067737717

confidence of prediction: 0.882332  
Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]  
Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a urinary tract infection given his, score: 0.021257518  
eye drops instill drop left eye, score: 0.0070452443  
potassium chloride meq one, score: 0.006082884

confidence of prediction: 0.939275  
Y\_true: [ 2 9 13 14 17 18 20 24 26 27 37 38 39 49]

Y\_pred: [ 2 13 14 15 18 20 24 26 27 37 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
catheterization past medical history, score: 0.07535765  
iabp left heart catheterization coronary angiogram history of,  
score: 0.022635989  
balloon pump was removed due, score: 0.015301005

confidence of prediction: 0.979309  
Y\_true: [15 18 25 38]  
Y\_pred: [18 25]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed toward the preoperative, score: 0.08128238  
conclusions pre bypass the, score: 0.010078581  
washing incisions gently with mild soap, score: 0.008608438

confidence of prediction: 0.867323  
Y\_true: [15 18 25 38]  
Y\_pred: [18 25]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve regurgitation with anterior, score: 0.59064114  
mitral valve regurgitation who developed, score: 0.06155062  
diagnosis mitral regurgitation bph raynauds, score: 0.027308598

confidence of prediction: 0.621882  
Y\_true: [ 3 10 13 18 20 24]  
Y\_pred: [ 3 10 11 13 18 20 24]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
x hypertension hypercholesterolemia childhood concussions childhood,  
score: 0.29328066  
history hypertension hypercholesterolemia childhood concussions  
childhood, score: 0.24858548  
x full rom x chest, score: 0.009079361

confidence of prediction: 0.790096  
Y\_true: [ 3 10 13 18 20 24]  
Y\_pred: [ 3 10 11 13 18 20 24]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
driver tobacco smokes ppd etoh bottle of wine, score: 0.046532884  
history race hispanic last, score: 0.00062301854  
x hypertension hypercholesterolemia childhood concussions childhood,  
score: 0.00056586164

confidence of prediction: 0.979091  
Y\_true: [ 3 10 13 18 20 24]  
Y\_pred: [ 3 10 11 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypas graft x lima [UNK], score: 0.46353585  
coronary artery bypass graft x on, score: 0.14022188

coronary artery bypass graft x hypertension, score: 0.022406846

confidence of prediction: 0.982428

Y\_true: [ 3 10 13 18 20 24]

Y\_pred: [ 3 10 11 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed towards his pre, score: 0.2359922

cardiothoracic allergies no known, score: 0.010849824

pacing wires were removed per, score: 0.006331411

confidence of prediction: 0.973244

Y\_true: [ 3 10 13 18 20 24]

Y\_pred: [ 3 10 11 13 18 20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hypercholesterolemia childhood

concussions childhood, score: 0.37448812

hydrochlorothiazide mg tablet sig, score: 0.16263421

on admission hctz mg, score: 0.028151209

confidence of prediction: 0.999917

Y\_true: [ 3 10 13 18 20 24]

Y\_pred: [ 3 10 11 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypas graft x lima, score: 0.78160274

coronary artery disease s p coronary artery bypass graft, score:

0.07848284

coronary artery bypass graft, score: 0.015832756

confidence of prediction: 0.826870

Y\_true: [ 4 13 18 20 22 24 34 39]

Y\_pred: [ 3 4 13 18 20 22 24 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history hypertension dyslipidemia h o palpitations with, score:

0.13768373

episode hypertension dyslipidemia hiatal hernia gerd colonic, score:

0.096946776

discharge medications simvastatin mg tablet sig, score: 0.005031197

confidence of prediction: 0.990864

Y\_true: [ 4 13 18 20 22 24 34 39]

Y\_pred: [ 3 4 13 18 20 22 24 34]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass grafting x3 with the, score: 0.5191923

coronary artery bypass grafting times three lima to, score:

0.029324671

mammary artery to the, score: 0.0152162695

confidence of prediction: 0.984757

Y\_true: [ 4 13 18 20 22 24 34 39]

Y\_pred: [ 3 4 13 18 20 22 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed and, score: 0.7034802  
lotions powders or ointments to, score: 0.08944455  
incisions no baths or, score: 0.07779864

confidence of prediction: 0.993911  
Y\_true: [ 4 13 18 20 22 24 34 39]  
Y\_pred: [ 3 4 13 18 20 22 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension dyslipidemia hiatal hernia gerd, score: 0.20000297  
medical history hypertension dyslipidemia h o, score: 0.13784531  
history of hypertension hypercholesterolemia palpitations and  
coronary, score: 0.065211944

confidence of prediction: 0.755638  
Y\_true: [ 4 13 18 20 22 24 34 39]  
Y\_pred: [ 3 4 13 18 20 22 24 34]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
non st elevation myocardial infarction vasovagal episode, score:  
0.021820981  
for myocardial infarction based, score: 0.014731804  
left circumflex coronary arteries ruled in, score: 0.006988093

confidence of prediction: 0.998949  
Y\_true: [ 4 13 18 20 22 24 34 39]  
Y\_pred: [ 3 4 13 18 20 22 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.6022565  
coronary artery disease s p cabg non st, score: 0.12750158  
coronary artery disease who, score: 0.030346874

confidence of prediction: 0.951827  
Y\_true: [ 4 13 18 20 22 24 34 39]  
Y\_pred: [ 3 4 13 18 20 22 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hiatal hernia gerd colonic polyps s p, score: 0.08389473  
hiatal hernia gerd colonic polyps s p, score: 0.020826131  
listing of medications conclusions pre, score: 0.0077907294

confidence of prediction: 0.593167  
Y\_true: [ 2 12 16 17 26 31 35 37 40 42]  
Y\_pred: [17 26 29 37]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
on picc line care heparin, score: 0.17358425  
day picc line care heparin, score: 0.068020314  
illness 73m with history, score: 0.026989797

confidence of prediction: 0.982162  
Y\_true: [ 2 12 16 17 26 31 35 37 40 42]  
Y\_pred: [17 26 29 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib lopressor mg iv given, score: 0.4105787  
afib hospital hospital acquired pneumonia, score: 0.2912461  
afib has not been on, score: 0.24801086

confidence of prediction: 0.881254  
Y\_true: [ 2 12 16 17 26 31 35 37 40 42]  
Y\_pred: [17 26 29 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
lumen pepcid mg tablet sig, score: 0.032928344  
vac dressing pt put, score: 0.011861882  
hospital acquired pneumonia vesicular rectal fistula, score:  
0.011013579

confidence of prediction: 0.537995  
Y\_true: [10 17 20 23 40 42]  
Y\_pred: [17 20 23 24 40 42 44]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
morning hd6 pod6 vss, score: 0.12765945  
line and central line were d c, score: 0.058493987  
[UNK] and required re, score: 0.05007884

confidence of prediction: 0.783218  
Y\_true: [10 17 20 23 40 42]  
Y\_pred: [17 20 23 24 40 42 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn cad h o mi, score: 0.17115739  
infrarenal fusiform aaa extending to, score: 0.13981362  
medical history htn cad h o mi, score: 0.12081019

confidence of prediction: 0.622062  
Y\_true: [10 17 20 23 40 42]  
Y\_pred: [17 20 23 24 40 42 44]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
history htn cad h o mi carotid, score: 0.0011483525  
of htn cad h o mi carotid, score: 0.0007278387  
to d c to, score: 0.00038396602

confidence of prediction: 0.865032  
Y\_true: [10 17 20 23 40 42]  
Y\_pred: [17 20 23 24 40 42 44]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
required re intubation and steroids, score: 0.08768277  
and intubated and was, score: 0.0191027  
control and pre op, score: 0.009658437

confidence of prediction: 0.735540  
Y\_true: [10 17 20 23 40 42]  
Y\_pred: [17 20 23 24 40 42 44]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
required re intubation and steroids patient, score: 0.063328356  
and intubated and was, score: 0.02626206  
on sips hd3 pod2 no, score: 0.01568073

confidence of prediction: 0.875897  
Y\_true: [ 4 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pda hypertension hyperlipidemia cervical radiculopathy benign  
essential, score: 0.16571212  
cath hypertension hyperlipidemia cervical radiculopathy benign ess  
tremor, score: 0.056527175  
cabg in 60s physical, score: 0.018788986

confidence of prediction: 0.970527  
Y\_true: [ 4 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34 40 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
lotions powders or ointments to, score: 0.31414202  
incisions no baths or, score: 0.27323994  
cardiothoracic allergies lisinopril attending, score: 0.038098704

confidence of prediction: 0.993268  
Y\_true: [ 4 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ramus pda hypertension hyperlipidemia cervical radiculopathy benign,  
score: 0.3478278  
lipitor sertraline atenolol lithium mirapex isosorbide asa, score:  
0.07575415  
disease cath hypertension hyperlipidemia cervical radiculopathy  
benign, score: 0.04429591

confidence of prediction: 0.987153  
Y\_true: [ 4 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34 40 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s, score: 0.14304994  
coronary artery disease since, score: 0.13617495  
coronary artery disease cath, score: 0.13617495

confidence of prediction: 0.814757  
Y\_true: [ 4 18 20 24 34]

Y\_pred: [ 4 13 18 20 24 34 40 42]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
dementia gastroesophageal reflux disease bipolar d o, score: 0.03155352  
gastroesophageal reflux disease s p appendectomy, score: 0.022530982  
[UNK] machine echocardiographic measurements, score: 0.0019980464

confidence of prediction: 0.732401  
Y\_true: [10 16 17 28 31 33 37 40 41 43]  
Y\_pred: [17 26 30 31 33 40 41 42 43 45]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
central line placed on right, score: 0.1365356  
given picc line for nutrition and, score: 0.07027229  
subclavian line placement that required emergent, score: 0.05585229

confidence of prediction: 0.638749  
Y\_true: [10 16 17 28 31 33 37 40 41 43]  
Y\_pred: [17 26 30 31 33 40 41 42 43 45]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
possible aspiration pna with recent left, score: 0.1927773  
recent aspiration pneumonia would be very, score: 0.07855329  
until made cmo code, score: 0.025605347

confidence of prediction: 0.917810  
Y\_true: [10 16 17 28 31 33 37 40 41 43]  
Y\_pred: [17 26 30 31 33 40 41 42 43 45]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
her respiratory failure multifocal atrial, score: 0.081117675  
acute respiratory failure requiring intubation, score: 0.05080548  
patient required reintubation arterial line, score: 0.03195678

confidence of prediction: 0.897571  
Y\_true: [10 16 17 28 31 33 37 40 41 43]  
Y\_pred: [17 26 30 31 33 40 41 42 43 45]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
patient required reintubation arterial line placed, score: 0.061142422  
patient re intubated on patient, score: 0.03316618  
failed extubations hypoxic respiratory failure, score: 0.01217729

confidence of prediction: 0.889960  
Y\_true: [10 16 17 28 31 33 37 40 41 43]  
Y\_pred: [17 26 30 31 33 40 41 42 43 45]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
feeding tube she was, score: 0.09301833  
feeding gastrostomy tube inserted, score: 0.082403384  
a feeding gastrostomy or, score: 0.062915884



confidence of prediction: 0.727473  
Y\_true: [10 16 17 28 31 33 37 40 41 43]  
Y\_pred: [17 26 30 31 33 40 41 42 43 45]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
reintubation arterial line placed on, score: 0.045821954  
a feeding gastrotomy tube inserted, score: 0.039498165  
a feeding gastrostomy or, score: 0.027438888

confidence of prediction: 0.833057  
Y\_true: [ 4 7 21 28]  
Y\_pred: [ 4 7 20 28]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pmh htn hld dm pvd p, score: 0.21362308  
pmh htn hld dm pvd p w, score: 0.21362308  
simvastatin mg tablet daily, score: 0.031805974

confidence of prediction: 0.547396  
Y\_true: [ 4 7 21 28]  
Y\_pred: [ 4 7 20 28]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
noticed bright red blood, score: 0.20615174  
after his endoscopy per, score: 0.18691286  
history of present illness, score: 0.10278168

confidence of prediction: 0.771971  
Y\_true: [ 4 7 21 28]  
Y\_pred: [ 4 7 20 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.68930167  
upper endoscopy revealed likely doctor, score: 0.06827206  
after his endoscopy per, score: 0.041824818

confidence of prediction: 0.988771  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery reverse saphenous vein single, score: 0.16888838  
coronary artery reverse saphenous vein graft, score: 0.14807017  
coronary artery reverse saphenous vein single, score: 0.10271752

confidence of prediction: 0.932025  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders on, score: 0.6977933  
bypass grafting x4 left internal, score: 0.0783677  
grafting and maze procedure, score: 0.040791083

confidence of prediction: 0.834132  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
qd digoxin tues and, score: 0.1255283  
quinapril qd zetia qd vitamin, score: 0.087203994  
atrial fibrillation hypertension dyslipidemia prior pacemaker for,  
score: 0.0833051

confidence of prediction: 0.996339  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery reverse saphenous, score: 0.12735003  
coronary artery reverse saphenous, score: 0.12329017  
coronary artery disease and, score: 0.11932902

confidence of prediction: 0.923290  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation and was restarted, score: 0.17480068  
atrial fibrillation history disp tablet, score: 0.058100726  
atrial fibrillation hypertension dyslipidemia prior, score:  
0.031940352

confidence of prediction: 0.923493  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic congestive heart failure coronary artery disease, score:  
0.30320874  
moderate mitral regurgitation is, score: 0.0046395026  
mitral regurgitation and mild, score: 0.0037580223

confidence of prediction: 0.768419  
Y\_true: [13 14 17 18 20 23 24 26 27 38 49]  
Y\_pred: [ 4 13 18 20 24 26 27 38 44]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization aortic valve, score: 0.39522347  
cath coronary angiography of this, score: 0.1000048  
sdu on postoperative day, score: 0.048870582

confidence of prediction: 0.771031  
Y\_true: [ 4 10 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history htn hyperlipidemia long term tobacco, score: 0.18559007  
o htn hyperlipidemia but denies cad and, score: 0.08975364  
fat low cholesterol to maintain your, score: 0.01599873

confidence of prediction: 0.974036

Y\_true: [ 4 10 20]

Y\_pred: [ 4 20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
coreg qd zocor qd valium, score: 0.22502218  
wish assistance on pod, score: 0.026211223  
hyperlipidemia but denies cad and dm past medical history htn  
hyperlipidemia long term, score: 0.02410499

confidence of prediction: 0.850838

Y\_true: [ 1 7 15 18 27 30 38 39]

Y\_pred: [ 1 18 30]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
s levothyroxine mcg tablet sig, score: 0.0024769243  
syndrome osteoarthritis hypothyroidism skin ca psoriasis s, score:  
0.0014262031

confidence of prediction: 0.966976

Y\_true: [ 1 7 15 18 27 30 38 39]

Y\_pred: [ 1 18 30]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies codeine attending, score: 0.16536942  
descending thoracic aorta the, score: 0.005159425  
gently diuresed towards her preoperative, score: 0.0035374637

confidence of prediction: 0.673136

Y\_true: [ 1 7 15 18 27 30 38 39]

Y\_pred: [ 1 18 30]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
p bilat cataract surgs, score: 0.0012153754  
disease chronic obstructive pulmonary disease stage i, score:  
0.000778091

confidence of prediction: 0.550676

Y\_true: [ 0 6 17 29 33 35 46]

Y\_pred: [ 0 6 30 33 35 44 46]

top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic shock coagulopathy labs on, score: 0.07151303  
status deteriorated goals of care, score: 0.035891924  
and sepsis hyperkalemia related to last, score: 0.027434407

confidence of prediction: 0.725226

Y\_true: [ 0 6 17 29 33 35 46]

Y\_pred: [ 0 6 30 33 35 44 46]

top three important windows for true positive code 6 (276.2:

Acidosis)

metabolic acidosis abg secondary to hypovolemic, score: 0.12772249

hr100 [UNK] rr29 on, score: 0.046434272

a dirty femoral catheter, score: 0.02205593

confidence of prediction: 0.764871

Y\_true: [ 0 6 17 29 33 35 46]

Y\_pred: [ 0 6 30 33 35 44 46]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

hypoxemic respiratory failure resulting in, score: 0.22708298

hypoxemic respiratory failure patient was, score: 0.11986966

deteriorated the family iniitally, score: 0.0111313965

confidence of prediction: 0.638825

Y\_true: [ 0 6 17 29 33 35 46]

Y\_pred: [ 0 6 30 33 35 44 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

carboplatin etoposide c2d1 carboplatin, score: 0.061361898

after decompensation patient was, score: 0.044383693

morphine acute kidney injury on admission cr up from, score: 0.036652498

confidence of prediction: 0.819200

Y\_true: [ 0 6 17 29 33 35 46]

Y\_pred: [ 0 6 30 33 35 44 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

septic shock coagulopathy labs on, score: 0.06884843

and sepsis hyperkalemia related to last, score: 0.03178632

status deteriorated goals of care, score: 0.030899648

confidence of prediction: 0.864840

Y\_true: [ 4 20 23 24 26 27 37]

Y\_pred: [ 4 10 20 23 24 26 27 34 37]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

zocor spiriva coumadin discharge, score: 0.01475796

w stable coumadin dose, score: 0.014275485

neuropathy deafness hypertension hyperlipidemia urinary incontinence

social history, score: 0.013818228

confidence of prediction: 0.976377

Y\_true: [ 4 20 23 24 26 27 37]

Y\_pred: [ 4 10 20 23 24 26 27 34 37]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

copd gerd hyperparathyroidism chol psh s p, score: 0.12591383

neuropathy deafness hypertension hyperlipidemia urinary incontinence

social, score: 0.064426504

zocor spiriva coumadin discharge, score: 0.029922625

confidence of prediction: 0.694024

Y\_true: [ 4 20 23 24 26 27 37]  
Y\_pred: [ 4 10 20 23 24 26 27 34 37]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
medical history cad s p mi in lcx and lad stent wandering, score: 0.0053648786  
be managed medically no, score: 0.0020539602  
psh s p ptca, score: 0.0007769139

confidence of prediction: 0.804485  
Y\_true: [ 4 20 23 24 26 27 37]  
Y\_pred: [ 4 10 20 23 24 26 27 34 37]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery) and lad stent wandering atrial pacemaker, score: 0.13782242  
history cad s p mi in lcx, score: 0.03427295  
psh s p ptca, score: 0.017122222

confidence of prediction: 0.510820  
Y\_true: [ 4 20 23 24 26 27 37]  
Y\_pred: [ 4 10 20 23 24 26 27 34 37]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
chf afib copd gerd hyperparathyroidism, score: 0.07237344  
amiodarone mg tablet sig, score: 0.02249375  
zocor spiriva coumadin discharge medications, score: 0.012631689

confidence of prediction: 0.597272  
Y\_true: [ 4 20 23 24 26 27 37]  
Y\_pred: [ 4 10 20 23 24 26 27 34 37]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
history of chf afib copd gerd hyperparathyroidism, score: 0.08482101  
sublingual every minutes x as, score: 0.021527542  
that will increase your, score: 0.013766269

confidence of prediction: 0.927296  
Y\_true: [ 4 20 23 24 26 27 37]  
Y\_pred: [ 4 10 20 23 24 26 27 34 37]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
kcl zocor spiriva coumadin discharge, score: 0.023989312  
mg tablet chewable sig, score: 0.010381554  
days mg warfarin mg, score: 0.009598036

confidence of prediction: 0.707008  
Y\_true: [ 3 17 20 39]  
Y\_pred: [17 24 41]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
had picc line placed for longterm, score: 0.12541312  
po q8h every hours, score: 0.034451835  
scan normal tracer distribution, score: 0.033065084

confidence of prediction: 0.857343  
Y\_true: [ 4 20 32 47]  
Y\_pred: [ 2 20 35 40]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh of htn pvd and dm s, score: 0.18332522  
chronic cholecystitis and cholelithiasis, score: 0.054342344  
type ii hypertension hyperlipidemia necrotizing pancreatitis with,  
score: 0.047565065

confidence of prediction: 0.679311  
Y\_true: [ 3 5 20]  
Y\_pred: [ 3 5 20]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
htn and hypercholesterolemia presents after the, score: 0.15390053  
medical history hypercholesterolemia htn social history lawyer,  
score: 0.07248542  
a pica aneurysm medications, score: 0.009305896

confidence of prediction: 0.552261  
Y\_true: [ 3 5 20]  
Y\_pred: [ 3 5 20]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
hr repeat tcd s on, score: 0.8848905  
vert tcd s impression, score: 0.022477856  
mild vasospasm in the, score: 0.014286523

confidence of prediction: 0.971110  
Y\_true: [ 3 5 20]  
Y\_pred: [ 3 5 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history hypercholesterolemia htn social history lawyer drink, score:  
0.07088541  
hctz lorazepam nortriptyline percocet, score: 0.06973649  
htn and hypercholesterolemia presents after, score: 0.05170544

confidence of prediction: 0.949518  
Y\_true: [ 2 20 24 40 42]  
Y\_pred: [ 2 7 20 40 41 42 43]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily metformin 500mg po daily, score: 0.006439308  
htn and niddm who had a mechanical, score: 0.004560948  
cad htn niddm b l cataract surgery, score: 0.0039821267

confidence of prediction: 0.804125  
Y\_true: [ 2 20 24 40 42]  
Y\_pred: [ 2 7 20 40 41 42 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

residue with solids brief, score: 0.18628782  
pmh cad htn niddm b l cataract, score: 0.0776991  
pmh cad htn and niddm who had, score: 0.0754629

confidence of prediction: 0.798048  
Y\_true: [ 2 20 24 40 42]  
Y\_pred: [ 2 7 20 40 41 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
she was intubated easily, score: 0.10057363  
she was intubated in the, score: 0.0826867  
was intubated is unclear, score: 0.033250317

confidence of prediction: 0.627643  
Y\_true: [ 2 20 24 40 42]  
Y\_pred: [ 2 7 20 40 41 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
her intubation and sedation she was, score: 0.2138298  
she was intubated easily, score: 0.07953432  
her intubation she received etomidate, score: 0.045730118

confidence of prediction: 0.544677  
Y\_true: [17]  
Y\_pred: [ 9 17]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
and initially continued to, score: 0.24979284  
history of present illness, score: 0.11704942  
erythematous 2mm maculopapular rough rash, score: 0.08673032

confidence of prediction: 0.625875  
Y\_true: [ 2 13 17 18 20 24 25 30]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hyperlipidemia diabetes mellitus coronary artery disease, score:  
0.01622387  
dependent diabetes mellitus s p rca, score: 0.01229355  
his 1st marriage occupation retired tobacco quit, score:  
0.0065702507

confidence of prediction: 0.999397  
Y\_true: [ 2 13 17 18 20 24 25 30]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
procedure cabg x lima to lad svg, score: 0.00041483104  
washing incisions gently with mild, score: 0.00034913077  
ointments to incisions each, score: 0.00027275606

confidence of prediction: 0.983586

Y\_true: [ 2 13 17 18 20 24 25 30]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

diuresed toward his preop, score: 0.11751456

cabg x lima to, score: 0.10162503

cardiothoracic allergies cephalosporins attending, score:  
0.027631598

confidence of prediction: 0.874938

Y\_true: [ 2 13 17 18 20 24 25 30]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

kidney stones prostate ca, score: 0.14940512

medical history hypertension hyperlipidemia diabetes mellitus

coronary, score: 0.0734511

p cabg double valve, score: 0.06830305

confidence of prediction: 0.999541

Y\_true: [ 2 13 17 18 20 24 25 30]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

cabg x lima to, score: 0.7167818

coronary artery disease s, score: 0.035780318

s p angioplasty and, score: 0.035393324

confidence of prediction: 0.628843

Y\_true: [ 4 7 9 13 18 24 25 27]

Y\_pred: [ 9 13 18 24 25 26]

top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)

developed a thrombocytopenia hit screen, score: 0.46478325

please wear bra to, score: 0.10090662

history coronray artery disease, score: 0.035806432

confidence of prediction: 0.989478

Y\_true: [ 4 7 9 13 18 24 25 27]

Y\_pred: [ 9 13 18 24 25 26]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass x lima lad mitral valve, score: 0.58226013

cabg x and mitral, score: 0.010638695

effusion post bypass the, score: 0.009322352

confidence of prediction: 0.985685

Y\_true: [ 4 7 9 13 18 24 25 27]

Y\_pred: [ 9 13 18 24 25 26]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.7530941

bypass x lima lad, score: 0.0059300177

cardiothoracic allergies penicillins attending, score: 0.0040461



confidence of prediction: 0.999485

Y\_true: [ 4 7 9 13 18 24 25 27]

Y\_pred: [ 9 13 18 24 25 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass x lima lad, score: 0.7954075

coronray artery disease mild, score: 0.03960597

coronray artery disease mild, score: 0.013131565

confidence of prediction: 0.724456

Y\_true: [ 4 7 9 13 18 24 25 27]

Y\_pred: [ 9 13 18 24 25 26]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

severely thickened deformed there, score: 0.11541819

mitral regurgitation she is, score: 0.102989346

mitral regurgitation vena contracta, score: 0.074786134

confidence of prediction: 0.985558

Y\_true: [ 4 7 18 20 23 24 26 32 42]

Y\_pred: [ 4 18 20 23 24 26]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

and hypertension hyperlipidemia herniated disc lumbar left, score: 0.0071385116

sl mg sl prn, score: 0.0054314747

squamous cell carcinoma renal, score: 0.0038241243

confidence of prediction: 0.986534

Y\_true: [ 4 7 18 20 23 24 26 32 42]

Y\_pred: [ 4 18 20 23 24 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.7651584

cardiothoracic allergies no known, score: 0.006187088

washing incisions gently with mild soap, score: 0.0022864398

confidence of prediction: 0.951875

Y\_true: [ 4 7 18 20 23 24 26 32 42]

Y\_pred: [ 4 18 20 23 24 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

lad and hypertension hyperlipidemia herniated disc lumbar, score: 0.06046947

on pft s incidental, score: 0.03949397

itchiness albuterol neb soln neb ih, score: 0.03733421

confidence of prediction: 0.713077

Y\_true: [ 4 7 18 20 23 24 26 32 42]

Y\_pred: [ 4 18 20 23 24 26]

top three important windows for true positive code 23 (412: Old myocardial infarction)

disease prior mi and s p pci stenting to, score: 0.4714154

sl mg sl prn, score: 0.0074842446  
artery disease prior mi and s p pci stenting to, score: 0.002579496

confidence of prediction: 0.680613  
Y\_true: [ 4 7 18 20 23 24 26 32 42]  
Y\_pred: [ 4 18 20 23 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease prior mi and, score: 0.05519544  
mg sl prn cp, score: 0.026679311  
s p pci stenting to, score: 0.023421435

confidence of prediction: 0.981534  
Y\_true: [ 4 7 18 20 23 24 26 32 42]  
Y\_pred: [ 4 18 20 23 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation discharge condition alert, score: 0.0947758  
atrial fibrillation furosemide mg iv bid, score: 0.0074883  
developed atrial fibrillation he converted to sinus, score:  
0.0016240884

confidence of prediction: 0.908061  
Y\_true: [ 2 20 29 30 49]  
Y\_pred: [ 2 20 29]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
chol pvd dm diet controlled location un, score: 0.05542886  
line is in mid, score: 0.0015161609  
cilostazol univasc advair kcl wellbutrin, score: 0.001206894

confidence of prediction: 0.993611  
Y\_true: [ 2 20 29 30 49]  
Y\_pred: [ 2 20 29]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn increase chol, score: 0.0571941  
filter vena cava clipping, score: 0.03879902  
hydrochlorothiazide mg tablet sig, score: 0.031042684

confidence of prediction: 0.698990  
Y\_true: [ 2 20 29 30 49]  
Y\_pred: [ 2 20 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
for pneumonia upper lungs, score: 0.07462752  
lower lobe pneumonia brief hospital course, score: 0.04028964  
a developing pneumonia he was started, score: 0.024284564

confidence of prediction: 0.710434  
Y\_true: [21 27 35 36 37]  
Y\_pred: [11 21 27 35 36 37]  
top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
chronic renal failure creatinine was, score: 0.18685447  
chronic renal failure discharge condition, score: 0.18685447  
s renal function remained, score: 0.02294544

confidence of prediction: 0.883822  
Y\_true: [21 27 35 36 37]  
Y\_pred: [11 21 27 35 36 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cta bilat heart rrr ii vi, score: 0.009466086  
hypertrophic cardiomyopathy chf anxiety depression g6pd deficiency,  
score: 0.0077569466  
renal failure discharge condition stable, score: 0.0038490598

confidence of prediction: 0.720487  
Y\_true: [21 27 35 36 37]  
Y\_pred: [11 21 27 35 36 37]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
on chronic renal failure creatinine was, score: 0.15141179  
on chronic renal failure discharge condition, score: 0.15141179  
acute renal failure hypertensive urgency, score: 0.11079964

confidence of prediction: 0.738102  
Y\_true: [21 27 35 36 37]  
Y\_pred: [11 21 27 35 36 37]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal failure creatinine was up, score: 0.17008397  
chronic renal failure discharge condition, score: 0.17008397  
s renal function remained, score: 0.028523436

confidence of prediction: 0.938420  
Y\_true: [21 27 35 36 37]  
Y\_pred: [11 21 27 35 36 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
given prn uti bacterial finished course, score: 0.057768542  
function remained relatively stable, score: 0.01763392  
resolved with improved blood, score: 0.00656833

confidence of prediction: 0.635200  
Y\_true: [37]  
Y\_pred: [37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
dip for leukocytes lg blood, score: 0.13277388  
urinary tract that involved your, score: 0.12443158  
leuk sm 00pm urine rbc, score: 0.036747474

confidence of prediction: 0.926079  
Y\_true: [ 2 47]

Y\_pred: [ 2 15 20]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

caregiver metformin glucophage mg po daily, score: 0.08372103

metformin was held transitional, score: 0.06414675

refills metformin glucophage mg po daily, score: 0.046586297

confidence of prediction: 0.681423

Y\_true: [ 1 7 20 24 34]

Y\_pred: [1 7]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

admission levothyroxine mcg po daily omeprazole, score: 0.2271302

medications levothyroxine mcg tablet sig two, score: 0.1143044

pmh hypertension hypothyroidism cad and two, score: 0.008950985

confidence of prediction: 0.994273

Y\_true: [ 1 7 20 24 34]

Y\_pred: [1 7]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

anemia requiring transfusion postoperative respiratory insufficiency  
discharge, score: 0.90361077

bleeding with acute blood, score: 0.01565736

low hematocrits which required further, score: 0.010270453

confidence of prediction: 0.887777

Y\_true: [ 0 2 3 8 9 16 17 27 29 33 37 40 42 46 47]

Y\_pred: [ 2 4 17 27 33 40 41 42 43]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

hypoxia dm2 qid fingersticks were, score: 0.059721008

ablation dm ii history of rectal, score: 0.017118579

of glipizide metformin recently stopped at rehab, score:  
0.0075096725

confidence of prediction: 0.605649

Y\_true: [ 0 2 3 8 9 16 17 27 29 33 37 40 42 46 47]

Y\_pred: [ 2 4 17 27 33 40 41 42 43]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

had significantly improved and, score: 0.23024328

and became oliguric renal was consulted, score: 0.101426125

and rapid recovery cardiology, score: 0.08324778

confidence of prediction: 0.987526

Y\_true: [ 0 2 3 8 9 16 17 27 29 33 37 40 42 46 47]

Y\_pred: [ 2 4 17 27 33 40 41 42 43]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

copd diastolic chf ef osa who presents, score: 0.008572854

copd diastolic chf ef osa and anxiety, score: 0.008572854

diastolic chf and pulmonary hypertension, score: 0.004960064

confidence of prediction: 0.772374

Y\_true: [ 0 2 3 8 9 16 17 27 29 33 37 40 42 46 47]

Y\_pred: [ 2 4 17 27 33 40 41 42 43]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

respiratory was called and, score: 0.10310197

s respiratory status improved, score: 0.10297482

family discussion pressors were, score: 0.05200406

confidence of prediction: 0.695591

Y\_true: [ 0 2 3 8 9 16 17 27 29 33 37 40 42 46 47]

Y\_pred: [ 2 4 17 27 33 40 41 42 43]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

and required paralytics due to dysynchronous, score: 0.58792496

was subsequently intubated she struggled with the, score: 0.08188926

to hypoxemia she again, score: 0.0059296233

confidence of prediction: 0.775154

Y\_true: [ 0 2 3 8 9 16 17 27 29 33 37 40 42 46 47]

Y\_pred: [ 2 4 17 27 33 40 41 42 43]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

and required paralytics due to dysynchronous, score: 0.8156075

was subsequently intubated she struggled with the, score:

0.015462078

elevated lfts up to, score: 0.001684785

confidence of prediction: 0.777978

Y\_true: [ 0 4 30]

Y\_pred: [ 2 4 30]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

hl stable continued statin and, score: 0.17693552

constipation copd hl djd atypical chest pain, score: 0.13292526

diabetes mellitus hyperlipidemia discharge condition mental, score:

0.056294534

confidence of prediction: 0.779856

Y\_true: [ 0 4 30]

Y\_pred: [ 2 4 30]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

obesity constipation copd hl djd atypical chest, score: 0.8060156

of dmii copd schizoaffective disorder and substance, score:

0.007969223

confidence of prediction: 0.621954

Y\_true: [ 7 11 28]

Y\_pred: [28]

top three important windows for true positive code 28 (45.13: Other

endoscopy of small intestine)  
history of present illness, score: 0.47358733  
performed an endoscopy to determine, score: 0.07118777  
otherwise normal egd to, score: 0.035505623

confidence of prediction: 0.981192  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting to four, score: 0.14403868  
coronary artery bypass grafting x4 with the, score: 0.06311043  
mammary artery to the, score: 0.027593777

confidence of prediction: 0.565697  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization coronary angiography in, score: 0.13686855  
iabp unchanged intially later, score: 0.058060836  
balloon pump was placed, score: 0.023447279

confidence of prediction: 0.982328  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed and, score: 0.40222302  
bypass grafting x4 with the, score: 0.040034417  
cardiothoracic allergies patient recorded, score: 0.0075404444

confidence of prediction: 0.627654  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
artery disease hypertension deep vein thrombosis, score: 0.20724902  
significant for hypertension prior, score: 0.11613609  
post bypass patient is, score: 0.082429975

confidence of prediction: 0.996179  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease elevated, score: 0.29526353  
coronary artery disease hypertension deep vein thrombosis, score:  
0.0961385  
vessel total occlusion the, score: 0.08580306

confidence of prediction: 0.982935  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation discharge condition alert, score: 0.064967796  
atrial fibrillation which converted back, score: 0.007686651  
amiodarone mg tablet sig, score: 0.0042542545

confidence of prediction: 0.777785  
Y\_true: [13 14 18 20 24 26 38 39 44 49]  
Y\_pred: [13 14 18 20 24 26 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization coronary angiography in, score: 0.1313154  
pump past medical history, score: 0.060294885  
iabp unchanged intially later, score: 0.058875244

confidence of prediction: 0.802454  
Y\_true: [ 6 11 20 26 30 49]  
Y\_pred: [ 1 4 17 20 26 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
[UNK] q6prn advair amlodipine, score: 0.14992265  
hypertension hyperlipidemia copd vocal chord, score: 0.11902297  
2qhs metoprolol omeprazole quetiapine, score: 0.08518219

confidence of prediction: 0.984750  
Y\_true: [ 6 11 20 26 30 49]  
Y\_pred: [ 1 4 17 20 26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib metoprolol succinate mg tablet, score: 0.121236235  
atrial fibrillation current smoking pack, score: 0.07931108  
fib she has held, score: 0.043703713

confidence of prediction: 0.656220  
Y\_true: [ 6 11 20 26 30 49]  
Y\_pred: [ 1 4 17 20 26 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin shingles depression peripheral, score:  
0.71445906  
placed on coumadin for a fib she has held, score: 0.068789236  
coumadin was resumed and, score: 0.024258917

confidence of prediction: 0.880162  
Y\_true: [ 7 20 41]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
p cva hypertension psh umbilical hernia repair, score: 0.13917115  
secondary diagnosis hypertension sleep apnea s, score: 0.018165002  
organ injury fully calcified, score: 0.013670789

confidence of prediction: 0.888180  
Y\_true: [ 1 4 28]

Y\_pred: [ 3 28]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
history of present illness, score: 0.6207511  
performed an egd which revealed a mass, score: 0.050233375  
you have iodinated contrast, score: 0.021256285

confidence of prediction: 0.869077  
Y\_true: [ 6 8 11 20 30 37]  
Y\_pred: [20 30 40 42]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
ccy appy perforated ulcers x3 hysterectomy bilateral total, score: 0.19911747  
hypertension pvd copd not, score: 0.052889224

confidence of prediction: 0.714419  
Y\_true: [ 6 8 11 20 30 37]  
Y\_pred: [20 30 40 42]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
history htn copd not on home, score: 0.11100312  
of htn copd not on home, score: 0.0702434  
hypertension pvd copd not on home, score: 0.054004684

confidence of prediction: 0.674650  
Y\_true: [ 0 2 10]  
Y\_pred: [2]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
diabetes type ii diagnosed year, score: 0.1936074  
lantus qpm 5qam metformin 500bid neurontin asa discharge, score: 0.042902913  
type ii diabetes mellitus who two, score: 0.03025433

confidence of prediction: 0.538776  
Y\_true: [10 33]  
Y\_pred: [10 27]  
top three important windows for true positive code 10 (305.1: Tobacco use disorder)  
abuse tobacco abuse h o, score: 0.027856575  
smoking cig day she had, score: 0.006882955  
infection got albuterol and, score: 0.0061554858

confidence of prediction: 0.845225  
Y\_true: [ 3 4 5 8 13 14 24 38]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
medical history hyperlipidemia hypertension pilonidal cyst removed, score: 0.120183036  
of htn hyperlipidemia and negative cardiac, score: 0.104544975  
hypertension and hyperlipidemia presenting with exertional



substernal, score: 0.0873623

confidence of prediction: 0.984952

Y\_true: [ 3 4 5 8 13 14 24 38]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting, score: 0.3233147

coronary artery bypass grafting, score: 0.059414577

coronary artery bypass graft x3 left internal mammary artery, score: 0.059414577

confidence of prediction: 0.996044

Y\_true: [ 3 4 5 8 13 14 24 38]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease discharge, score: 0.17704144

coronary artery bypass grafting, score: 0.15959561

off pump coronary artery bypass graft, score: 0.06551634

confidence of prediction: 0.972879

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

dyslipidemia htn originally presents to, score: 0.087603256

factors diabetes dyslipidemia hypertension, score: 0.034176856

hyperlipidemia history of hyperlipidemia on statin last, score: 0.024564145

confidence of prediction: 0.698162

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 15 (37.23:

Combined right and left heart cardiac catheterization)

cardiac catheterization swan ganz, score: 0.7768363

comments coronary angiography in, score: 0.044883043

lmca lad lcx and rca, score: 0.013292274

confidence of prediction: 0.991253

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

on discharge htn history of hypertension managed with atenolol

normotensive, score: 0.054606743

afib dyslipidemia htn discharge, score: 0.044198

coumadin dyslipidemia htn originally, score: 0.03998626

confidence of prediction: 0.997350

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib on warfarin htn, score: 0.5893969

afib on coumadin dyslipidemia htn, score: 0.15628608

afib dyslipidemia htn discharge, score: 0.03845345

confidence of prediction: 0.867233

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic congestive heart failure secondary diagnosis chronic,  
score: 0.06581589

afib on warfarin htn, score: 0.021726856

yourself every morning call, score: 0.014674288

confidence of prediction: 0.939273

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization swan ganz, score: 0.698912

comments coronary angiography in this, score: 0.1407129

lmca lad lcx and rca, score: 0.018898586

confidence of prediction: 0.985891

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

con intubated intubated 06pm k 06pm, score: 0.008671255

tidal vol peep po2 pco2 ph, score: 0.0032793346

ganz catheter intubation history of present illness, score:  
0.0005926425

confidence of prediction: 0.870615

Y\_true: [ 4 15 20 26 27 33 38 40 42 47 49]

Y\_pred: [ 4 14 15 20 22 24 26 27 29 38 42 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)

afib on warfarin htn, score: 0.7138704

afib on warfarin at, score: 0.1652707

afib on coumadin dyslipidemia, score: 0.04532833

confidence of prediction: 0.761923

Y\_true: [ 4 17 20 44]

Y\_pred: [ 4 7 17 20 44]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

last placed hyperlipidemia hypertension gout anxiety medications,  
score: 0.19269982

last placed hyperlipidemia hypertension gout anxiety discharge,  
score: 0.19269982

metastatic cholangiocarcinoma presents with transient, score:

0.06437241

confidence of prediction: 0.914581

Y\_true: [ 4 17 20 44]

Y\_pred: [ 4 7 17 20 44]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

line placed rij on, score: 0.15059613

femoral line placed in field, score: 0.10468044

performed access rij placed and removed, score: 0.068412334

confidence of prediction: 0.543916

Y\_true: [ 4 17 20 44]

Y\_pred: [ 4 7 17 20 44]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

[UNK] cisplatin gemcitabine on who presents, score: 0.21870674

placed hyperlipidemia hypertension gout anxiety, score: 0.1763704

coded in clinic in, score: 0.03105817

confidence of prediction: 0.659535

Y\_true: [ 4 17 20 44]

Y\_pred: [ 4 7 17 20 44]

top three important windows for true positive code 44 (99.04:

Transfusion of packed cells)

received units prbcs in ed plus, score: 0.20760973

transfusions of prbc no more, score: 0.15523876

scheduled prbc transfusion emergency, score: 0.06991651

confidence of prediction: 0.537434

Y\_true: [ 0 2 4 11 20 29 33 41 42 46]

Y\_pred: [ 2 4 17 20 40 42 48]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

and type diabetes psh cabg left carotid, score: 0.08263106

po qam glyburide mg po daily, score: 0.005448147

coronary artery disease left, score: 0.004763065

confidence of prediction: 0.880868

Y\_true: [ 0 2 4 11 20 29 33 41 42 46]

Y\_pred: [ 2 4 17 20 40 42 48]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

diabetes psh cabg left carotid endarterectomy, score: 0.031616874

pmh depression coronary artery disease left, score: 0.012325759

stenosis in hypertension hyperlipidemia peripheral vascular disease, score: 0.009970746

confidence of prediction: 0.933043

Y\_true: [ 0 2 4 11 20 29 33 41 42 46]

Y\_pred: [ 2 4 17 20 40 42 48]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

coronary artery disease left, score: 0.14090513  
stenosis in hypertension hyperlipidemia peripheral vascular disease,  
score: 0.08654474  
talked to both daughters, score: 0.06054063

confidence of prediction: 0.793881  
Y\_true: [ 0 2 4 11 20 29 33 41 42 46]  
Y\_pred: [ 2 4 17 20 40 42 48]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated upon arrival and, score: 0.4177109  
neuro intubated and sedated mental, score: 0.35921228  
hospital1 intubated and sedated, score: 0.030157901

confidence of prediction: 0.826940  
Y\_true: [ 6 11 20 34 40 42]  
Y\_pred: [ 4 8 11 20 33 34 40]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
therapy wbat cpm advancing as tolerated to, score: 0.011581097  
therapy wbat cpm advancing as tolerated, score: 0.011581097  
machine advancing as tolerated, score: 0.008642773

confidence of prediction: 0.507367  
Y\_true: [ 6 11 20 34 40 42]  
Y\_pred: [ 4 8 11 20 33 34 40]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
aneurysm clipping htn asthma depression gerd, score: 0.15103108  
hct albuterol effexor pantoprazole, score: 0.08602716  
wbac cpm advancing as tolerated, score: 0.077895865

confidence of prediction: 0.835621  
Y\_true: [ 6 11 20 34 40 42]  
Y\_pred: [ 4 8 11 20 33 34 40]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
therapy wbat cpm advancing as, score: 0.024846649  
htn asthma depression gerd obesity smokes 1ppd social, score:  
0.015601548  
physical therapy wbat cpm advancing as, score: 0.0060122386

confidence of prediction: 0.848398  
Y\_true: [ 6 11 20 34 40 42]  
Y\_pred: [ 4 8 11 20 33 34 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was tolerating a regular, score: 0.027237413  
and dry it is, score: 0.004726497  
your surgeon s office, score: 0.0025935436

confidence of prediction: 0.681777  
Y\_true: [ 7 17 41]

Y\_pred: [ 7 17]  
top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
anemia he was taken, score: 0.08855265  
closure the volar wound was, score: 0.07857283  
service orthopaedics allergies patient recorded as having no, score: 0.07402736

confidence of prediction: 0.718898  
Y\_true: [ 7 17 41]  
Y\_pred: [ 7 17]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
septic necrotizing fasciitis upon admission, score: 0.061907575  
on saturdays sundays or, score: 0.05395515  
on broad spectrum antibiotics, score: 0.027293969

confidence of prediction: 0.846539  
Y\_true: [ 4 7 26 34 49]  
Y\_pred: [ 4 20 23 26 34 49]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
alone hld statin was initially held, score: 0.023090983  
pilocarpine eye drops q6h, score: 0.019541051  
af dm depression hyperlipidemia recent admission for, score: 0.014230678

confidence of prediction: 0.922773  
Y\_true: [ 4 7 26 34 49]  
Y\_pred: [ 4 20 23 26 34 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
af on coumadin dm, score: 0.63456327  
af with rvr non, score: 0.13761958  
fib were discussed in, score: 0.03172547

confidence of prediction: 0.551984  
Y\_true: [ 4 7 26 34 49]  
Y\_pred: [ 4 20 23 26 34 49]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
gerd atrial fibrillation diabetes mellitus, score: 0.18613264  
multiple discussions were held with, score: 0.0133062  
aphasia gerd af dm depression hyperlipidemia, score: 0.011189172

confidence of prediction: 0.688967  
Y\_true: [ 4 7 26 34 49]  
Y\_pred: [ 4 20 23 26 34 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
af on coumadin dm, score: 0.77274495  
daily atrovent coumadin mg, score: 0.09924915  
new medication warfarin asa, score: 0.021966813

confidence of prediction: 0.962805

Y\_true: [ 2 4 13 14 18 20 24 38]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

couple days including today, score: 0.003718859

inotropic support post cpb, score: 0.0034866184

and tardus in cartoid with bilateral, score: 0.0027240065

confidence of prediction: 0.893266

Y\_true: [ 2 4 13 14 18 20 24 38]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

avr hypertension hyperlipidemia arthritis atrial and ventricular,  
score: 0.1604001

history hypertension hyperlipidemia diabetes mellitus borderline  
arthritis, score: 0.09264844

vit d 1000u daily, score: 0.027596487

confidence of prediction: 0.867207

Y\_true: [ 2 4 13 14 18 20 24 38]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass graft, score: 0.35207197

coronary artery bypass grafting x1, score: 0.08171083

effusion post bypass the, score: 0.036846135

confidence of prediction: 0.979126

Y\_true: [ 2 4 13 14 18 20 24 38]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies patient recorded, score: 0.014558338

grafting x1 with left, score: 0.012169354

tee was performed in, score: 0.009843762

confidence of prediction: 0.868555

Y\_true: [ 2 4 13 14 18 20 24 38]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

p avr hypertension hyperlipidemia arthritis atrial and, score:  
0.12293494

medical history hypertension hyperlipidemia diabetes mellitus  
borderline, score: 0.10713814

d 1000u daily moexipril 15mg, score: 0.07335572

confidence of prediction: 0.964547

Y\_true: [ 2 4 13 14 18 20 24 38]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg aortic, score: 0.40917405  
coronary artery bypass graft, score: 0.08254483  
coronary artery disease and, score: 0.063016035

confidence of prediction: 0.971728  
Y\_true: [ 2 17 18 19 20 26 32 35 39 41]  
Y\_pred: [18 19 26 40 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies heparin agents, score: 0.0479426  
washing incisions gently with mild soap, score: 0.009024  
had to lie down in, score: 0.005892293

confidence of prediction: 0.592543  
Y\_true: [ 2 17 18 19 20 26 32 35 39 41]  
Y\_pred: [18 19 26 40 42]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
on dialysis and his bun and, score: 0.08275709  
fluid overloaded cvvh was started a renal, score: 0.05166181  
failure requiring hemodialysis discharge condition alert, score:  
0.045641676

confidence of prediction: 0.970446  
Y\_true: [ 2 17 18 19 20 26 32 35 39 41]  
Y\_pred: [18 19 26 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on which was treated, score: 0.5461492  
atrial fibrillation social history no, score: 0.2879797  
atrial fibrillation renal failure requiring, score: 0.0028978833

confidence of prediction: 0.941585  
Y\_true: [ 2 20]  
Y\_pred: [ 2 4 20]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
and dm s p fall, score: 0.06903498  
daily metformin glucophage mg po bid, score: 0.062808074  
lantus nf insulin glargine, score: 0.025292879

confidence of prediction: 0.980035  
Y\_true: [ 2 20]  
Y\_pred: [ 2 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn and dm s p, score: 0.12669589  
history dm htn hl social history married, score: 0.12613006  
metformin glucophage mg po, score: 0.030531563

confidence of prediction: 0.664728  
Y\_true: [ 4 13 18 20 24 26 34]

Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
x hypertension dyslipidemia arthritis gastroesophageal reflux disease, score: 0.046105616  
omeprazole simvastatin asa discharge medications, score: 0.020633953  
htn borderline recently diagnosed dyslipidemia recently diagnosed mild, score: 0.010508056

confidence of prediction: 0.988643  
Y\_true: [ 4 13 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting to, score: 0.5767341  
coronary artery bypass grafting to three, score: 0.08823148  
descending artery saphenous vein graft, score: 0.04356414

confidence of prediction: 0.965234  
Y\_true: [ 4 13 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.4099557  
cardiothoracic allergies patient recorded, score: 0.010103946  
bypass graft x hypertension, score: 0.0059627215

confidence of prediction: 0.953925  
Y\_true: [ 4 13 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
hypertension dyslipidemia arthritis gastroesophageal reflux, score: 0.037231676  
extremely active walking on, score: 0.03105441  
started stopped isosorbide mononitrate metoprolol tartrate, score: 0.022230893

confidence of prediction: 0.998932  
Y\_true: [ 4 13 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.5860515  
coronary artery disease s p coronary artery bypass graft, score: 0.1240709  
coronary artery disease he, score: 0.040655196

confidence of prediction: 0.943847  
Y\_true: [ 4 13 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
fibrillation titrate coumadin dose, score: 0.31261486



atrial fibrillation he was placed, score: 0.14443333  
atrial fibrillation with a controlled, score: 0.12570469

confidence of prediction: 0.923097  
Y\_true: [ 4 13 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
arthritis gastroesophageal reflux disease discharge condition good,  
score: 0.060026247  
medical history gerd recently diagnosed htn borderline, score:  
0.027157888  
extremely active walking on, score: 0.003026946

confidence of prediction: 0.785325  
Y\_true: [ 4 8 26 34 40 42]  
Y\_pred: [ 4 20 24 26 33 34 40 42 43]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
coronary intervention hyperlipidemia peripheral, score: 0.20122193  
factors diabetes dyslipidemia hypertension cardiac history cabg,  
score: 0.1552913  
81mg daily hld continued on home rosuvastatin, score: 0.14958535

confidence of prediction: 0.933344  
Y\_true: [ 4 8 26 34 40 42]  
Y\_pred: [ 4 20 24 26 33 34 40 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation s p pvi, score: 0.3110874  
atrial fibrillation coronary artery disease, score: 0.12189993  
paf diagnosed in failed, score: 0.066008516

confidence of prediction: 0.877116  
Y\_true: [ 4 8 26 34 40 42]  
Y\_pred: [ 4 20 24 26 33 34 40 42 43]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
and zetia gerd he was initially transition, score: 0.048386503  
550x20 peep fio2 general, score: 0.0018291319  
history of present illness, score: 0.0016069933

confidence of prediction: 0.725464  
Y\_true: [ 4 8 26 34 40 42]  
Y\_pred: [ 4 20 24 26 33 34 40 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was reintubated in the, score: 0.24837802  
requiring re intubation somnolence given, score: 0.113742754  
general sedated intubated heent ncat, score: 0.07000367

confidence of prediction: 0.798809  
Y\_true: [ 4 8 26 34 40 42]  
Y\_pred: [ 4 20 24 26 33 34 40 42 43]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was reintubated in the, score: 0.14069253  
requiring re intubation somnolence given, score: 0.074849755  
was intubated and sedated, score: 0.05916158

confidence of prediction: 0.894064  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
daily coenzyme q10 prescribed, score: 0.08200756  
colectomy htn hyperlipidemia found to, score: 0.073399745  
infection hypertension hyperlipidemia arthritis in knees hernia,  
score: 0.060280614

confidence of prediction: 0.988275  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.49220562  
descending saphenous vein graft, score: 0.05258511  
tee conclusions prebypass no, score: 0.03846752

confidence of prediction: 0.986373  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7291557  
diuresed toward the preoperative, score: 0.020573147  
tee conclusions prebypass no, score: 0.0065851873

confidence of prediction: 0.995719  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hyperlipidemia arthritis in knees, score: 0.059222545  
coenzyme q10 prescribed by, score: 0.03685696  
colectomy htn hyperlipidemia found to have, score: 0.03135707

confidence of prediction: 0.999302  
Y\_true: [ 4 13 18 20 24]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.6183326  
coronary artery disease s p coronary artery bypass graft, score:  
0.130905  
descending saphenous vein graft, score: 0.02619466

confidence of prediction: 0.818781  
Y\_true: [ 4 8 10 13 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
medical history dyslipidemia hypertension gout gerd hepatitis,  
score: 0.09974687  
valsartan 40mg daily aspirin, score: 0.015130817  
simvastatin mg tablet sig, score: 0.013813449

confidence of prediction: 0.985336  
Y\_true: [ 4 8 10 13 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x3 left internal mammary artery, score:  
0.5130839  
coronary artery bypass graft x3 left internal mammary artery to the,  
score: 0.03134838  
saphenous vein grafts to, score: 0.023953693

confidence of prediction: 0.979317  
Y\_true: [ 4 8 10 13 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies lisinopril attending, score: 0.023690341  
pacing wires were removed per, score: 0.008053341  
washing incisions gently with mild soap, score: 0.0051000183

confidence of prediction: 0.969282  
Y\_true: [ 4 8 10 13 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history dyslipidemia hypertension gout gerd hepatitis a, score:  
0.07549408  
fibrinoge 39am pt ptt, score: 0.029976733  
vein catheter brief hospital, score: 0.020638965

confidence of prediction: 0.999132  
Y\_true: [ 4 8 10 13 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.6174857  
coronary artery disease s p coronary artery bypass graft, score:  
0.13072571  
coronary artery disease he, score: 0.020132791

confidence of prediction: 0.899563  
Y\_true: [ 4 8 10 13 18 20 24 34]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 34 (530.81:

Esophageal reflux)  
hypertension gout gerd hepatitis a s p, score: 0.060499094  
social history race caucasian, score: 0.000797674  
fibrinoge 39am pt ptt, score: 0.00077766663

confidence of prediction: 0.942842  
Y\_true: [ 4 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
ischemic attack hyperlipidemia hypertension discharge condition  
mental, score: 0.7776376  
140s systolic hyperlipidemia patient had an ldl, score: 0.0037735114  
warfarin mg every night, score: 0.0034557204

confidence of prediction: 0.848734  
Y\_true: [ 4 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension the patient wa [UNK] to have, score: 0.14432988  
attack hyperlipidemia hypertension discharge condition mental,  
score: 0.09349801  
changed started coumadin warfarin mg every night, score: 0.06173616

confidence of prediction: 0.762969  
Y\_true: [ 6 34 40 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was intubated briefly and extubated within, score: 0.16078287  
and was intubated without difficulty patient, score: 0.041319344  
young male intubated frothing at, score: 0.03727047

confidence of prediction: 0.693337  
Y\_true: [ 6 34 40 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated briefly and extubated within, score: 0.070783734  
and was intubated without difficulty patient, score: 0.010465923  
male intubated frothing at, score: 0.0029348305

confidence of prediction: 0.565254  
Y\_true: [ 6 20 35]  
Y\_pred: [ 6 35]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
hydration metabolic acidosis likely due to starvation, score:  
0.14443941  
pints of vodka family history, score: 0.033230007  
at q2 4hours withdrawal symptoms, score: 0.019027779

confidence of prediction: 0.878704

Y\_true: [ 6 20 35]

Y\_pred: [ 6 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

ketoacidosis alcohol arf resolving upon transfer, score: 0.03765432

at q2 4hours withdrawal symptoms, score: 0.03240298

somewhat prerenal in the, score: 0.025692174

confidence of prediction: 0.572094

Y\_true: [41 43]

Y\_pred: [17 29 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

several foreign bodies no underlying, score: 0.14349526

monitor placement tracheostomy and peg placement history, score:

0.12926605

with an icp of his icp was, score: 0.023769766

confidence of prediction: 0.937115

Y\_true: [41 43]

Y\_pred: [17 29 41 43]

top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)

monitor placement tracheostomy and peg placement history, score:

0.28250617

several foreign bodies no underlying, score: 0.023611808

parents arrive to the emergency, score: 0.022574395

confidence of prediction: 0.549350

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

pneumonia septic shock discharge condition hemodynamically, score:

0.038150735

concerning for sepsis with pneumonia as source, score: 0.031130359

required pressors briefly while in micu, score: 0.027853612

confidence of prediction: 0.860602

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

anxiety hypothyroidism has wrist, score: 0.4599917

inpatient hypothyroidism continued on synthroid depression anxiety

continued, score: 0.24386467

admission levothyroxine aricept aspirin ec, score: 0.095848195

confidence of prediction: 0.712044

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
chronic renal failure unknown baseline renal function but, score: 0.22391206

aox1 coarse b l, score: 0.015424571

interstitial lung disease recommend, score: 0.014761982

confidence of prediction: 0.704002

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

course pneumonia hypoxia patient presented with, score: 0.3521649

cxr done pna got, score: 0.113175206

a pneumonia was found, score: 0.10750476

confidence of prediction: 0.837212

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

from pre renal failure given hypotension, score: 0.33152574

on chronic renal failure unknown baseline renal function but, score: 0.11466411

of likely arf however given that, score: 0.045653954

confidence of prediction: 0.725337

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic renal failure unknown baseline renal function but admission, score: 0.20841391

dementia at baseline with, score: 0.007952408

interstitial lung disease recommend, score: 0.0077568307

confidence of prediction: 0.655226

Y\_true: [ 0 1 8 21 29 35 36 46]

Y\_pred: [ 0 1 21 27 29 35 36 37 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

briefly while in micu, score: 0.038999103

pnas got vanco levaquin, score: 0.027227528

rods was empirically started, score: 0.026591176

confidence of prediction: 0.779414

Y\_true: [20 24]

Y\_pred: [20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

lipitor nadolol lisinopril norvasc, score: 0.11124558

kidney stones [UNK] ocular arterial occlusions carotid, score: 0.05283334

coenzyme q10 discharge medications acetaminophen, score: 0.015874729

confidence of prediction: 0.774477  
Y\_true: [20 24]  
Y\_pred: [20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
extremity dvt mri l, score: 0.009826369  
p falls x3 over, score: 0.0094390325  
patient was clinically symptomatic, score: 0.007855286

confidence of prediction: 0.971708  
Y\_true: [ 4 11 13 18 24]  
Y\_pred: [ 4 13 18 19 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
m2 indication cabg icd, score: 0.5306758  
fistulas and revisions social, score: 0.033897825  
htn hyperlipidemia rbbb cad depression restless leg syndrome, score:  
0.021709632

confidence of prediction: 0.987433  
Y\_true: [ 4 11 13 18 24]  
Y\_pred: [ 4 13 18 19 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting times two, score: 0.59495974  
coronary artery bypass grafting times two, score: 0.09101971  
wires were discontinued on, score: 0.023696532

confidence of prediction: 0.986555  
Y\_true: [ 4 11 13 18 24]  
Y\_pred: [ 4 13 18 19 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
pacing wires were discontinued on, score: 0.0035460747  
cardiothoracic allergies patient recorded, score: 0.0034094625  
bypass grafting times two, score: 0.0031272252

confidence of prediction: 0.998514  
Y\_true: [ 4 11 13 18 24]  
Y\_pred: [ 4 13 18 19 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.6037871  
cad and pci was not, score: 0.061012767  
coronary artery bypass grafting, score: 0.025786934

confidence of prediction: 0.617524  
Y\_true: [10]  
Y\_pred: [10]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
ago he smokes 2ppd cigarettes and drinks, score: 0.021565642  
tubes and xanthocromia was judged negative, score: 0.000983467

tubes and xanthocromia was, score: 0.000983467

confidence of prediction: 0.902179

Y\_true: [ 2 4 20 23 24 27 35]

Y\_pred: [ 2 21 23 24 27 35]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

schf dm hpl htn who is, score: 0.13313648

dm ii continued home regimen, score: 0.13167524

novolog mix units qam, score: 0.04244229

confidence of prediction: 0.567026

Y\_true: [ 2 4 20 23 24 27 35]

Y\_pred: [ 2 21 23 24 27 35]

top three important windows for true positive code 23 (412: Old myocardial infarction)

h o mi likely nstemi chronic schf, score: 0.14714484

history of mi h o schf morbid, score: 0.031148484

h o mi in and h o, score: 0.0058505507

confidence of prediction: 0.948882

Y\_true: [ 2 4 20 23 24 27 35]

Y\_pred: [ 2 21 23 24 27 35]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

coronary artery disease history, score: 0.12721129

coronary artery disease chronic, score: 0.05896183

likely nstemi chronic schf, score: 0.0580165

confidence of prediction: 0.942849

Y\_true: [ 2 4 20 23 24 27 35]

Y\_pred: [ 2 21 23 24 27 35]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

systolic heart failure discharge condition good, score: 0.32670274

lasix and metolazone which, score: 0.1458771

nstemi chronic schf dm hpl, score: 0.020418465

confidence of prediction: 0.721544

Y\_true: [ 2 4 20 23 24 27 35]

Y\_pred: [ 2 21 23 24 27 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

his baseline cr is, score: 0.029939305

qpm novolog 100u ml solution, score: 0.014091928

have bun cr there, score: 0.009509181

confidence of prediction: 0.933786

Y\_true: [ 2 4 20 31 33 40 41 42]

Y\_pred: [ 2 4 20 31 41]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)



psychosis diabetes mellitus hyperlipidemia discharge condition,  
score: 0.07811694  
1000mg hospital1 metformin lovastatin discharge medications  
lisinopril, score: 0.053894624  
schizophrenia dm hyperlipidemia tardive dyskinesias [UNK], score:  
0.03231824

confidence of prediction: 0.514049  
Y\_true: [ 2 4 20 31 33 40 41 42]  
Y\_pred: [ 2 4 20 31 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
schizophrenia dm hyperlipidemia tardive dyskinesias [UNK] to, score:  
0.1739204  
semirhythmic theta range activity, score: 0.042887103  
hypertension psychosis diabetes mellitus hyperlipidemia discharge  
condition stable discharge, score: 0.023728402

confidence of prediction: 0.959860  
Y\_true: [ 2 4 20 31 33 40 41 42]  
Y\_pred: [ 2 4 20 31 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hospital1 metformin lovastatin discharge medications, score:  
0.042709462  
htn [UNK] schizophrenia dm hyperlipidemia tardive dyskinesias [UNK]  
to longterm, score: 0.025024325  
multiple sclerosis hypertension psychosis diabetes mellitus  
hyperlipidemia, score: 0.021480212

confidence of prediction: 0.917746  
Y\_true: [ 2 4 20 31 33 40 41 42]  
Y\_pred: [ 2 4 20 31 41]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
epilepticus aspiration pneumonia dysphagia secondary diagnosis,  
score: 0.31300935  
a video swallow study, score: 0.033055235  
an aspiration pneumonia after a swallowing, score: 0.032293253

confidence of prediction: 0.884938  
Y\_true: [ 2 4 20 31 33 40 41 42]  
Y\_pred: [ 2 4 20 31 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
on tube feeds with a speech, score: 0.15919635  
on feeds were restarted, score: 0.14021917  
gj tube was placed, score: 0.092827246

confidence of prediction: 0.972045  
Y\_true: [20 23 24 47]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

p cva htn b l rotator cuff psh bl, score: 0.52046335  
pmh mi s p ptci, score: 0.0038744942  
the patient tolerated the, score: 0.0019171835

confidence of prediction: 0.692115  
Y\_true: [ 8 19 33 35 43 47]  
Y\_pred: [19 27 35 40 41 43]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
team on hemodialysis was initiated and he, score: 0.1959735  
remained on hemodialysis throughout and, score: 0.05914399  
with end stage renal disease status, score: 0.011459784

confidence of prediction: 0.598821  
Y\_true: [ 8 19 33 35 43 47]  
Y\_pred: [19 27 35 40 41 43]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure and fluid, score: 0.17491685  
to renal osteodystrophy in status, score: 0.051167566  
acute renal failure secondary to, score: 0.05035953

confidence of prediction: 0.851529  
Y\_true: [ 8 19 33 35 43 47]  
Y\_pred: [19 27 35 40 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
he was bronched on hospital day which, score: 0.06966365  
and was intubated as, score: 0.044323877  
pending respiratory failure and, score: 0.03232117

confidence of prediction: 0.968420  
Y\_true: [ 4 20 26 28 44]  
Y\_pred: [ 4 20 26 28]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
regurgitation cholelithiasis hyperlipidemia homocystinemia basal  
cell carcinoma hemorrhoidectomy hypertension, score: 0.12037335  
simvastatin mg tablet sig, score: 0.005114179  
mg oral qdaily atenolol, score: 0.0024196075

confidence of prediction: 0.939146  
Y\_true: [ 4 20 26 28 44]  
Y\_pred: [ 4 20 26 28]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
carcinoma hemorrhoidectomy hypertension cataracts social history,  
score: 0.091348894  
irregular with mechanical valve, score: 0.033598322  
cholelithiasis hyperlipidemia homocystinemia basal cell, score:  
0.030538656

confidence of prediction: 0.932207

Y\_true: [ 4 20 26 28 44]  
Y\_pred: [ 4 20 26 28]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation was well rate, score: 0.22177804  
atrial fibrillation hospital3 mitral valve repair in, score: 0.14387359  
irregular irregular with mechanical valve, score: 0.03844626  
  
confidence of prediction: 0.637034  
Y\_true: [ 4 20 26 28 44]  
Y\_pred: [ 4 20 26 28]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
otherwise normal egd to stomach body brief, score: 0.27873585  
had an endoscopy performed on hospital day, score: 0.052655023  
to his satisfaction upon, score: 0.05103719  
  
confidence of prediction: 0.827291  
Y\_true: [ 2 13 18 20 24 26 49]  
Y\_pred: [ 2 13 18 20 24 26 49]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
daily metformin hospital1 pravachol daily coumadin, score: 0.17182343  
daily metformin mg tablet sig, score: 0.0707338  
history diabetes hypertension mi x3, score: 0.048096046  
  
confidence of prediction: 0.999827  
Y\_true: [ 2 13 18 20 24 26 49]  
Y\_pred: [ 2 13 18 20 24 26 49]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
cabg x3 lima lad svg diag, score: 0.9783053  
coronary artery reverse saphenous vein graft, score: 0.004014643  
coronary artery reverse saphenous vein single, score: 0.0024416964  
  
confidence of prediction: 0.989552  
Y\_true: [ 2 13 18 20 24 26 49]  
Y\_pred: [ 2 13 18 20 24 26 49]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.6421768  
incisions gently with mild soap, score: 0.1683378  
cabg x3 lima lad svg diag, score: 0.08915041  
  
confidence of prediction: 0.766158  
Y\_true: [ 2 13 18 20 24 26 49]  
Y\_pred: [ 2 13 18 20 24 26 49]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
diagnosis diabetes hypertension cva mi x3 s, score: 0.10120227  
history diabetes hypertension mi x3, score: 0.100673825

occupation retired engineer family history, score: 0.055045836

confidence of prediction: 0.999951

Y\_true: [ 2 13 18 20 24 26 49]

Y\_pred: [ 2 13 18 20 24 26 49]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

cabg x3 lima lad, score: 0.69656944

coronary artery reverse saphenous, score: 0.054629352

vessel coronary disease major, score: 0.013170007

confidence of prediction: 0.998658

Y\_true: [ 2 13 18 20 24 26 49]

Y\_pred: [ 2 13 18 20 24 26 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib on coumadin cva factor, score: 0.49132708

afib on coumadin osteoarthritis right, score: 0.49132708

afib tablet po once, score: 0.0058942153

confidence of prediction: 0.858485

Y\_true: [ 2 13 18 20 24 26 49]

Y\_pred: [ 2 13 18 20 24 26 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

afib on coumadin cva, score: 0.494758

afib on coumadin osteoarthritis right, score: 0.494758

instructions for coumadin and, score: 0.001890127

confidence of prediction: 0.877619

Y\_true: [ 5 35]

Y\_pred: [ 4 5 6 10 35]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

known baseline hyponatremia na on admission most, score: 0.7165128

recorded as having no, score: 0.036506012

polyuria and occas blurry, score: 0.012820573

confidence of prediction: 0.956744

Y\_true: [ 5 35]

Y\_pred: [ 4 5 6 10 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

acute renal failure leukocytosis no, score: 0.16644411

acute renal failure creatinine on, score: 0.049921453

and acute renal failure diabetic ketoacidosis, score: 0.015263134

confidence of prediction: 0.986491

Y\_true: [ 4 18 20 23 24 34]

Y\_pred: [ 2 18 24 34]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without complication, score: 0.75125486

diuresed toward the preoperative, score: 0.021196675

cardiothoracic allergies naprosyn attending, score: 0.0036567051

confidence of prediction: 0.899101

Y\_true: [ 4 18 20 23 24 34]

Y\_pred: [ 2 18 24 34]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease aortic, score: 0.32927954

coronary artery disease aortic, score: 0.12865378

rca pci was deferred, score: 0.033416495

confidence of prediction: 0.941579

Y\_true: [ 4 18 20 23 24 34]

Y\_pred: [ 2 18 24 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

moderate arthritis gerd hiatal hernia past surgical, score:

0.0024509593

and om lesion and is, score: 0.0011989897

confidence of prediction: 0.622308

Y\_true: [ 5 10]

Y\_pred: [ 5 6 30 42]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

her sats hyponatremia felt to be due, score: 0.7933965

mg intramuscular every weeks, score: 0.016196592

admission with pressured and, score: 0.0069982545

confidence of prediction: 0.762575

Y\_true: [ 4 8 14 20 24 38]

Y\_pred: [ 4 20 24 38]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history hypertension hyperlipidemia cad s p poba, score: 0.121279314

readded accupril hyperlipidemia continue statin anemia, score:

0.05469472

disease hypotension hyperlipidemia discharge condition stable on,  
score: 0.028321384

confidence of prediction: 0.878542

Y\_true: [ 4 8 14 20 24 38]

Y\_pred: [ 4 20 24 38]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hyperlipidemia cad s p, score:

0.18573098

multivessel ptca recently underwent, score: 0.16389352

continued statin hypertension restarted lower dose, score:

0.05759368

confidence of prediction: 0.991339

Y\_true: [ 4 8 14 20 24 38]

Y\_pred: [ 4 20 24 38]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease complex, score: 0.0671832  
rca lesion with an, score: 0.052435063  
vessel coronary artery disease the, score: 0.04478316

confidence of prediction: 0.611770  
Y\_true: [ 4 8 14 20 24 38]  
Y\_pred: [ 4 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
coronary angiography of this, score: 0.11851332  
catheterization for angina on demonstrating, score: 0.072830476  
weaned off dopamine after, score: 0.058312133

confidence of prediction: 0.708474  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hctz asa simvastatin qhs lisinopril multivitamin, score: 0.049659017  
herniated nucleus [UNK] in lumbar, score: 0.009364351  
nSTEMI hypertension hyperlipidemia s p cva s, score: 0.00897031

confidence of prediction: 0.995296  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
cabg x3 lima lad svg diag om rf, score: 0.37485147  
s p cabg x3 lima lad svg diag om rf, score: 0.02043647  
wires were discontinued without, score: 0.016864872

confidence of prediction: 0.983073  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.8087481  
creams or powders to, score: 0.14887096  
cabg x3 lima lad svg diag, score: 0.005723458

confidence of prediction: 0.925565  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
artery disease hypertension icd codes test, score: 0.27608162  
400mg amiodarone 50mg toprol, score: 0.06315998  
metoprolol triamterene hctz asa simvastatin qhs, score: 0.043802354

confidence of prediction: 0.724528  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]

top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
for nstemi cardiac cath revealed coronary artery disease, score:  
0.22524422  
history cad nstemi hypertension hyperlipidemia, score: 0.07063228  
non tender non distended, score: 0.014459159

confidence of prediction: 0.922090  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p cabg x3 lima lad, score: 0.3980053  
coronary artery disease and, score: 0.07154281  
coronary artery disease hypertension, score: 0.05095376

confidence of prediction: 0.851141  
Y\_true: [ 4 13 17 18 20 22 24 26 39 44]  
Y\_pred: [ 4 13 18 20 22 23 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation chest pain, score: 0.27561808  
atrial fibrillation new dx herniated, score: 0.06736451  
amiodarone 50mg toprol xl, score: 0.06118935

confidence of prediction: 0.760718  
Y\_true: [ 6 20 49]  
Y\_pred: [20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
for perforated diverticulitis vs perforated sigmoid, score:  
0.032334812  
history pmh htn asthma myasthenia psh radical prostatectomy for,  
score: 0.02469202  
colectomy and hartmanns history, score: 0.019918088

confidence of prediction: 0.941346  
Y\_true: [ 1 4 7 25 27 28]  
Y\_pred: [ 1 4 7 27 28 44]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
hypertension hypothyroidism hyperlipidemia discharge condition,  
score: 0.37559748  
hyperlipidemia hypothyroidism history of, score: 0.3138487  
restarted hypothyroidism stable the, score: 0.108408645

confidence of prediction: 0.686411  
Y\_true: [ 1 4 7 25 27 28]  
Y\_pred: [ 1 4 7 27 28 44]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypothyroidism hyperlipidemia discharge condition afebrile, score:  
0.07018002  
transfusions diverticulosis hyperlipidemia hypothyroidism history of

glaucoma, score: 0.03992621  
grafts taken from her, score: 0.024185475

confidence of prediction: 0.755965  
Y\_true: [ 1 4 7 25 27 28]  
Y\_pred: [ 1 4 7 27 28 44]  
top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
the bleeding aka colon cancer was, score: 0.086416155  
unit and transfused blood, score: 0.08435083  
history of present illness, score: 0.06672964

confidence of prediction: 0.989176  
Y\_true: [ 1 4 7 25 27 28]  
Y\_pred: [ 1 4 7 27 28 44]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diastolic heart failure ef in echo, score: 0.28388008  
diastolic heart failure ef in, score: 0.28388008  
diastolic heart failure right leg swelling, score: 0.13390441

confidence of prediction: 0.709755  
Y\_true: [ 1 4 7 25 27 28]  
Y\_pred: [ 1 4 7 27 28 44]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
history of present illness, score: 0.48627204  
performed an egd to rule, score: 0.026896155  
body and antrum on endoscopy mild diverticulosis, score: 0.013489762

confidence of prediction: 0.633405  
Y\_true: [ 4 13 15 18 20 24 30 38]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
cva htn hyperlipidemia and ai as who, score: 0.48540628  
daily aspirin 325mg daily benadryl 25mg daily, score: 0.013700336  
s p turp social history tobacco, score: 0.0064107366

confidence of prediction: 0.979798  
Y\_true: [ 4 13 15 18 20 24 30 38]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
descending coronary reverse saphenous vein single, score: 0.11887368  
wires were discontinued without, score: 0.030108746  
mammary artery to left, score: 0.022155184

confidence of prediction: 0.986457  
Y\_true: [ 4 13 15 18 20 24 30 38]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7395064



diuresed toward the preoperative, score: 0.02086519  
cardiothoracic allergies nitroglycerin diltiazem, score: 0.008182046

confidence of prediction: 0.992274  
Y\_true: [ 4 13 15 18 20 24 30 38]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
irregular murmur iii iv, score: 0.019919604  
catch his falling roommate he, score: 0.0176626  
managed with incisions sternal, score: 0.014332873

confidence of prediction: 0.996796  
Y\_true: [ 4 13 15 18 20 24 30 38]  
Y\_pred: [ 4 13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
descending coronary reverse saphenous vein, score: 0.2598364  
his falling roommate he sustained, score: 0.04455331  
coronary artery disease discharge, score: 0.031138273

confidence of prediction: 0.581037  
Y\_true: [ 0 17 20 31 35 46]  
Y\_pred: [17 20 31 35]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
tachycardic febrile elevated wbc count, score: 0.12344264  
a rij placed and was given, score: 0.11270319  
access r ij removed psych continued geodon, score: 0.046970356

confidence of prediction: 0.933121  
Y\_true: [ 0 17 20 31 35 46]  
Y\_pred: [17 20 31 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
bipolar disorder htn bph discharge condition, score: 0.15574302  
reversal in htn social history living, score: 0.11795302  
colostomy with reversal and htn admitted for, score: 0.070340216

confidence of prediction: 0.923097  
Y\_true: [ 0 17 20 31 35 46]  
Y\_pred: [17 20 31 35]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
leading to pneumonia the, score: 0.73472416  
aspiration pneumonitis chronic non occlusive, score: 0.030158252  
an aspiration event his oxygen, score: 0.027979953

confidence of prediction: 0.945306  
Y\_true: [ 0 17 20 31 35 46]  
Y\_pred: [17 20 31 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
cellulitis acute renal failure aspiration pneumonitis, score:

0.13306068

he cellulitis arf on admission, score: 0.049205218

bilateral infrahilar consolidation left, score: 0.0345744

confidence of prediction: 0.606953

Y\_true: [ 2 4 13 18 20 24 27 33 35 42 47]

Y\_pred: [ 2 3 13 15 18 24 25 27 38 40 42]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

failure diabetes mellitus type acute systolic, score: 0.120367624

metformin mg hospital1 amlodipine, score: 0.09579268

hypercholesterolemia type dm on metformin as outpatient, score: 0.017370075

confidence of prediction: 0.989743

Y\_true: [ 2 4 13 18 20 24 27 33 35 42 47]

Y\_pred: [ 2 3 13 15 18 24 25 27 38 40 42]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting to four, score: 0.5987806

coronary artery bypass grafting to four, score: 0.09160425

descending artery saphenous vein graft, score: 0.04522944

confidence of prediction: 0.982869

Y\_true: [ 2 4 13 18 20 24 27 33 35 42 47]

Y\_pred: [ 2 3 13 15 18 24 25 27 38 40 42]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.80921495

creams or powders to, score: 0.1489569

cardiothoracic allergies patient recorded, score: 0.0036712564

confidence of prediction: 0.999196

Y\_true: [ 2 4 13 18 20 24 27 33 35 42 47]

Y\_pred: [ 2 3 13 15 18 24 25 27 38 40 42]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting, score: 0.6162412

coronary artery disease per records, score: 0.042749494

coronary artery disease as, score: 0.031051546

confidence of prediction: 0.877569

Y\_true: [ 2 4 13 18 20 24 27 33 35 42 47]

Y\_pred: [ 2 3 13 15 18 24 25 27 38 40 42]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

depressed lvef with mild, score: 0.022757683

service in preparation for, score: 0.013601951

his mitral regurgitation after a panorex was obtained mr, score: 0.008079964

confidence of prediction: 0.796614

Y\_true: [ 2 4 13 18 20 24 27 33 35 42 47]

Y\_pred: [ 2 3 13 15 18 24 25 27 38 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated and underwent diagnostic, score: 0.13835415  
patient was intubated but awake, score: 0.110977784  
was subsequently intubated due to dyspnea, score: 0.037503522

confidence of prediction: 0.712813  
Y\_true: [ 4 10 20 34]  
Y\_pred: [ 2 4 20 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history htn hyperlipidemia gerd diabetes mellitus on omr, score:  
0.22777072  
daily atorvastatin mg tablet sig, score: 0.00787935  
citalopram mg tablet sig, score: 0.0045965156

confidence of prediction: 0.990793  
Y\_true: [ 4 10 20 34]  
Y\_pred: [ 2 4 20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hyperlipidemia gerd diabetes mellitus, score:  
0.39601913  
a sterile fashion access was gained, score: 0.042937502  
artery arteriogram shows that, score: 0.021099748

confidence of prediction: 0.888900  
Y\_true: [ 4 10 20 34]  
Y\_pred: [ 2 4 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
htn hyperlipidemia gerd diabetes mellitus on omr, score: 0.015819881  
underwent a cerebral angiogram, score: 0.0034615465  
used to enter the, score: 0.003411833

confidence of prediction: 0.916476  
Y\_true: [ 1 7 11 20 34 37 47]  
Y\_pred: [ 1 20 34 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
through levothyroxine 112mcg metoprolol succinate mirtazapine,  
score: 0.06855875  
hernia hypothyroid lung ca depression pvd, score: 0.015611458  
day levothyroxine mcg tablet sig one, score: 0.014698046

confidence of prediction: 0.760203  
Y\_true: [ 1 7 11 20 34 37 47]  
Y\_pred: [ 1 20 34 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn gerd hiatal hernia hypothyroid, score: 0.26093212  
retired silk finisher her daughter lives, score: 0.08619473

mirtazapine [UNK] omeprazole pravastatin tramadol, score:  
0.017982947

confidence of prediction: 0.914034  
Y\_true: [ 1 7 11 20 34 37 47]  
Y\_pred: [ 1 20 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
cdiff htn gerd hiatal hernia hypothyroid lung ca depression pvd  
thrombocytosis, score: 0.0309238  
and became hypotensive her, score: 0.001143676  
was transfused another unit, score: 0.0009934581

confidence of prediction: 0.863208  
Y\_true: [ 1 7 11 20 34 37 47]  
Y\_pred: [ 1 20 34 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
retired silk finisher her daughter, score: 0.16149034  
a uti on pod she was, score: 0.05215932  
she was extubated overnight, score: 0.02374691

confidence of prediction: 0.905890  
Y\_true: [19 33 40 42]  
Y\_pred: [17 19 27 33 40 42]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
missed hd sessions htn, score: 0.10526824  
sided dialysis catheter tip, score: 0.08081413  
normal dialysis tomorrow as, score: 0.07859649

confidence of prediction: 0.700185  
Y\_true: [19 33 40 42]  
Y\_pred: [17 19 27 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
diagnosis respiratory failure flash, score: 0.123390466  
[UNK] gen intubated and, score: 0.08526842  
she had hd x2, score: 0.06287249

confidence of prediction: 0.767610  
Y\_true: [19 33 40 42]  
Y\_pred: [17 19 27 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
neuro intubated and sedated, score: 0.4943007  
hysterical and intubated for airway protection with, score:  
0.060459774  
[UNK] gen intubated and sedated, score: 0.043133844

confidence of prediction: 0.827849  
Y\_true: [19 33 40 42]  
Y\_pred: [17 19 27 33 40 42]  
top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

neuro intubated and sedated pertinent, score: 0.59060764

gen intubated and sedated, score: 0.045084916

extubation hemodialysis x2 history, score: 0.035770323

confidence of prediction: 0.876215

Y\_true: [ 7 12 17 40 41 43]

Y\_pred: [17 41]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

ivc filter picc right, score: 0.122031376

cultures grew mrsa kept, score: 0.022336237

fixation of patella fracture with, score: 0.01953825

confidence of prediction: 0.581645

Y\_true: [ 7 12 17 40 41 43]

Y\_pred: [17 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

his trach tube was plugged with, score: 0.10271175

pulmonary contusions and small, score: 0.016042843

with your trach tube plugged and hopefully, score: 0.014686872

confidence of prediction: 0.665643

Y\_true: [ 4 14 20 24 38]

Y\_pred: [14 24 38]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

cardiac cath bms to mid lcx, score: 0.6373206

catheterization found to have, score: 0.023093836

cardiac catheterization on with revealed, score: 0.018150033

confidence of prediction: 0.984336

Y\_true: [ 4 14 20 24 38]

Y\_pred: [14 24 38]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

cardiac cath bms to, score: 0.080222465

coronary artery disease hyperlipidemia, score: 0.07578914

coronary artery disease patent, score: 0.0721467

confidence of prediction: 0.936526

Y\_true: [ 4 14 20 24 38]

Y\_pred: [14 24 38]

top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)

cardiac cath bms to mid, score: 0.79939127

vessel and the lcx, score: 0.019487748

lcx the cath was, score: 0.015526529

confidence of prediction: 0.935127

Y\_true: [ 4 13 14 18 22 24 38]

Y\_pred: [ 4 13 18 24 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
cabg x3 hyperlipidemia erectile dysfunction rhinitis nstemi, score: 0.14933038  
factors diabetes dyslipidemia hypertension cardiac history cabg, score: 0.12174282  
erectile dysfunction rhinitis social history, score: 0.006693282

confidence of prediction: 0.992374  
Y\_true: [ 4 13 14 18 22 24 38]  
Y\_pred: [ 4 13 18 24 38]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting x3 left internal mammary artery, score: 0.08103574  
cardiac catheterization cabg x lima to, score: 0.06652292  
descending artery saphenous vein to, score: 0.040011257

confidence of prediction: 0.980117  
Y\_true: [ 4 13 14 18 22 24 38]  
Y\_pred: [ 4 13 18 24 38]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.57522833  
wires removed per protocol, score: 0.13479888  
cabg x lima to, score: 0.043201864

confidence of prediction: 0.997637  
Y\_true: [ 4 13 14 18 22 24 38]  
Y\_pred: [ 4 13 18 24 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
cardiac catheterization cabg x lima to, score: 0.19559984  
coronary artery disease s p cabg x3, score: 0.17413111  
coronary artery bypass grafting, score: 0.03512838

confidence of prediction: 0.513130  
Y\_true: [ 4 13 14 18 22 24 38]  
Y\_pred: [ 4 13 18 24 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
catherization lab were severe two, score: 0.07596637  
obtuse marginal please see, score: 0.061383273  
catheterization cabg x lima, score: 0.049509235

confidence of prediction: 0.972287  
Y\_true: [20 28]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
abuse issues hypertension started nadolol on, score: 0.2883512  
seizures hypertension social history lives, score: 0.0745683  
f u htn management substance abuse, score: 0.058038097

confidence of prediction: 0.887537  
Y\_true: [20 28]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
history of present illness, score: 0.38594657  
otherwise normal egd to, score: 0.32397848  
also revealed columns of, score: 0.05007862

confidence of prediction: 0.953732  
Y\_true: [ 4 20 26 49]  
Y\_pred: [ 3 20 24 26 49]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
qd allopurinol lovastatin coumadin mg q, score: 0.03649891  
valve replacement hypertension gout social history social, score: 0.022460952  
history pmhx hypercholesteremia aortic, score: 0.004042503

confidence of prediction: 0.907664  
Y\_true: [ 4 20 26 49]  
Y\_pred: [ 3 20 24 26 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation he was seen by, score: 0.22360836  
atrial fibrillation discharge condition aox3, score: 0.06971328  
started on coumadin 10mg, score: 0.0022336966

confidence of prediction: 0.829883  
Y\_true: [ 4 20 26 49]  
Y\_pred: [ 3 20 24 26 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
who takes coumadin for a, score: 0.79173505  
a day warfarin mg tablet sig, score: 0.061294626  
allopurinol lovastatin coumadin mg, score: 0.054669507

confidence of prediction: 0.988563  
Y\_true: [13 17 18 22 24]  
Y\_pred: [13 18 22 24 25]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting, score: 0.40133083  
left internal mammary artery grafted to, score: 0.06284837  
coronary artery bypass grafting x left, score: 0.06139746

confidence of prediction: 0.970112  
Y\_true: [13 17 18 22 24]  
Y\_pred: [13 18 22 24 25]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
lotions powders or ointments to, score: 0.22664097  
incisions no baths or, score: 0.19713175  
cardiothoracic doctor first name, score: 0.13406166

confidence of prediction: 0.678516  
Y\_true: [13 17 18 22 24]  
Y\_pred: [13 18 22 24 25]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
chief complaint nstemi major surgical or invasive, score: 0.04101432  
have non stemi with trop i had, score: 0.013620588  
3vessel coronary disease ef55, score: 0.0049749445

confidence of prediction: 0.999264  
Y\_true: [13 17 18 22 24]  
Y\_pred: [13 18 22 24 25]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.54749334  
coronary artery disease s p coronary artery bypass grafting, score:  
0.11590788  
3vessel coronary disease ef55 she, score: 0.05973423

confidence of prediction: 0.849829  
Y\_true: [ 1 8 19 26 49]  
Y\_pred: [ 1 19 26 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
daily levothyroxine 75mcg daily omeprazole 40mg, score: 0.26460147  
year hypothyroidism mr tr tte systolic, score: 0.07410565  
dose levoxyl during this, score: 0.04293217

confidence of prediction: 0.956628  
Y\_true: [ 1 8 19 26 49]  
Y\_pred: [ 1 19 26 49]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
was emergently dialyzed in the, score: 0.20537964  
discharge diagnosis esrd now s, score: 0.034823153  
round of hemodialysis when transferred, score: 0.034494624

confidence of prediction: 0.992145  
Y\_true: [ 1 8 19 26 49]  
Y\_pred: [ 1 19 26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib a tsh was sent, score: 0.4425293  
paf on coumadin and amiodarone, score: 0.3177573  
afib and was complaining, score: 0.09276837

confidence of prediction: 0.532267  
Y\_true: [ 1 8 19 26 49]  
Y\_pred: [ 1 19 26 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
paf on coumadin and, score: 0.38933688  
every hours warfarin mg tablet sig, score: 0.28739733



of on coumadin morphine, score: 0.06360103

confidence of prediction: 0.864909

Y\_true: [ 2 4 8 13 18 20 24 26 47 49]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

lad diabetes mellitus type hypertension hyperlipidemia, score: 0.038638968

artery diabetes mellitus type hypertension hyperlipidemia, score: 0.02026139

daily metformin er mg daily tramadol, score: 0.019774504

confidence of prediction: 0.784247

Y\_true: [ 2 4 8 13 18 20 24 26 47 49]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

type hypertension hyperlipidemia atrial flutter at hospital1, score: 0.075608835

amputation d t osteomyelitis, score: 0.071921155

hctz daily [UNK] daily, score: 0.008107239

confidence of prediction: 0.988072

Y\_true: [ 2 4 8 13 18 20 24 26 47 49]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass [UNK], score: 0.4684037

descending artery reverse spahenous, score: 0.09792993

coronary artery bypass grafting please see, score: 0.028618515

confidence of prediction: 0.962237

Y\_true: [ 2 4 8 13 18 20 24 26 47 49]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

lotions powders or ointments to, score: 0.31790403

incisions no baths or, score: 0.27651212

bypass grafting please see or, score: 0.026267057

confidence of prediction: 0.966307

Y\_true: [ 2 4 8 13 18 20 24 26 47 49]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hctz daily [UNK] daily metformin er mg daily, score: 0.12856467

history occupation retired music director last, score: 0.07980514

mellitus type hypertension hyperlipidemia atrial flutter at, score: 0.062041152

confidence of prediction: 0.999328

Y\_true: [ 2 4 8 13 18 20 24 26 47 49]

Y\_pred: [ 2 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass [UNK], score: 0.30799174  
descending artery reverse spahenous, score: 0.12981637  
coronary artery disease in, score: 0.110405326

confidence of prediction: 0.808429

Y\_true: [ 5 9 35 44]

Y\_pred: [ 5 35 44]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
to be hyponatremic and hypokalemic on, score: 0.51665723  
renal failure hyponatremia hypokalemia anemia discharge condition,  
score: 0.24567445  
recorded as having no, score: 0.041707538

confidence of prediction: 0.526472

Y\_true: [ 5 9 35 44]

Y\_pred: [ 5 35 44]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
recorded as having no, score: 0.01986517  
diagnoses acute renal failure hyponatremia hypokalemia, score:  
0.018296061  
an acute renal failure he was, score: 0.013866444

confidence of prediction: 0.680630

Y\_true: [ 5 9 35 44]

Y\_pred: [ 5 35 44]

top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
he was transfused units prbcs in the micu, score: 0.034055673  
illicit drug use family history, score: 0.020743418  
prbcs x3 units history, score: 0.009496331

confidence of prediction: 0.658351

Y\_true: [ 4 10 20 23 24 41]

Y\_pred: [10 23 24 41]

top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
crani evacuation duraplasty and kept, score: 0.005669489  
social history smokes ppd x years drinks, score: 0.005099699  
htn discharge medications acetaminophen, score: 0.0009516037

confidence of prediction: 0.703976

Y\_true: [ 4 10 20 23 24 41]

Y\_pred: [10 23 24 41]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
htn hypercholesterol cad s p mi years ago social history, score:  
0.0014084425  
right sided lesion frozen section it, score: 0.00084610615  
right sided lesion it, score: 0.00084610615

confidence of prediction: 0.570458  
Y\_true: [ 4 10 20 23 24 41]  
Y\_pred: [10 23 24 41]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
sided lesion frozen section it consists, score: 0.049192626  
hypercholesterol cad s p mi years ago social history, score:  
0.036880065  
sided lesion it consists of, score: 0.028241448

confidence of prediction: 0.954954  
Y\_true: [ 4 10 20 23 24 41]  
Y\_pred: [10 23 24 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
placed tube feeds were started pt, score: 0.14339016  
dobhoff tube because of his, score: 0.008542349  
discharged to said facility, score: 0.0073997243

confidence of prediction: 0.974448  
Y\_true: [ 4 14 18 20 24 38]  
Y\_pred: [13 18 20 24 38 40 42 48]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires and chest tubes, score: 0.11350387  
cardiothoracic allergies patient recorded, score: 0.01228912  
avr 23mm doctor last, score: 0.012215669

confidence of prediction: 0.627261  
Y\_true: [ 4 14 18 20 24 38]  
Y\_pred: [13 18 20 24 38 40 42 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension recently underwent xrt, score:  
0.08259357  
witnessed vfib arrest major surgical, score: 0.047788993  
placement for chb after cabg htn severe, score: 0.042192757

confidence of prediction: 0.860010  
Y\_true: [ 4 14 18 20 24 38]  
Y\_pred: [13 18 20 24 38 40 42 48]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cardiac catheterization re do, score: 0.25116554  
coronary artery disease s p cabg in lima to, score: 0.052211355  
s p cabg in, score: 0.04442829

confidence of prediction: 0.658897  
Y\_true: [ 4 14 18 20 24 38]  
Y\_pred: [13 18 20 24 38 40 42 48]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization re do sternotomy, score: 0.6456007

varicosities none x neuro, score: 0.052587472  
prebypass mild spontaneous echo, score: 0.039916117

confidence of prediction: 0.737001  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus type sleep apnea, score: 0.0808061  
diabetes mellitus and previous, score: 0.066596024  
metformin mg hospital1 humulin, score: 0.04178864

confidence of prediction: 0.747315  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
of hypertension hyperlipidemia diabetes mellitus and previous,  
score: 0.06947124  
cad hypertension dyslipidemia diabetes mellitus type, score:  
0.037580922

confidence of prediction: 0.988294  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
bypass grafting x4 with, score: 0.22131276  
bypass graft x4 lima lad svg, score: 0.06993925  
coronary artery bypass x4 please, score: 0.029601408

confidence of prediction: 0.589422  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac cath coronary artery bypass, score: 0.37832507  
cardiac cath selective coronary angiography of this, score:  
0.07839702  
cath on which revealed, score: 0.01831792

confidence of prediction: 0.945383  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders on, score: 0.69369835  
bypass grafting x4 with left, score: 0.09077396  
bypass x4 please see, score: 0.023562955

confidence of prediction: 0.923791  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
cad hypertension dyslipidemia diabetes, score: 0.13648325  
history occupation retired last dental exam, score: 0.06445759  
cad patient recently saw, score: 0.045588575

confidence of prediction: 0.988667  
Y\_true: [ 2 4 13 14 18 20 23 24]  
Y\_pred: [ 2 4 13 14 18 20 22 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p coronary artery bypass graft, score:  
0.14891401  
coronary artery disease do, score: 0.14175718  
cardiac cath coronary artery bypass graft, score: 0.10728667

confidence of prediction: 0.780789  
Y\_true: [ 4 13 15 18 20 24 26 38 49]  
Y\_pred: [ 4 13 18 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia coronary artery disease s,  
score: 0.15008321  
artery disease hyperlipidemia hypertension discharge condition good,  
score: 0.09895429  
atenolol daily plavix daily, score: 0.016961625

confidence of prediction: 0.984925  
Y\_true: [ 4 13 15 18 20 24 26 38 49]  
Y\_pred: [ 4 13 18 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending artery reverse saphenous vein graft, score: 0.15322089  
artery reverse saphenous vein graft, score: 0.03612311  
bypass graft times three, score: 0.018741345

confidence of prediction: 0.976940  
Y\_true: [ 4 13 15 18 20 24 26 38 49]  
Y\_pred: [ 4 13 18 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.5723416  
cardiothoracic allergies shellfish derived, score: 0.14206035  
bypass grafting x3 pmh coronary artery, score: 0.027782135

confidence of prediction: 0.993354  
Y\_true: [ 4 13 15 18 20 24 26 38 49]  
Y\_pred: [ 4 13 18 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
descending artery reverse saphenous vein, score: 0.26151186  
coronary artery disease s p coronary artery, score: 0.13135153  
coronary artery disease s, score: 0.08788946

confidence of prediction: 0.949060  
Y\_true: [ 4 13 15 18 20 24 26 38 49]  
Y\_pred: [ 4 13 18 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
amiodarone mg tablet sig, score: 0.005362695  
developed atrial fibrillation which responded to, score: 0.002683152  
furosemide mg tablet sig, score: 0.0013963261

confidence of prediction: 0.667869  
Y\_true: [ 3 11]  
Y\_pred: [3]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
secondary diagnosis hypercholesterolemia rheumatoid arthritis  
depression discharge, score: 0.15171932  
medical history hypercholesterolemia rheumatoid arthritis depression  
social, score: 0.07958452  
planned hip surgery for, score: 0.0033847813

confidence of prediction: 0.797344  
Y\_true: [ 3 12 16 17 20 33 35 40 42]  
Y\_pred: [19 27 33 35 40]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
intubated with increasing sedation, score: 0.17634256  
and required increasing peep and increasing, score: 0.04188501  
fio2 po2 pco2 ph, score: 0.037051883

confidence of prediction: 0.586870  
Y\_true: [ 3 12 16 17 20 33 35 40 42]  
Y\_pred: [19 27 33 35 40]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
and cr hyperkalemia and, score: 0.07820086  
hemorrhage renal failure shock discharge, score: 0.072921395  
in renal failure requiring, score: 0.060395606

confidence of prediction: 0.557994  
Y\_true: [ 3 12 16 17 20 33 35 40 42]  
Y\_pred: [19 27 33 35 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
she was intubated for concern, score: 0.0699844  
intubat intubated reports cxr et tube left, score: 0.052514464  
aline bronchoscopy r and, score: 0.03200906

confidence of prediction: 0.675332  
Y\_true: [11]  
Y\_pred: [11 20]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
myoclonus depression etoh abuse transferred, score: 0.14380422  
etoh abuse depression social history homeless currently, score:

0.06150706

etoh abuse depression discharge condition afebrile, score:

0.06150706

confidence of prediction: 0.845678

Y\_true: [ 1 4 16 20 26 29 33 34 37 41]

Y\_pred: [ 4 26 29 34 37 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

starting hypertension dyslipidemia doctor last name disease, score:

0.033724017

with apple sauce if, score: 0.018734416

laryngitis from gerd social history, score: 0.005929052

confidence of prediction: 0.841723

Y\_true: [ 1 4 16 20 26 29 33 34 37 41]

Y\_pred: [ 4 26 29 34 37 49]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation requiring three prior, score: 0.4626739

atrial fibrillation after the 2nd, score: 0.02941415

hyponatremia rheumatoid arthritis tia, score: 0.020182513

confidence of prediction: 0.622803

Y\_true: [ 1 4 16 20 26 29 33 34 37 41]

Y\_pred: [ 4 26 29 34 37 49]

top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)

developed a pneumonia and urinary tract infection, score:

0.052747756

made cmo and hospice, score: 0.022848297

to find mention of this, score: 0.016954426

confidence of prediction: 0.860719

Y\_true: [ 1 4 16 20 26 29 33 34 37 41]

Y\_pred: [ 4 26 29 34 37 49]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

tah gerd cervical spondylosis hx of, score: 0.051936503

laryngitis from gerd social history has her, score: 0.036233302

kinase musk antibodies that, score: 0.029306615

confidence of prediction: 0.564745

Y\_true: [ 1 4 16 20 26 29 33 34 37 41]

Y\_pred: [ 4 26 29 34 37 49]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)

and urinary tract infection a family, score: 0.03517968

[UNK] days wk [UNK], score: 0.022576217

20mg hospital1 warfarin 2mg, score: 0.012854601

confidence of prediction: 0.981945

Y\_true: [10 14 16 18 26 27 38 39]

Y\_pred: [18 26 27 38]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards his pre, score: 0.24005292  
cardiothoracic allergies no known, score: 0.011036518  
pacing wires were removed per, score: 0.0064403564

confidence of prediction: 0.965423  
Y\_true: [10 14 16 18 26 27 38 39]  
Y\_pred: [18 26 27 38]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation past surgical history, score: 0.062131844  
fib disp tablet s, score: 0.007674362  
atrial fibrillation was admitted to, score: 0.006014598

confidence of prediction: 0.927026  
Y\_true: [10 14 16 18 26 27 38 39]  
Y\_pred: [18 26 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic congestive heart failure mitral valve regurgitation  
atrial, score: 0.21045302  
congestive heart failure mitral valve regurgitation atrial, score:  
0.06693192  
aortic stenosis atrial fibrillation, score: 0.023522137

confidence of prediction: 0.659660  
Y\_true: [10 14 16 18 26 27 38 39]  
Y\_pred: [18 26 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath selective coronary angiography of this, score:  
0.20673901  
cath history of present, score: 0.0556719  
cardiac catheterization to evaluate, score: 0.05278936

confidence of prediction: 0.974704  
Y\_true: [34]  
Y\_pred: [20 34 37 46]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
doc q lace mg twice, score: 0.009691488  
diazepam fluoxetine gerd continued omeprazole chronic pain, score:  
0.0077015013  
sepsis patient with cp, score: 0.001884841

confidence of prediction: 0.849349  
Y\_true: [ 1 21 25 27 30 35 36 37 39]  
Y\_pred: [25 27]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve prolapse presenting with, score: 0.5249599  
mitral valve prolapse cataracts, score: 0.1488296  
mitral valve prolapse partial, score: 0.050087754



confidence of prediction: 0.902856  
Y\_true: [ 1 21 25 27 30 35 36 37 39]  
Y\_pred: [25 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf less than one, score: 0.045553543  
congestive heart failure with lvef history, score: 0.039016217  
diastolic chf and severe mitral valve, score: 0.028755806

confidence of prediction: 0.779303  
Y\_true: [ 3 13 14 18 20 24 25 26 38]  
Y\_pred: [13 14 18 20 24 26 34 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
cardiac catheterization coronary artery bypass graft x1, score:  
0.09529889  
cabg than pci cabg, score: 0.04970857  
for cabg today he has, score: 0.022383602

confidence of prediction: 0.609337  
Y\_true: [ 3 13 14 18 20 24 25 26 38]  
Y\_pred: [13 14 18 20 24 26 34 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization coronary artery bypass, score: 0.81678134  
catheterization which showed a, score: 0.007601775  
diag mid to distal lcx no, score: 0.006126955

confidence of prediction: 0.979802  
Y\_true: [ 3 13 14 18 20 24 25 26 38]  
Y\_pred: [13 14 18 20 24 26 34 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
washing incisions gently with mild soap, score: 0.009997619  
cardiothoracic allergies ciprofloxacin attending, score: 0.00596161  
incisions each morning you, score: 0.0047562607

confidence of prediction: 0.920240  
Y\_true: [ 3 13 14 18 20 24 25 26 38]  
Y\_pred: [13 14 18 20 24 26 34 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
possibly mild hypertension and, score: 0.064182006  
fibrillation hypercholesterolemia social history, score: 0.028135883  
s p cabg atrial, score: 0.02057175

confidence of prediction: 0.979659  
Y\_true: [ 3 13 14 18 20 24 25 26 38]  
Y\_pred: [13 14 18 20 24 26 34 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg atrial fibrillation, score:  
0.32289556

cardiac catheterization coronary artery bypass graft, score:  
0.16705711

lesion therefore will be, score: 0.07495993

confidence of prediction: 0.935226

Y\_true: [ 3 13 14 18 20 24 25 26 38]

Y\_pred: [13 14 18 20 24 26 34 38]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation s p laa, score: 0.09563165

fibrillation hypercholesterolemia who presented, score: 0.046822462

paf was referred to, score: 0.038996693

confidence of prediction: 0.905055

Y\_true: [ 3 13 14 18 20 24 25 26 38]

Y\_pred: [13 14 18 20 24 26 34 38]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)

cardiac catheterization coronary artery bypass, score: 0.9178116

catheterization which showed a, score: 0.0036952987

multi vessel or proximal, score: 0.0036674351

confidence of prediction: 0.812543

Y\_true: [ 3 7 11 20 37]

Y\_pred: [ 3 4 7 11 20 28 37]

top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)

work hypertension hypercholesterolemia erectile dysfunction  
depression, score: 0.05742825

htn hld multiple cvas, score: 0.000947835

and deceased of stroke, score: 0.0007969302

confidence of prediction: 0.597355

Y\_true: [ 3 7 11 20 37]

Y\_pred: [ 3 4 7 11 20 28 37]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

small melenotic bowel movements, score: 0.07544459

a repeat endoscopy that showed bleeding in, score: 0.06490854

was performed by gi, score: 0.05681728

confidence of prediction: 0.669398

Y\_true: [ 3 7 11 20 37]

Y\_pred: [ 3 4 7 11 20 28 37]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)

his egd depression continued patient s sertraline, score:  
0.006046233

erectile dysfunction depression elevated psa social history, score:  
0.004184823

showed the above findings, score: 0.0029626018

confidence of prediction: 0.994755

Y\_true: [ 3 7 11 20 37]

Y\_pred: [ 3 4 7 11 20 28 37]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

htn hld multiple cvas and, score: 0.16841711

continuing to complain of, score: 0.007785836

had small melenotic bowel, score: 0.0026271495

confidence of prediction: 0.933258

Y\_true: [ 3 7 11 20 37]

Y\_pred: [ 3 4 7 11 20 28 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

discharge urinary tract infection pan sensitive e coli uti noted on previous, score: 0.048935983

dysfunction depression elevated psa, score: 0.0032141309

confidence of prediction: 0.808310

Y\_true: [ 2 4 13 17 18 20 24 47]

Y\_pred: [ 2 4 18 20 24 26 40]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

noninsulin dependent diabetes mellitus hypertension hyperlipidemia social, score: 0.1143896

diabetes mellitus hypertension hyperlipidemia discharge, score: 0.07585823

daily metformin 500mg hospital1 fish oil, score: 0.022942131

confidence of prediction: 0.843462

Y\_true: [ 2 4 13 17 18 20 24 47]

Y\_pred: [ 2 4 18 20 24 26 40]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

mellitus hypertension hyperlipidemia social history last dental, score: 0.08373102

mellitus hypertension hyperlipidemia discharge condition alert, score: 0.08373102

atorvastatin mg hospital1 sig, score: 0.0068949754

confidence of prediction: 0.977171

Y\_true: [ 2 4 13 17 18 20 24 47]

Y\_pred: [ 2 4 18 20 24 26 40]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed in, score: 0.124073416

cardiothoracic allergies norvasc attending, score: 0.054576922

washing incisions gently with mild soap, score: 0.008008192

confidence of prediction: 0.943640

Y\_true: [ 2 4 13 17 18 20 24 47]

Y\_pred: [ 2 4 18 20 24 26 40]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

diabetes mellitus hypertension hyperlipidemia social history last,

score: 0.15389378  
diabetes mellitus hypertension hyperlipidemia discharge condition  
alert, score: 0.15389378  
mechanical cabg x2 lima, score: 0.06543657

confidence of prediction: 0.860216  
Y\_true: [ 2 4 13 17 18 20 24 47]  
Y\_pred: [ 2 4 18 20 24 26 40]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease noninsulin, score: 0.10268743  
lm mid lad 2nd diagonal lesions, score: 0.075609736  
on the surgery was, score: 0.036255796

confidence of prediction: 0.539242  
Y\_true: [ 1 4 11 26 47 49]  
Y\_pred: [ 1 26]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
of hypothyroidism and paroxysmal af admitted, score: 0.5009956  
daily levothyroxine mcg tablet sig, score: 0.06245551  
daily synthroid 100mcg dialy metoprolol xl, score: 0.060510438

confidence of prediction: 0.970561  
Y\_true: [ 1 4 11 26 47 49]  
Y\_pred: [ 1 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf s p pvi, score: 0.38325256  
paf on holter with, score: 0.20222355  
af admitted for elective, score: 0.07674311

confidence of prediction: 0.985496  
Y\_true: [10 11 18 34]  
Y\_pred: [18 27 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued per, score: 0.7359662  
cardiothoracic allergies codeine morphine, score: 0.040733337  
washing incisions gently with mild soap, score: 0.0021992077

confidence of prediction: 0.938433  
Y\_true: [10 11 18 34]  
Y\_pred: [18 27 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
p avr gerd asthma depression left tibial, score: 0.023003224  
aerosol prn omeprazole 20mg, score: 0.007748998  
occupation retired cigarettes smoked, score: 0.0006934051

confidence of prediction: 0.993472  
Y\_true: [ 4 8 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 4 (272.4: Other

and unspecified hyperlipidemia)  
cabg x4 dyslipidemia hypertension cardiac history percutaneous,  
score: 0.4411118  
for hypertension hyperlipidemia and single vessel, score:  
0.009984517

confidence of prediction: 0.999708  
Y\_true: [ 4 8 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
[UNK] x4 lima lad svg, score: 0.0041652215  
wires were discontinued without, score: 0.0016111811  
p cabg x4 dyslipidemia, score: 0.0009260802

confidence of prediction: 0.987566  
Y\_true: [ 4 8 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.72236705  
cabg x4 lima to, score: 0.033064693  
diuresed toward the preoperative, score: 0.020381603

confidence of prediction: 0.952609  
Y\_true: [ 4 8 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
significant for hypertension hyperlipidemia and single vessel,  
score: 0.19819154  
occupation retired cigarettes smoked no, score: 0.10445973  
x4 dyslipidemia hypertension cardiac history percutaneous, score:  
0.030899374

confidence of prediction: 0.999895  
Y\_true: [ 4 8 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cabg x4 lima to, score: 0.5269309  
vessel cad s p bare metal, score: 0.079262316  
single vessel cad s p bare metal, score: 0.02901281

confidence of prediction: 0.928916  
Y\_true: [ 4 8 13 18 20 24 34 47]  
Y\_pred: [ 4 13 18 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
rca in gerd gout h o ulcer, score: 0.04959056  
occupation retired cigarettes smoked, score: 0.0012761699  
allergies penicillins percocet percodan, score: 0.00080779934

confidence of prediction: 0.972604

Y\_true: [26]  
Y\_pred: [26]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib with rates in the, score: 0.71871316  
af on postoperative day, score: 0.16777144  
atrial fibrillation delerium tremens chronic, score: 0.015019392  
  
confidence of prediction: 0.990525  
Y\_true: [ 3 13 18 22 24 37]  
Y\_pred: [ 2 13 18 20 22 24 29]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting x3 with the, score: 0.51304847  
coronary artery bypass graft surgery see, score: 0.07848855  
obtuse marginal coronary artery endoscopic left, score: 0.02410298  
  
confidence of prediction: 0.981410  
Y\_true: [ 3 13 18 22 24 37]  
Y\_pred: [ 2 13 18 20 22 24 29]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
bypass grafting x3 with the, score: 0.03168296  
cardiothoracic allergies penicillins beta, score: 0.01449046  
tee was performed in, score: 0.008273605  
  
confidence of prediction: 0.786020  
Y\_true: [ 3 13 18 22 24 37]  
Y\_pred: [ 2 13 18 20 22 24 29]  
top three important windows for true positive code 22 (410.71: Subendocardial infarction, initial episode of care)  
non st elevation myocardial infarction community acquired, score: 0.010656714  
non st elevation myocardial infarction and cardiac, score: 0.010650512  
for myocardial infarction troponin street, score: 0.0071945726  
  
confidence of prediction: 0.999131  
Y\_true: [ 3 13 18 22 24 37]  
Y\_pred: [ 2 13 18 20 22 24 29]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.60442793  
coronary artery disease s p cabg non st, score: 0.1279613  
coronary artery bypass graft, score: 0.025814304  
  
confidence of prediction: 0.903560  
Y\_true: [20 31 47]  
Y\_pred: [20 27 33]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
hypertension lower extremity edema hypertension social history smoked 3pks, score: 0.28545085  
[UNK] serevent 50mcg discus lasix 20mg, score: 0.031636428

advair spiriva singulair and, score: 0.029085275

confidence of prediction: 0.684610

Y\_true: [ 1 4 10 20 33 34]

Y\_pred: [1 2 4]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

hypoglycemics hypothyroidism bipolar disease obesity, score:

0.3577754

disorder hypothyroidism and diabetic neuropathy, score: 0.1618518

pm levothyroxine mcg tablet tablet s, score: 0.10662913

confidence of prediction: 0.763470

Y\_true: [ 1 4 10 20 33 34]

Y\_pred: [1 2 4]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

disease obesity hyperlipidemia osteoarthritis of the knees, score:

0.10380099

day rosuvastatin crestor mg tablet tablet, score: 0.024471236

daily daily rosuvastatin mg tablet sig, score: 0.010763451

confidence of prediction: 0.952320

Y\_true: [ 4 20 32]

Y\_pred: [ 4 20]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history pmh hypertension hyperlipidemia sleep apnea social history,  
score: 0.0023940466

statin atenolol 25mg discharge, score: 0.0017180975

controlled with prn dilaudid, score: 0.0015446901

confidence of prediction: 0.999727

Y\_true: [ 4 20 32]

Y\_pred: [ 4 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

history pmh hypertension hyperlipidemia sleep apnea social, score:

0.11846261

off a ladder onto concrete onto, score: 0.011810794

non steroidal antiinflammatory drugs, score: 0.0030144777

confidence of prediction: 0.944447

Y\_true: [17 21 33 35 37 42]

Y\_pred: [ 4 17 37 43]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

line placement intubated supported, score: 0.3743946

by a ventilator history of present illness, score: 0.027363207

a picc line was placed for, score: 0.021506341

confidence of prediction: 0.974269

Y\_true: [17 21 33 35 37 42]

Y\_pred: [ 4 17 37 43]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
both a uti with klebsiella and pna with staph, score: 0.015848361  
mg tablet chewable sig, score: 0.005546544  
excoriations on her abdomen, score: 0.0040052934

confidence of prediction: 0.991502  
Y\_true: [ 4 5 16 17 20 37 41 42]  
Y\_pred: [20 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension s p melanoma, score: 0.30946028  
hctz gabapentin [UNK] crestor discharge medications staples, score:  
0.031116102  
a holocaust survivor her son, score: 0.019496264

confidence of prediction: 0.904542  
Y\_true: [ 4 5 16 17 20 37 41 42]  
Y\_pred: [20 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
illness 78f found down with uti troponin bradycardia with 4th,  
score: 0.027148595  
vermis urinary tract infection myocardial infarction, score:  
0.0073169414  
a tract in the, score: 0.005647657

confidence of prediction: 0.657845  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
related to sepsis fluids restricted lasix continued, score:  
0.33923462  
[UNK] with sepsis secondary diagnosis renal failure, score:  
0.03184951  
a widespread encephalopathy affecting both cortical, score:  
0.01743534

confidence of prediction: 0.889442  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
a widespread encephalopathy affecting both cortical, score:  
0.052911077  
[UNK] gallbladder central line changed ef hepatic, score:  
0.046451353  
patient had respiratory distress, score: 0.027817672

confidence of prediction: 0.548341  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 33 (518.81: Acute



respiratory failure)  
intubated for airway protection while percutaneous drain placed,  
score: 0.12651746  
intubated for tachypnea ptc, score: 0.10404506  
intubated for airway protection eeg done neuro consulted, score:  
0.07707942

confidence of prediction: 0.722155  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
today intubated started on, score: 0.10813475  
monitoring intubated for tachypnea, score: 0.07516774  
and was intubated for airway protection while percutaneous drain  
placed, score: 0.038721938

confidence of prediction: 0.531203  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
while percutaneous drain placed past, score: 0.22529341  
today intubated started on, score: 0.13637812  
eeg abnormal eeg due to, score: 0.064363785

confidence of prediction: 0.718286  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
bun 2u prbc r uq us, score: 0.18050933  
bun 2u prbc given r uq us, score: 0.18050933  
multiple medical conditions depressive d, score: 0.020948565

confidence of prediction: 0.745290  
Y\_true: [ 0 11 16 17 19 21 33 36 40 42 43 44 45 46]  
Y\_pred: [ 0 17 33 40 42 44 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
collection surrounding decompressed gb c w, score: 0.08558367  
us decompressed gb non, score: 0.02946302  
duplex us tpn ordered insulin gtt extubated, score: 0.0267933

confidence of prediction: 0.975601  
Y\_true: [ 4 18 20 24 44 47]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires are still in, score: 0.5788758  
lotions or ointments to, score: 0.2423316  
effusion electronically signed by, score: 0.027374828

confidence of prediction: 0.639755  
Y\_true: [ 4 18 20 24 44 47]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
exertional dyspnea major surgical, score: 0.33134463  
ischemic cardiomyopathy hypertension dyslipidemia elevated psa,  
score: 0.20570448  
machine vivid echocardiographic measurements, score: 0.04839754

confidence of prediction: 0.977327  
Y\_true: [ 4 18 20 24 44 47]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s, score: 0.17955233  
three vessel coronary artery bypass grafting, score: 0.12005584  
coronary artery disease ischemic cardiomyopathy hypertension, score:  
0.07015342

confidence of prediction: 0.990950  
Y\_true: [20 27 34 37]  
Y\_pred: [ 4 20 27 30 34 37 41 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
sbo gallstones htn hld gerd emphysema on, score: 0.33184206  
40mg daily zocor 40mg daiyl flomax qhs, score: 0.030920612

confidence of prediction: 0.906523  
Y\_true: [20 27 34 37]  
Y\_pred: [ 4 20 27 30 34 37 41 43]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diagnosis of chf though ef shown to, score: 0.028085351  
diastolic dysfunction he carries, score: 0.022835134  
medical history chf ef unknown sbo gallstones, score: 0.017670419

confidence of prediction: 0.831324  
Y\_true: [20 27 34 37]  
Y\_pred: [ 4 20 27 30 34 37 41 43]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
htn hld gerd emphysema on l suppl, score: 0.0072989594  
substantial baseline requirement of 5lnc so he, score: 0.0067915507  
pursued and revealed no, score: 0.0055627786

confidence of prediction: 0.938483  
Y\_true: [20 27 34 37]  
Y\_pred: [ 4 20 27 30 34 37 41 43]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
and uti ct head, score: 0.117007114  
urinary tract infection that grew, score: 0.073703766  
urinary tract infection there, score: 0.073703766

confidence of prediction: 0.698148  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
supported with vasopressors from, score: 0.052369997  
fem cvl was placed she was, score: 0.04343232  
management of cervical cancer, score: 0.033184696

confidence of prediction: 0.846097  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib with rvr with conversion, score: 0.28585923  
fib with rvr and flash, score: 0.23057267  
atrial fibrillation dccv on and, score: 0.1564761

confidence of prediction: 0.941056  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chronic systolic chf which improved with diuresis, score: 0.09316711  
systolic murmur loudest at, score: 0.01766881  
flash pulmonary edema treated, score: 0.015328581

confidence of prediction: 0.958936  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
required endotracheal intubation following intubation patient had, score: 0.08158679  
percutaneous nephrostomy tube endotracheal intubation extubation  
cervical biopsy, score: 0.05755126  
supported with vasopressors from to, score: 0.03257939

confidence of prediction: 0.532101  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
palliative treatment following resolution, score: 0.03339077  
cipro monotherapy began to, score: 0.017487884  
for complicated uti respiratory failure intubated, score: 0.013940248

confidence of prediction: 0.850398  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

required endotracheal intubation following intubation patient had, score: 0.12883992  
tube endotracheal intubation extubation cervical biopsy endotracheal intubation history of, score: 0.07976488  
intubate for airway protection, score: 0.010169944

confidence of prediction: 0.920576  
Y\_true: [ 7 11 17 20 22 26 27 33 37 40 41 43 46]  
Y\_pred: [ 0 6 17 25 26 27 33 35 37 40 42 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
supported with vasopressors from to, score: 0.5198243  
shock treated empirically with, score: 0.025715439  
then cr up to, score: 0.023505237

confidence of prediction: 0.543195  
Y\_true: [ 1 8 34]  
Y\_pred: [ 1 20 34]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
gerd hypothyroidism c section in, score: 0.014285562  
on admission levothyroxine mcg tablet tablets, score: 0.0056001153  
discharge medications levothyroxine mcg tablet sig one, score: 0.002249387

confidence of prediction: 0.746213  
Y\_true: [ 1 8 34]  
Y\_pred: [ 1 20 34]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
ohms sensing mv and, score: 0.021166937  
femoral line was placed and, score: 0.014129059  
line somewhat distant heart sounds, score: 0.008642347

confidence of prediction: 0.503174  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 0 (038.9: Unspecified septicemia)  
septic shock atn requiring transient, score: 0.052879523  
and was started on broad spectrum antibiotics he was, score: 0.035934947  
gbs sepsis shock atn w transient, score: 0.03407289

confidence of prediction: 0.808007  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
initiated on cvvh this was, score: 0.26720247  
dm ckd iii htn, score: 0.02641695  
then developed acute hypercapnea hypoxia and, score: 0.006169727

confidence of prediction: 0.681353

Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
ckd stage iii cr new baseline since last, score: 0.29760855  
chronic renal failure and possible, score: 0.08436725  
cv [UNK] diminished s1, score: 0.045217775

confidence of prediction: 0.984075  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib since admission here, score: 0.30138978  
atrial fibrillation he continued to, score: 0.054868367  
atrial fibrillation and prior to, score: 0.010438624

confidence of prediction: 0.915204  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf lvef rv dilation, score: 0.16874115  
chf lower extremity ulcers major, score: 0.15305588  
acute systolic chf, score: 0.10211991

confidence of prediction: 0.792074  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
developed a pneumonia with respiratory failure and, score:  
0.16037937  
acute hypercapnea hypoxia and, score: 0.02310745  
bibasilar rales and massive, score: 0.017600916

confidence of prediction: 0.894882  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
tee no spontaneous echo, score: 0.91353863  
transesophageal echocardiogram history of, score: 0.059214894  
mitral valve prolapse mild mitral, score: 0.0009937095

confidence of prediction: 0.775699  
Y\_true: [ 0 6 9 12 19 21 26 27 29 35 39 43 45 46 49]  
Y\_pred: [ 0 1 19 21 26 27 29 33 39 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock atn requiring transient, score: 0.077459775  
sepsis shock atn w transient, score: 0.03285535  
and was started on broad spectrum antibiotics he, score: 0.028419541

confidence of prediction: 0.650149  
Y\_true: [ 1 4 18 27 32 34 37]  
Y\_pred: [ 1 4 15 18 25 27 34 38 39 44]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
arthropathy hypothyroidism thyroid nodule benign, score: 0.15079136  
protonix hospital1 levoxyl qd atenolol qd aspirin, score:  
0.008955431  
facility hospital1 vna discharge, score: 0.002947913

confidence of prediction: 0.973725  
Y\_true: [ 1 4 18 27 32 34 37]  
Y\_pred: [ 1 4 15 18 25 27 34 38 39 44]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
[UNK] 1000mg tid feso4 325mg qd, score: 0.0037223871  
field deficit dyslipidemia asthma restrictive lung disease, score:  
0.002562519  
levoxyl qd atenolol qd, score: 0.0010398541

confidence of prediction: 0.971448  
Y\_true: [ 1 4 18 27 32 34 37]  
Y\_pred: [ 1 4 15 18 25 27 34 38 39 44]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic doctor first name, score: 0.2850428  
cardiothoracic allergies remicade attending, score: 0.014404167  
tee was performed in, score: 0.012915766

confidence of prediction: 0.658472  
Y\_true: [ 1 4 18 27 32 34 37]  
Y\_pred: [ 1 4 15 18 25 27 34 38 39 44]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
25mm st male first, score: 0.023659062  
heart cardiac catheterization have, score: 0.018113809  
implantation difficult intubation followed cardiac, score:  
0.01178201

confidence of prediction: 0.753763  
Y\_true: [ 1 4 18 27 32 34 37]  
Y\_pred: [ 1 4 15 18 25 27 34 38 39 44]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
and women s hospital, score: 0.010999198  
and women s with, score: 0.010999198  
incontinence gastroesophageal reflux disease ulcerative colitis,  
score: 0.009538587

confidence of prediction: 0.815981  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus gastric reflux dyslipidemia, score: 0.15922791  
noninsulin dependent diabetes mellitus hypertension s p, score: 0.15922791  
admission metformin triamterene hctz, score: 0.021667456

confidence of prediction: 0.752628  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
artery disease dyslipidemia atrial fibrillation noninsulin, score: 0.09442324  
sternotomy for cabg avr, score: 0.061636824  
cabg follow up since, score: 0.04719263

confidence of prediction: 0.961438  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
effusion post bypass left, score: 0.026462536  
coronary artery bypass grafts x lima lad history of, score: 0.024083821  
redosternotomy cabgx lima lad avr street, score: 0.012069809

confidence of prediction: 0.920690  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.8196653  
cardiothoracic allergies patient recorded, score: 0.020201826  
lima lad avr street, score: 0.016141174

confidence of prediction: 0.956121  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
repair hypertension atrial fibrillation noninsulin dependent diabetes mellitus, score: 0.045604106  
metformin triamterene hctz toprol xl glipizide amiodarone, score: 0.04225498  
noninsulin dependent diabetes mellitus hypertension s p mitral, score: 0.030833125

confidence of prediction: 0.746095  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

coronary artery disease h o, score: 0.16151124  
coronary artery disease major surgical, score: 0.09774111  
aortic insufficiency coronary artery disease dyslipidemia, score:  
0.03077965

confidence of prediction: 0.981023  
Y\_true: [ 2 4 13 18 20 24 26 39 49]  
Y\_pred: [ 2 4 13 18 20 24 25 26 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation recently he ha, score: 0.67614603  
atrial fibrillation chest pain coronary, score: 0.058576785  
af workup and cardiac, score: 0.039006338

confidence of prediction: 0.826271  
Y\_true: [ 2 21 24 27 34 36]  
Y\_pred: [21 24 27 30 34 36 38]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
ace inhibitor cri patient received several, score: 0.05701009  
and chronic kidney failure diabetes physical exam, score:  
0.011600123  
daily pyridoxine 100mg daily vitamin, score: 0.007396157

confidence of prediction: 0.955599  
Y\_true: [ 2 21 24 27 34 36]  
Y\_pred: [21 24 27 30 34 36 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease gerd, score: 0.05649738  
vessel coronary artery disease and, score: 0.048766274  
coronary artery disease known mid, score: 0.038777493

confidence of prediction: 0.987351  
Y\_true: [ 2 21 24 27 34 36]  
Y\_pred: [21 24 27 30 34 36 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure he was continued, score: 0.43852967  
failure and chronic kidney, score: 0.012139914  
pulmonary edema with development, score: 0.0068635666

confidence of prediction: 0.906773  
Y\_true: [ 2 21 24 27 34 36]  
Y\_pred: [21 24 27 30 34 36 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
artery disease gerd discharge condition good, score: 0.060445614  
oxygen gerd continued on ppi medications, score: 0.03679691  
wrist surgery gerd social history he is, score: 0.025434379

confidence of prediction: 0.817487  
Y\_true: [ 2 21 24 27 34 36]



Y\_pred: [21 24 27 30 34 36 38]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
ace inhibitor cri patient received several, score: 0.07821727  
and chronic kidney failure diabetes physical exam, score: 0.00811077  
daily pyridoxine 100mg daily vitamin, score: 0.006542152

confidence of prediction: 0.912040  
Y\_true: [ 4 20 30]  
Y\_pred: [ 4 20 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
aerosol inhaler hospital1 one puff, score: 0.009397799  
history asthma copd htn hyperlipidemia h o prostate ca, score:  
0.003112237

confidence of prediction: 0.917004  
Y\_true: [ 4 20 30]  
Y\_pred: [ 4 20 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
asthma copd htn hyperlipidemia h o prostate, score: 0.12023603  
colonic polyps lichen simplex chronicus, score: 0.088852964  
cholecystostomy tube placement history, score: 0.03095344

confidence of prediction: 0.742775  
Y\_true: [ 4 20 30]  
Y\_pred: [ 4 20 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
history asthma copd htn hyperlipidemia h o prostate, score:  
0.25675446  
every hours tiotropium bromide, score: 0.0031214429  
elderly male in no, score: 0.0027198254

confidence of prediction: 0.985774  
Y\_true: [ 4 13 18 19 24 25 26 38]  
Y\_pred: [13 18 19 22 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x4 with, score: 0.049952395  
artery and reverse saphenous vein graft, score: 0.030837415  
wires were discontinued without, score: 0.029681347

confidence of prediction: 0.986627  
Y\_true: [ 4 13 18 19 24 25 26 38]  
Y\_pred: [13 18 19 22 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.73090816  
bypass grafting x4 with left, score: 0.017605573  
cardiothoracic allergies no known, score: 0.0059101395

confidence of prediction: 0.618496

Y\_true: [ 4 13 18 19 24 25 26 38]  
Y\_pred: [13 18 19 22 24 26]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
he was dialyzed on pod, score: 0.11226026  
stage renal disease spinal, score: 0.054675512  
labile with dialysis midodrine was started he, score: 0.054209128

confidence of prediction: 0.988764  
Y\_true: [ 4 13 18 19 24 25 26 38]  
Y\_pred: [13 18 19 22 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease acute, score: 0.15288523  
coronary artery disease balloon, score: 0.14553754  
and sequential reverse saphenous vein graft, score: 0.07929854

confidence of prediction: 0.978665  
Y\_true: [ 4 13 18 19 24 25 26 38]  
Y\_pred: [13 18 19 22 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation for which he, score: 0.13776192  
afib well and he, score: 0.016423827  
afib discharge disposition extended, score: 0.013781856

confidence of prediction: 0.500716  
Y\_true: [ 2 12 17 24 25 26 30 33 40 41 42]  
Y\_pred: [17 20 24 26 33 39 40 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement history of, score: 0.040165655  
gerd multinodular goiter social history, score: 0.03464434  
had progressive supplementary o2 requirements and, score: 0.0292426

confidence of prediction: 0.897057  
Y\_true: [ 2 12 17 24 25 26 30 33 40 41 42]  
Y\_pred: [17 20 24 26 33 39 40 42 43]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
above cad cardiomyopathy patient had an, score: 0.19477765  
cad s p bms to rca in upper lobe bronchiectasis, score: 0.017752195  
of cad hypotension initially, score: 0.01600904

confidence of prediction: 0.927490  
Y\_true: [ 2 12 17 24 25 26 30 33 40 41 42]  
Y\_pred: [17 20 24 26 33 39 40 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib rr o2sat on, score: 0.32656127  
atrial fibrillation patient was well, score: 0.14738429  
atrial fibrillation who was transferred, score: 0.090347685

confidence of prediction: 0.903337

Y\_true: [ 2 12 17 24 25 26 30 33 40 41 42]  
Y\_pred: [17 20 24 26 33 39 40 42 43]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxic respiratory failure after an, score: 0.22073588  
progressive respiratory failure she was intubated at, score: 0.120179266  
hypoxemic respiratory failure her ventilator requirements continued, score: 0.08398647

confidence of prediction: 0.805624  
Y\_true: [ 2 12 17 24 25 26 30 33 40 41 42]  
Y\_pred: [17 20 24 26 33 39 40 42 43]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
of intubation she also, score: 0.07017027  
she was intubated at the, score: 0.06615702  
she was intubated for hypoxemic respiratory, score: 0.05769622

confidence of prediction: 0.574440  
Y\_true: [ 2 12 17 24 25 26 30 33 40 41 42]  
Y\_pred: [17 20 24 26 33 39 40 42 43]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
arterial line placement history, score: 0.266591  
her ventilator requirements continued, score: 0.042837966  
she was intubated at the, score: 0.03027166

confidence of prediction: 0.897878  
Y\_true: [ 2 3 20 29]  
Y\_pred: [ 2 4 20 29]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
problems type dm on metformin home patient kept, score: 0.018962542  
obesity type dm hypertension high cholesterol, score: 0.015602261  
metformin mg hospital1 ibuprofen mg, score: 0.0066282433

confidence of prediction: 0.953197  
Y\_true: [ 2 3 20 29]  
Y\_pred: [ 2 4 20 29]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
type dm hypertension high cholesterol sleep apnea, score: 0.2466829  
htn patient on lisinopril 20mg, score: 0.12704709  
hctz metformin mg hospital1 ibuprofen, score: 0.11964053

confidence of prediction: 0.791868  
Y\_true: [ 2 3 20 29]  
Y\_pred: [ 2 4 20 29]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
community acquired pneumonia discharge condition mental, score:

0.19081317

have pneumonia with bandemia, score: 0.08503364

given hypoxia pneumonia was felt, score: 0.03722141

confidence of prediction: 0.985590

Y\_true: [ 3 13 18 20 24 26 30]

Y\_pred: [13 18 20 24 26 30]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass surgery, score: 0.61924237

coronary artery bypass graft x cross, score: 0.09473458

wires were discontinued without, score: 0.02466368

confidence of prediction: 0.986162

Y\_true: [ 3 13 18 20 24 26 30]

Y\_pred: [13 18 20 24 26 30]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.7565426

washing incisions gently with mild soap, score: 0.002260694

marginal history of present, score: 0.002176967

confidence of prediction: 0.996320

Y\_true: [ 3 13 18 20 24 26 30]

Y\_pred: [13 18 20 24 26 30]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

[UNK] copd hypertension hypercholesterolemia gluten sensitivity

social history, score: 0.14623436

[UNK] copd hypertension hypercholesterolemia gluten sensitivity

discharge, score: 0.14623436

occupation recently retired banking, score: 0.028964806

confidence of prediction: 0.998486

Y\_true: [ 3 13 18 20 24 26 30]

Y\_pred: [13 18 20 24 26 30]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass surgery, score: 0.5117184

coronary artery disease sp coronary artery bypass graft, score:

0.108334094

coronary artery disease s, score: 0.04232753

confidence of prediction: 0.969861

Y\_true: [ 3 13 18 20 24 26 30]

Y\_pred: [13 18 20 24 26 30]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation coumadin was stopped physical, score:

0.035216905

atrial fibrillation with amiodarone and, score: 0.02282346

amiodarone dosing mg twice a, score: 0.009559869

confidence of prediction: 0.742385

Y\_true: [ 3 13 18 20 24 26 30]  
Y\_pred: [13 18 20 24 26 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
hospital1 [UNK] copd hypertension hypercholesterolemia gluten  
sensitivity, score: 0.32097754  
hospital1 [UNK] copd hypertension hypercholesterolemia gluten,  
score: 0.32097754  
systolic function lvef right, score: 0.0026546235

confidence of prediction: 0.990309  
Y\_true: [ 6 7 10 13 18 24 25]  
Y\_pred: [13 18 20 24 25]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
cabg x lima lad svg om mitral, score: 0.532739  
descending coronary reverse saphenous vein single, score: 0.08559796  
wires were discontinued without, score: 0.021680554

confidence of prediction: 0.985875  
Y\_true: [ 6 7 10 13 18 24 25]  
Y\_pred: [13 18 20 24 25]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.72585976  
diuresed toward the preoperative, score: 0.02048015  
cabg x lima lad, score: 0.017117012

confidence of prediction: 0.994829  
Y\_true: [ 6 7 10 13 18 24 25]  
Y\_pred: [13 18 20 24 25]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
descending coronary reverse saphenous vein, score: 0.33975026  
coronary artery disease type, score: 0.12153083  
cabg x lima lad, score: 0.049523097

confidence of prediction: 0.707920  
Y\_true: [ 6 7 10 13 18 24 25]  
Y\_pred: [13 18 20 24 25]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
severe mitral regurgitation is seen, score: 0.1605046  
mitral valve replacement with, score: 0.10055756  
diagnosis mitral regurgitation coronary artery, score: 0.050198935

confidence of prediction: 0.840243  
Y\_true: [20]  
Y\_pred: [20 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diagnosis perforated diverticulitis discharge condition, score:  
0.2805525  
uses inhaler social history no, score: 0.09800496

medical history htn depression anxiety chronic back pain perforated  
diverticulitis s p, score: 0.08085893

confidence of prediction: 0.965645

Y\_true: [20 35]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension h o scoliosis, score: 0.45964074

fluticasone gabapentin hctz lidocaine patch metop, score: 0.2143652

hypotension and orthostatic symptoms, score: 0.046321746

confidence of prediction: 0.605231

Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]

Y\_pred: [ 4 13 18 20 23 24 26 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history htn hyperlipidemia sciatica seasonal allergies elevated,  
score: 0.17764322

mi age fatal mi age, score: 0.08347036

x5 hypertension hyperlipidemia sciatica elev psa, score: 0.038265247

confidence of prediction: 0.999401

Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]

Y\_pred: [ 4 13 18 20 23 24 26 34]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

cabg x lima lad svg diag svg om svg, score: 0.97843313

coronary artery bypass pre, score: 0.0042904834

cabg x5 hypertension hyperlipidemia sciatica elev, score:  
0.0015713637

confidence of prediction: 0.967653

Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]

Y\_pred: [ 4 13 18 20 23 24 26 34]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed per, score: 0.46884313

creams or powders on, score: 0.3566182

cabg x lima lad, score: 0.07900313

confidence of prediction: 0.996051

Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]

Y\_pred: [ 4 13 18 20 23 24 26 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn hyperlipidemia sciatica seasonal allergies,  
score: 0.19390747

cabg x5 hypertension hyperlipidemia sciatica elev psa, score:  
0.02333516

protocol diuretics betablockade and, score: 0.019756239

confidence of prediction: 0.999768

Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]

Y\_pred: [ 4 13 18 20 23 24 26 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
diagnosis cad s p cabg x5, score: 0.01239666  
smoked years ago no, score: 0.008660418  
multi vessel disease he, score: 0.0073029893

confidence of prediction: 0.912989  
Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]  
Y\_pred: [ 4 13 18 20 23 24 26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation he was treated, score: 0.15685573  
atrial fibrillation additionally low dose, score: 0.03166176  
amiodarone and did convert, score: 0.010718254

confidence of prediction: 0.785679  
Y\_true: [ 4 13 14 18 20 22 24 26 27 34 35]  
Y\_pred: [ 4 13 18 20 23 24 26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gerd social history married worked, score: 0.16578142  
initial pre gerd sleep apnea discharge, score: 0.026779752  
sciatica seasonal allergies elevated psa, score: 0.0122658145

confidence of prediction: 0.585652  
Y\_true: [ 2 4 8 9 10 12 13 18 20 24 30 34 43]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
pmh diabetes mellitus murmur and, score: 0.12120949  
daily metformin mg tablet sig, score: 0.0444737  
furniture mover cigarettes smoked, score: 0.040568806

confidence of prediction: 0.921070  
Y\_true: [ 2 4 8 9 10 12 13 18 20 24 30 34 43]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stenosis hypertension hyperlipidemia obesity copd erectile  
dysfunction low back, score: 0.06375659  
disease hypertension hyperlipidemia obesity copd erectile  
dysfunction low back, score: 0.034372836

confidence of prediction: 0.946928  
Y\_true: [ 2 4 8 9 10 12 13 18 20 24 30 34 43]  
Y\_pred: [ 2 4 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending reverse saphenous vein graft, score: 0.24216637  
coronary artery bypass grafting to two, score: 0.040474772  
coronary artery bypass grafting x2, score: 0.037628092

confidence of prediction: 0.973899  
 Y\_true: [ 2 4 8 9 10 12 13 18 20 24 30 34 43]  
 Y\_pred: [ 2 4 13 18 20 24]  
 top three important windows for true positive code 18 (39.61:  
 Extracorporeal circulation auxiliary to open heart surgery)  
 reverse saphenous vein graft, score: 0.017033456  
 mammary artery grafted to, score: 0.012882737  
 grafting x2 with a, score: 0.012879396

confidence of prediction: 0.981343  
 Y\_true: [ 2 4 8 9 10 12 13 18 20 24 30 34 43]  
 Y\_pred: [ 2 4 13 18 20 24]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)  
 mover cigarettes smoked no, score: 0.09179519  
 artery disease hypertension hyperlipidemia obesity copd erectile,  
 score: 0.051642034  
 aortic stenosis hypertension hyperlipidemia obesity copd erectile,  
 score: 0.039343413

confidence of prediction: 0.983385  
 Y\_true: [ 2 4 8 9 10 12 13 18 20 24 30 34 43]  
 Y\_pred: [ 2 4 13 18 20 24]  
 top three important windows for true positive code 24 (414.01:  
 Coronary atherosclerosis of native coronary artery)  
 coronary artery disease presents today, score: 0.29647398  
 anterior descending reverse saphenous vein graft, score: 0.07688131  
 coronary artery disease pmh, score: 0.07412684

confidence of prediction: 0.769780  
 Y\_true: [20 37]  
 Y\_pred: [20 37]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)  
 htn dm and large, score: 0.17322724  
 seizure disorder hypertension benign prostatic hypertrophy, score:  
 0.068101026  
 a caudet catheter on, score: 0.055779252

confidence of prediction: 0.842263  
 Y\_true: [20 37]  
 Y\_pred: [20 37]  
 top three important windows for true positive code 37 (599.0:  
 Urinary tract infection, site not specified)  
 urinary tract infection the infection, score: 0.260743  
 urinary tract infection per patient, score: 0.1068082  
 after a foley catheter, score: 0.065198444

confidence of prediction: 0.929622  
 Y\_true: [ 1 4 20 34]  
 Y\_pred: [ 1 2 4 20 34]  
 top three important windows for true positive code 1 (244.9:  
 Unspecified acquired hypothyroidism)  
 prediabetes hypothyroidism who presents, score: 0.17591953



bradycardia hypothyroid continued levothyroxine macular degeneration  
glaucoma, score: 0.09312036  
degeneration hypothyroid eczema hypercalcemia, score: 0.028025696

confidence of prediction: 0.713441

Y\_true: [ 1 4 20 34]

Y\_pred: [ 1 2 4 20 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

and timolol dyslipidemia continued fenofibrate fish, score:  
0.09894129

factors prediabetes dyslipidemia hypertension cardiac history cabg,  
score: 0.08212182

diabetes hypertension dyslipidemia renal failure, score: 0.054086965

confidence of prediction: 0.965554

Y\_true: [ 1 4 20 34]

Y\_pred: [ 1 2 4 20 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

history of htn dyslipidemia prediabetes hypothyroidism who, score:  
0.19718601

conducted p waves noted, score: 0.16783962

hypertension discharge condition mental, score: 0.112834275

confidence of prediction: 0.843315

Y\_true: [ 1 4 20 34]

Y\_pred: [ 1 2 4 20 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

her worsening gerd medications on admission preadmission, score:  
0.112586275

gerd along with mild, score: 0.030684646

renal failure physical exam, score: 0.01010716

confidence of prediction: 0.991654

Y\_true: [ 2 7 9 13 14 18 20 23 24 26 34 38]

Y\_pred: [13 18 20 24 26 34]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

bypass grafting x4 with, score: 0.20101054

coronary artery reverse saphenous vein single, score: 0.14110795

coronary artery reverse saphenous vein single, score: 0.12371411

confidence of prediction: 0.986829

Y\_true: [ 2 7 9 13 14 18 20 23 24 26 34 38]

Y\_pred: [13 18 20 24 26 34]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.71905124

diuresed toward the preoperative, score: 0.020288048

bypass grafting x4 with left, score: 0.017319974

confidence of prediction: 0.998419

Y\_true: [ 2 7 9 13 14 18 20 23 24 26 34 38]  
Y\_pred: [13 18 20 24 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
p cabg pmh hypertension diet controlled diabetes poor, score:  
0.008170609

confidence of prediction: 0.992750  
Y\_true: [ 2 7 9 13 14 18 20 23 24 26 34 38]  
Y\_pred: [13 18 20 24 26 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg pmh, score: 0.1355238  
coronary artery reverse saphenous vein single, score: 0.13329305  
coronary artery reverse saphenous, score: 0.13329305

confidence of prediction: 0.838287  
Y\_true: [ 2 7 9 13 14 18 20 23 24 26 34 38]  
Y\_pred: [13 18 20 24 26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
develop post op rapid atrial fibrillation which resolved with,  
score: 0.04228356  
amiodarone mg tablet sig, score: 0.027134016  
cabg in her late, score: 0.012588182

confidence of prediction: 0.860980  
Y\_true: [ 2 7 9 13 14 18 20 23 24 26 34 38]  
Y\_pred: [13 18 20 24 26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
and minor gerd he did develop post, score: 0.056136362  
with prilosec he underwent stress testing, score: 0.0035124733  
protocol reaching greater than, score: 0.0030808307

confidence of prediction: 0.655044  
Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
valerian 450mg capsules hs prn discharge, score: 0.15456825  
anxiety depression social history retired he, score: 0.054621086  
anxiety depression discharge condition alert, score: 0.05391874

confidence of prediction: 0.991126  
Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x2, score: 0.484508  
descending reverse saphenous vein graft, score: 0.11071303  
coronary artery bypass grafting the, score: 0.029602455

confidence of prediction: 0.986227

Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7217156  
diuresed towards pre op, score: 0.04511243  
reverse saphenous vein graft, score: 0.0040147235  
  
confidence of prediction: 0.745569  
Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
mellitus chronic kidney disease hypertension anxiety, score:  
0.0757945  
valerian 450mg capsules hs prn, score: 0.06967272  
ace inhibitors nickel attending first, score: 0.012475577  
  
confidence of prediction: 0.997866  
Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.3203654  
descending artery stent of, score: 0.07828978  
s p lad stent, score: 0.06405976  
  
confidence of prediction: 0.691922  
Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
angina mitral regurgitation coronary artery, score: 0.103828885  
mitral valve repair with, score: 0.04929805  
mitral valve repair overall, score: 0.028842773  
  
confidence of prediction: 0.770652  
Y\_true: [ 4 7 9 11 13 14 18 21 24 25 36 38 47]  
Y\_pred: [ 2 11 13 18 21 24 25 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
catheterization comments selective coronary angiography in, score:  
0.10501808  
cardiac catheterization past medical history, score: 0.05046825  
angina mitral regurgitation coronary artery, score: 0.024712812  
  
confidence of prediction: 0.702283  
Y\_true: [20 29 42]  
Y\_pred: [20 29 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn social history lives alone, score: 0.2967952  
htn patient has baseline severe hypertension and, score: 0.05690202

reflects redistribution opacification of the, score: 0.036634997

confidence of prediction: 0.665126

Y\_true: [20 29 42]

Y\_pred: [20 29 40 42]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

acquired pneumonia discharge condition mental, score: 0.4006014

hospital acquired pna he remained, score: 0.05726693

for pneumonia cxr there, score: 0.041914172

confidence of prediction: 0.729518

Y\_true: [20 29 42]

Y\_pred: [20 29 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

used for intubation rather than, score: 0.105482034

sedatives intubation icu delirium that, score: 0.10486849

he was intubated for airway protection, score: 0.09109029

confidence of prediction: 0.788092

Y\_true: [10 33 40 42]

Y\_pred: [ 6 20 33 42]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

fio2 peep tv he has, score: 0.11312828

by respiratory failure and bacteremia, score: 0.09970899

patient was intubated with etomidate, score: 0.08955313

confidence of prediction: 0.789278

Y\_true: [10 33 40 42]

Y\_pred: [ 6 20 33 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

general sedated intubated nad heent, score: 0.2227499

anicteric mmm intubated neck supple, score: 0.16372797

patient was intubated with etomidate, score: 0.045995545

confidence of prediction: 0.899160

Y\_true: [ 4 20 24 34]

Y\_pred: [ 4 20 34]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history htn hld born with kidney gerd h o migraines, score:

0.11416398

of htn hld cad diverticulosis and migraine, score: 0.06768003

confidence of prediction: 0.992278

Y\_true: [ 4 20 24 34]

Y\_pred: [ 4 20 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn hld born with kidney gerd h o, score: 0.23246983  
history of htn hld cad diverticulosis and migraine, score:  
0.21187261

confidence of prediction: 0.871803  
Y\_true: [ 4 20 24 34]  
Y\_pred: [ 4 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
exerting minimal mass effect, score: 0.0035254753  
although ground glass opacity, score: 0.0025740576  
kidney punctate splenic calcifications likely, score: 0.0017272516

confidence of prediction: 0.953776  
Y\_true: [ 8 20 26 34 42]  
Y\_pred: [20 26 33 34 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
with dementia psychosis old, score: 0.16174282  
occasionally would refuse to, score: 0.071920194  
plavix miralax risperidol hospital1, score: 0.007529837

confidence of prediction: 0.939425  
Y\_true: [ 8 20 26 34 42]  
Y\_pred: [20 26 33 34 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation discharge condition mental, score: 0.2129775  
fib at this time, score: 0.072424635  
developed atrial fibrillation she was started, score: 0.006253163

confidence of prediction: 0.847733  
Y\_true: [ 8 20 26 34 42]  
Y\_pred: [20 26 33 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
stroke dementia gerd psychosis htn anemia lipids, score: 0.15812449  
plavix miralax risperidol hospital1 colace, score: 0.01848333  
placement in a nursing, score: 0.008207426

confidence of prediction: 0.815046  
Y\_true: [ 8 20 26 34 42]  
Y\_pred: [20 26 33 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated upon arrival she, score: 0.3670054  
initially intubated for protection of, score: 0.16505434  
was intubated at the, score: 0.10600039

confidence of prediction: 0.946579  
Y\_true: [ 2 3 13 18 20 24 39]  
Y\_pred: [ 2 3 13 18 20 24]  
top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
hypertension hypercholesterolemia diabetes mellitus type uterine fibroids, score: 0.011155289  
hypertension hypercholesterolemia diabetes mellitus type uterine fibroids, score: 0.006714085  
she received cefazolin for, score: 0.0013304891

confidence of prediction: 0.649179  
Y\_true: [ 2 3 13 18 20 24 39]  
Y\_pred: [ 2 3 13 18 20 24]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
cabg hypertension hypercholesterolemia diabetes mellitus type uterine, score: 0.22116576  
with exertional angina that occurs, score: 0.030126384  
medical history hypertension hypercholesterolemia diabetes mellitus type, score: 0.0068935617

confidence of prediction: 0.990158  
Y\_true: [ 2 3 13 18 20 24 39]  
Y\_pred: [ 2 3 13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.672452  
descending saphenous vein graft to, score: 0.07184185  
coronary artery bypass graft surgery please, score: 0.037980985

confidence of prediction: 0.975552  
Y\_true: [ 2 3 13 18 20 24 39]  
Y\_pred: [ 2 3 13 18 20 24]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards her pre, score: 0.17760584  
lotions powders or ointments to, score: 0.1684644  
incisions no baths or, score: 0.14652993

confidence of prediction: 0.987360  
Y\_true: [ 2 3 13 18 20 24 39]  
Y\_pred: [ 2 3 13 18 20 24]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
medical history hypertension hypercholesterolemia diabetes mellitus type, score: 0.23384951  
20mg qd hctz 25mg, score: 0.06035475  
s p cabg hypertension hypercholesterolemia diabetes mellitus type, score: 0.019814061

confidence of prediction: 0.999363  
Y\_true: [ 2 3 13 18 20 24 39]  
Y\_pred: [ 2 3 13 18 20 24]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.64475286

coronary artery disease s p cabg hypertension, score: 0.13649835  
coronary artery disease left, score: 0.031855453

confidence of prediction: 0.932499

Y\_true: [20]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
rheumatoid arthritis rectal bleeding htn seasonal allergies social  
history, score: 0.0017526905  
of l sdh history, score: 0.000784061  
diagnosis l sdh with, score: 0.00073576876

confidence of prediction: 0.971533

Y\_true: [ 4 5 13 14 18 21 23 24 26 35 36 38]

Y\_pred: [13 18 23 24 26]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass surgery x with, score: 0.30506107  
lima lad reverse saphenous vein graft, score: 0.1938622  
artery obtuse marginal artery history of, score: 0.029140806

confidence of prediction: 0.979444

Y\_true: [ 4 5 13 14 18 21 23 24 26 35 36 38]

Y\_pred: [13 18 23 24 26]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.4283083  
cardiothoracic allergies patient recorded, score: 0.008029463  
reverse saphenous vein graft, score: 0.007769864

confidence of prediction: 0.612234

Y\_true: [ 4 5 13 14 18 21 23 24 26 35 36 38]

Y\_pred: [13 18 23 24 26]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
history of imi s p pci to, score: 0.011060596  
p cardiac catheterization and, score: 0.009401883  
medical history cad s p imi pci with, score: 0.009383574

confidence of prediction: 0.970158

Y\_true: [ 4 5 13 14 18 21 23 24 26 35 36 38]

Y\_pred: [13 18 23 24 26]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass surgery, score: 0.17242531  
coronary artery disease discharge, score: 0.12861204  
s p imi pci, score: 0.11901999

confidence of prediction: 0.954641

Y\_true: [ 4 5 13 14 18 21 23 24 26 35 36 38]

Y\_pred: [13 18 23 24 26]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

irregularly irregular s1 s2 no, score: 0.41315642  
paf not on coumadin, score: 0.3112138  
fib post operatively per, score: 0.109464794

confidence of prediction: 0.885947  
Y\_true: [ 2 17 20]  
Y\_pred: [ 2 4 20]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
medical history t2dm htn hepatitis b carrier, score: 0.007296745  
of dmii htn and h o, score: 0.0070252796

confidence of prediction: 0.782171  
Y\_true: [ 2 17 20]  
Y\_pred: [ 2 4 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of dmii htn and h o, score: 0.13896714  
history t2dm htn hepatitis b carrier, score: 0.12059835  
mrx1 prn prochlorperazine 5mg, score: 0.025456209

confidence of prediction: 0.611900  
Y\_true: [ 0 6 22 26 29]  
Y\_pred: [ 0 2 22 26]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
broad spectrum antibiotics vanc cefepime, score: 0.044900898  
continued to spike fevers and, score: 0.014572082  
presented with sepsis from a suspected pulmonary, score: 0.014522797

confidence of prediction: 0.526110  
Y\_true: [ 0 6 22 26 29]  
Y\_pred: [ 0 2 22 26]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
indx ctropnt 56pm ck, score: 0.20058528  
indx ctropnt 04pm ck, score: 0.058018457  
she also nstemi d with positive, score: 0.03716902

confidence of prediction: 0.959194  
Y\_true: [ 0 6 22 26 29]  
Y\_pred: [ 0 2 22 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
amiodarone loading and infusion she, score: 0.12749667  
atrial fibrillation with rapid ventricular, score: 0.02299919  
developed afib with rvr and was, score: 0.006596898

confidence of prediction: 0.754082  
Y\_true: [ 2 4 13 18 24 26 30 39]  
Y\_pred: [ 4 13 18 24 26 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)



heart disease hyperlipidemia osteoarthritis in hips mild, score:  
0.10567866  
rosuvastatin mg tablet sig, score: 0.009621972  
crestor mg daily asa mg, score: 0.009055048

confidence of prediction: 0.935678  
Y\_true: [ 2 4 13 18 24 26 30 39]  
Y\_pred: [ 4 13 18 24 26 30]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending artery saphenous vein graft, score: 0.09431329  
coronary artery bypass graft x and, score: 0.07052195  
coronary artery bypass graft x left, score: 0.06404844

confidence of prediction: 0.962466  
Y\_true: [ 2 4 13 18 24 26 30 39]  
Y\_pred: [ 4 13 18 24 26 30]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders on, score: 0.3896386  
pacing wires were removed per, score: 0.009987988  
cardiothoracic allergies patient recorded, score: 0.009603201

confidence of prediction: 0.931463  
Y\_true: [ 2 4 13 18 24 26 30 39]  
Y\_pred: [ 4 13 18 24 26 30]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease mitral, score: 0.14378528  
coronary artery bypass graft, score: 0.12690896  
coronary artery disease mitral, score: 0.12048487

confidence of prediction: 0.941683  
Y\_true: [ 2 4 13 18 24 26 30 39]  
Y\_pred: [ 4 13 18 24 26 30]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation that was treated, score: 0.13715398  
atrial fibrillation despite treatment with bblockers, score:  
0.030048214  
regurgitation vena contracta is, score: 0.0042675

confidence of prediction: 0.655606  
Y\_true: [ 2 4 13 18 24 26 30 39]  
Y\_pred: [ 4 13 18 24 26 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
regurgitation stenosis hypertension rheumatic, score: 0.01234247  
wall thickness cavity size, score: 0.005312692  
chronic obstructive pulmonary disease obesity amaurosis, score:  
0.0025131088

confidence of prediction: 0.543197  
Y\_true: [ 1 8 32 41]

Y\_pred: [ 1 41]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

hemiparesis hypothyroidism htn chronic anemia poor, score:

0.38698536

daily levothyroxine mcg tablet sig one, score: 0.13170324

daily synthroid [UNK] daily dulcolax, score: 0.023491677

confidence of prediction: 0.804467

Y\_true: [ 1 8 32 41]

Y\_pred: [ 1 41]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

implanted feeding tube placed at this, score: 0.29335254

associated subarachnoid hemorrhage unchanged, score: 0.04544097

with contusions and pre, score: 0.013503673

confidence of prediction: 0.825219

Y\_true: [16 17 23 24]

Y\_pred: [17 20 23 24]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

so a picc line was placed on and, score: 0.013919567

underwent a diagnostic cerebral, score: 0.013060756

qt qtc p qrs, score: 0.008940983

confidence of prediction: 0.713975

Y\_true: [16 17 23 24]

Y\_pred: [17 20 23 24]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)

history pmhx cad s p mi psych, score: 0.0034515178

diagnostic cerebral angiogram which, score: 0.000300922

cerebral angiogram history of, score: 0.00023540907

confidence of prediction: 0.823059

Y\_true: [16 17 23 24]

Y\_pred: [17 20 23 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

history pmhx cad s p mi psych, score: 0.01327739

s were pressed to, score: 0.0051522446

complications she was maintained, score: 0.0043660128

confidence of prediction: 0.607663

Y\_true: [ 2 6 27 35 37 48]

Y\_pred: [ 2 4 24 26 27 35 37 48]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

continued home lantus units qam in, score: 0.24062471

cancer and diabetes in, score: 0.07402674

of t2dm cad ischemic, score: 0.027493155

confidence of prediction: 0.605089

Y\_true: [ 2 6 27 35 37 48]

Y\_pred: [ 2 4 24 26 27 35 37 48]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

cardiomyopathy lvef coronary artery, score: 0.19622798

core antibody igm negative hepatitis, score: 0.08777909

isosorbide mononitrate on month, score: 0.029276345

confidence of prediction: 0.900750

Y\_true: [ 2 6 27 35 37 48]

Y\_pred: [ 2 4 24 26 27 35 37 48]

top three important windows for true positive code 35 (584.9: Acute

kidney failure, unspecified)

kidney injury improved with fluids, score: 0.10616096

have kidney injury low blood, score: 0.03719367

ivf etiology prerenal azotemia in, score: 0.030426692

confidence of prediction: 0.885753

Y\_true: [ 2 6 27 35 37 48]

Y\_pred: [ 2 4 24 26 27 35 37 48]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

urinary tract infection your blood, score: 0.18762651

urinary tract infection date range, score: 0.09645441

have uti last name un, score: 0.07618081

confidence of prediction: 0.584557

Y\_true: [ 2 6 27 35 37 48]

Y\_pred: [ 2 4 24 26 27 35 37 48]

top three important windows for true positive code 48 (V45.81:

Aortocoronary bypass status)

s p cabg paternal, score: 0.88792366

cad ischemic cardiomyopathy with lvef, score: 0.01739918

w ischemic cardiomyopathy lvef, score: 0.010253238

confidence of prediction: 0.803403

Y\_true: [12 17 19 32 33 39 40 43 45 46]

Y\_pred: [17 19 39 45 46]

top three important windows for true positive code 17 (38.93: Venous

catheterization, not elsewhere classified)

and picc line were, score: 0.08357051

abdominal wall abscess drainage, score: 0.08111062

ex lap gastrostomy closure umbo hernia, score: 0.0427006

confidence of prediction: 0.890585

Y\_true: [12 17 19 32 33 39 40 43 45 46]

Y\_pred: [17 19 39 45 46]

top three important windows for true positive code 19 (39.95:

Hemodialysis)

esrd on hd m w, score: 0.11078255

esrd on hd chronic, score: 0.11078255

esrd on hd patient was, score: 0.085004635

confidence of prediction: 0.764267  
Y\_true: [12 17 19 32 33 39 40 43 45 46]  
Y\_pred: [17 19 39 45 46]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
yeast tee showed no evidence of, score: 0.015142773  
cath i d abdominal, score: 0.013102521  
line were removed and, score: 0.00697745

confidence of prediction: 0.790891  
Y\_true: [12 17 19 32 33 39 40 43 45 46]  
Y\_pred: [17 19 39 45 46]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
ex lap gastrostomy closure umbo hernia, score: 0.13636203  
patient s tpn was held in, score: 0.11853215  
concomitant tpn of note, score: 0.108182274

confidence of prediction: 0.772327  
Y\_true: [12 17 19 32 33 39 40 43 45 46]  
Y\_pred: [17 19 39 45 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
leukocytosis hypotension major surgical, score: 0.038887855  
renal made aware on, score: 0.034337703  
changed to vanco 250mg, score: 0.026187724

confidence of prediction: 0.678116  
Y\_true: [ 2 4 11 20 26 35]  
Y\_pred: [ 2 4 20 26 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
discharge diabetes patient is on, score: 0.080967486  
bid metformin mg po bid, score: 0.038802736  
amaryl januvia and metformin as an, score: 0.0342978

confidence of prediction: 0.685448  
Y\_true: [ 2 4 11 20 26 35]  
Y\_pred: [ 2 4 20 26 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
diabetes depression dyslipidemia ataxia peripheral vascular, score:  
0.23886043  
on amaryl januvia and, score: 0.09704382  
150mg amaryl mg tablet sig, score: 0.022136947

confidence of prediction: 0.865175  
Y\_true: [ 2 4 11 20 26 35]  
Y\_pred: [ 2 4 20 26 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
s dementia hypertension diabetes depression dyslipidemia, score:  
0.14625528

januvia mg gam multivitamin, score: 0.1378122  
nuring home records tylenol, score: 0.04423863

confidence of prediction: 0.987218  
Y\_true: [ 2 4 11 20 26 35]  
Y\_pred: [ 2 4 20 26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib on coumadin who, score: 0.23154481  
atrial fibrillation with rvr, score: 0.06746079  
atrial fibrillation on coumadin alzheimer, score: 0.03698338

confidence of prediction: 0.734004  
Y\_true: [ 3 20 35]  
Y\_pred: [35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
worsening kidney funtion of his, score: 0.26966175  
on chronic renal failure left arm, score: 0.1698065  
chief complaint arf hypocalcemia abdominal, score: 0.057106774

confidence of prediction: 0.666112  
Y\_true: [ 3 8 20]  
Y\_pred: [3]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
medical history hypercholesterolemia htn elective admission for,  
score: 0.10194069  
pica artery aneurysm was, score: 0.013225481  
r pica aneurysm coiling, score: 0.010506631

confidence of prediction: 0.684272  
Y\_true: [ 3 20 41]  
Y\_pred: [ 3 20]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
the liver spleen and kidneys extensive atherosclerotic disease,  
score: 0.0068486338  
medical history hypertension hypercholesterolemia bph depression  
anxiety family, score: 0.0044272346  
fractures l1 transverse process, score: 0.0023010175

confidence of prediction: 0.929900  
Y\_true: [ 3 20 41]  
Y\_pred: [ 3 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hypercholesterolemia bph depression  
anxiety, score: 0.21297008  
celexa and zocor discharge medications, score: 0.08620958  
kidneys extensive atherosclerotic disease without evidence, score:  
0.0401387

confidence of prediction: 0.989378

Y\_true: [ 4 13 18 20 24 26 34 47]  
Y\_pred: [13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass x lima lad svg diag om svg, score: 0.5182297  
coronary artery bypass x as, score: 0.0792812  
wires were discontinued without, score: 0.020640468

confidence of prediction: 0.985648  
Y\_true: [ 4 13 18 20 24 26 34 47]  
Y\_pred: [13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.73769706  
diuresed toward the preoperative, score: 0.020814141  
cardiothoracic allergies no known, score: 0.005965035

confidence of prediction: 0.896267  
Y\_true: [ 4 13 18 20 24 26 34 47]  
Y\_pred: [13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
cabg x social history, score: 0.17598769  
arrest [UNK] hypertension degenerative, score: 0.10190753  
fatigue a perfusion study, score: 0.06135105

confidence of prediction: 0.998749  
Y\_true: [ 4 13 18 20 24 26 34 47]  
Y\_pred: [13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass x lima lad, score: 0.58289266  
coronary artery disease cardiac, score: 0.12340214  
coronary artery disease cardiac, score: 0.04821481

confidence of prediction: 0.942687  
Y\_true: [ 4 13 18 20 24 26 34 47]  
Y\_pred: [13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation again and ep, score: 0.27341166  
amiodarone was resumed at, score: 0.009432675  
was discontinued coumadin was, score: 0.0072060693

confidence of prediction: 0.604998  
Y\_true: [10]  
Y\_pred: [10]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
smoking cessation with your, score: 0.05095616  
spiriva with handihaler mcg capsule, score: 0.027663672  
counseled about smoking cessation elevated bicarbonate has, score:  
0.006053222

confidence of prediction: 0.958772  
Y\_true: [26 33 41 42]  
Y\_pred: [17 25 26 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation while sedated and, score: 0.14399667  
afib leaky valve presents, score: 0.13590895  
fibrillation the patient s, score: 0.12043931

confidence of prediction: 0.509865  
Y\_true: [26 33 41 42]  
Y\_pred: [17 25 26 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
sedated intubated heent unreactive, score: 0.23434392  
extubation central venous line, score: 0.1441441  
continuous video eeg was taken, score: 0.03252133

confidence of prediction: 0.819667  
Y\_true: [25 37]  
Y\_pred: [25 37]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
fibromyalgia mitral valve prolapse seizure disorder, score:  
0.0062977113  
her shoulder blades upon waking, score: 0.0061463476  
her shoulder blades fine, score: 0.0014511655

confidence of prediction: 0.787758  
Y\_true: [25 37]  
Y\_pred: [25 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a urinary tract infection and were, score: 0.11522473  
uti seizure disorder right, score: 0.05094961  
positive for uti and she was, score: 0.04634268

confidence of prediction: 0.905322  
Y\_true: [ 4 6 15 17 20 30 43 48]  
Y\_pred: [ 4 6 11 18 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disease hypertension dyslipidemia left nephrectomy secondary to,  
score: 0.0631532  
replacement pmh cabg x, score: 0.011214265

confidence of prediction: 0.802750  
Y\_true: [ 4 6 15 17 20 30 43 48]  
Y\_pred: [ 4 6 11 18 24]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
he developed acidosis with rising lactate immediately, score:  
0.116850846

history usually stays with, score: 0.011905503  
and ventilation improved echo, score: 0.00922807

confidence of prediction: 0.606071  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic shock pyelonephritis was the, score: 0.088335566  
derrangements and septic shock her baseline was, score: 0.06284623  
have septic shock with pyelonephritis as, score: 0.018249944

confidence of prediction: 0.772908  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic anemia baseline chronic kidney disease baseline venous,  
score: 0.013406762  
renal u s she, score: 0.011125058  
became cmo hyperkalemia secondary, score: 0.010526706

confidence of prediction: 0.921751  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stent chronic anemia, score: 0.42791882  
h h baseline na, score: 0.0068530403  
coronary artery disease s p stent chronic anemia, score:  
0.0047913343

confidence of prediction: 0.812901  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with rvr new, score: 0.5112744  
af with rvr and, score: 0.02557907  
mg qhs warfarin mg, score: 0.020017143

confidence of prediction: 0.756199  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
rvr and arf patient was monitored, score: 0.12998596  
underlying renal failure atrial, score: 0.046280146  
cardiopulmonary process renal u s, score: 0.037580285

confidence of prediction: 0.652385  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]



top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
hyperglycemia t2dm patient presented with, score: 0.01809252  
chronic anemia baseline chronic kidney disease baseline venous,  
score: 0.017923908  
renal u s she, score: 0.015621186

confidence of prediction: 0.940074  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock pyelonephritis was the, score: 0.11454518  
septic shock with pyelonephritis as, score: 0.06900493  
derrangements and septic shock her baseline was, score: 0.03429961

confidence of prediction: 0.948649  
Y\_true: [ 0 6 8 17 21 24 26 35 36 46 47 49]  
Y\_pred: [ 0 4 21 24 26 33 35 36 46 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
embolism on warfarin urinary incontinence, score: 0.580325  
mg qhs warfarin mg on wednesday, score: 0.2714717  
pe on warfarin and, score: 0.043611087

confidence of prediction: 0.957567  
Y\_true: [ 5 9 20 26]  
Y\_pred: [20 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn dementia s p facial, score: 0.3125431  
hypertension dementia discharge condition, score: 0.29106265  
float was called to, score: 0.06778451

confidence of prediction: 0.884313  
Y\_true: [ 5 9 20 26]  
Y\_pred: [20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation which was rate, score: 0.2500563  
fib with a rate, score: 0.20961289  
expired on night float, score: 0.020213379

confidence of prediction: 0.806610  
Y\_true: [ 6 10 35 37]  
Y\_pred: [35 37]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
patient was delirius and aggitated on, score: 0.011076457  
aggitation acute kidney injury likely pre renal in the setting,  
score: 0.010261233

confidence of prediction: 0.953321  
Y\_true: [ 6 10 35 37]

Y\_pred: [35 37]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection secondary diagnosis, score: 0.21100062  
a uti urine cultures grew out, score: 0.07285643  
of uti and she, score: 0.032073606

confidence of prediction: 0.983154

Y\_true: [ 4 20 27 34 48]

Y\_pred: [ 2 24 27 34 35]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure patient had, score: 0.31199375  
diastolic heart failure ef cabg cad, score: 0.11470923  
dchf s p avr years, score: 0.102218404

confidence of prediction: 0.900344

Y\_true: [ 4 20 27 34 48]

Y\_pred: [ 2 24 27 34 35]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
history nash gerd reducible umbilical hernia social, score:  
0.013818337  
and correct placment of, score: 0.007972519  
donepezil 10mg gerd stable we continued omeprazole, score:  
0.0036887045

confidence of prediction: 0.835324

Y\_true: [ 1 4 8 18 20 34]

Y\_pred: [ 4 18 20 24 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia asthma anxiety depression gerd,  
score: 0.12806027  
aneurysm hypertension hyperlipidemia asthma anxiety depression gerd,  
score: 0.061295874  
atorvastatin mg tablet sig, score: 0.007928805

confidence of prediction: 0.970607

Y\_true: [ 1 4 8 18 20 34]

Y\_pred: [ 4 18 20 24 34]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed toward her preop, score: 0.08614307  
cardiothoracic allergies aspirin bupropion, score: 0.03511635  
washing incisions gently with mild soap, score: 0.008506262

confidence of prediction: 0.978968

Y\_true: [ 1 4 8 18 20 34]

Y\_pred: [ 4 18 20 24 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hyperlipidemia asthma anxiety depression, score:  
0.25649622

medical history hypertension hyperlipidemia asthma anxiety  
depression, score: 0.15949246  
nefazodone paroxetine penicillins progesterone, score: 0.14417209

confidence of prediction: 0.945117  
Y\_true: [ 1 4 8 18 20 34]  
Y\_pred: [ 4 18 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
anxiety depression gerd insomnia chronic cystitis, score: 0.06634459  
nefazodone paroxetine penicillins progesterone sulfa, score:  
0.011691115  
hypothermic circulatory arrest history of, score: 0.0076847384

confidence of prediction: 0.859551  
Y\_true: [ 0 20 28 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
initiation of anitbiotics had ua, score: 0.057028007  
history copd htn cva with residual, score: 0.049584914  
airspace opacification proximally suggests, score: 0.0155637385

confidence of prediction: 0.719573  
Y\_true: [ 0 20 28 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd htn cva with residual, score: 0.2001517  
history of copd cva with residual, score: 0.0982322

confidence of prediction: 0.871805  
Y\_true: [ 0 20 28 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
and aspiration pneumonitis h o, score: 0.17158023  
to aspiration age indeterminate, score: 0.0769908  
had an aspiration pneumonia as he already, score: 0.020690959

confidence of prediction: 0.944954  
Y\_true: [ 0 20 28 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection please, score: 0.06991187  
wbcs and leuk est however, score: 0.044353396  
a urinary tract infection which we, score: 0.03143248

confidence of prediction: 0.571309  
Y\_true: [ 6 35]  
Y\_pred: [5 6]  
top three important windows for true positive code 6 (276.2:  
Acidosis)

elevated inr lactate hyponatremia and hypoalbuminemia along, score: 0.046062782  
gap metabolic acidosis which may suggest, score: 0.042327654  
suggesting pre renal etiology to, score: 0.01785586

confidence of prediction: 0.725436  
Y\_true: [7 9]  
Y\_pred: [ 9 21]  
top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)  
despite comorbid thrombocytopenia anemia thought to be, score: 0.6055327  
stabilized after prbc transfusions and gyn, score: 0.018336888  
illness 43f g1p1 with history of, score: 0.01108642

confidence of prediction: 0.722805  
Y\_true: [ 4 14 24 27 34 38 39]  
Y\_pred: [ 4 14 15 24 27 34 38]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
factors diabetes dyslipidemia hypertension cardiac history cabg, score: 0.22242595  
medical history dyslipidemia gerd social history lives, score: 0.054757096  
of hematoma hyperlipidemia per history not, score: 0.03873535

confidence of prediction: 0.518017  
Y\_true: [ 4 14 24 27 34 38 39]  
Y\_pred: [ 4 14 15 24 27 34 38]  
top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)  
cardiac catheterization with placement, score: 0.32547867  
cath comments coronary angiography in this, score: 0.043413546  
catheterization which showed vessel, score: 0.030025404

confidence of prediction: 0.993316  
Y\_true: [ 4 14 24 27 34 38 39]  
Y\_pred: [ 4 14 15 24 27 34 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p bms to, score: 0.11816179  
single vessel cad s p bms to, score: 0.07426963  
coronary artery disease the, score: 0.050413813

confidence of prediction: 0.874869  
Y\_true: [ 4 14 24 27 34 38 39]  
Y\_pred: [ 4 14 15 24 27 34 38]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
pump better weigh yourself every morning name8, score: 0.5238332  
failure on cardiac catheterization or, score: 0.20704249  
ef on tte pacing, score: 0.009823943

confidence of prediction: 0.927133

Y\_true: [ 4 14 24 27 34 38 39]  
Y\_pred: [ 4 14 15 24 27 34 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
history dyslipidemia gerd social history lives with, score:  
0.03079736  
325mg daily prilosec daily, score: 0.0053743403  
asa mg atorvastatin 80mg daily, score: 0.0043663485

confidence of prediction: 0.871261  
Y\_true: [ 4 14 24 27 34 38 39]  
Y\_pred: [ 4 14 15 24 27 34 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with placement, score: 0.56923753  
lad history of present, score: 0.054813325  
lab found to have, score: 0.025385302

confidence of prediction: 0.769496  
Y\_true: [ 4 6 11 18 20 25 26 34]  
Y\_pred: [ 4 18 20 25 26 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
medical history hyperlipidemia hypertension mitral regurgitation  
depression, score: 0.17069472  
mg daily simvastatin mg daily discharge, score: 0.02933229  
secondary hyperlipidemia hypertension depression skin cancer, score:  
0.022930736

confidence of prediction: 0.975417  
Y\_true: [ 4 6 11 18 20 25 26 34]  
Y\_pred: [ 4 18 20 25 26 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies no known, score: 0.025454834  
washing incisions gently with mild soap, score: 0.00940684  
mitral valve prolapse torn, score: 0.007172533

confidence of prediction: 0.991609  
Y\_true: [ 4 6 11 18 20 25 26 34]  
Y\_pred: [ 4 18 20 25 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hospital1 occupation retired teacher cigarettes smoked, score:  
0.080127865  
history hyperlipidemia hypertension mitral regurgitation depression  
skin, score: 0.04933301  
on secondary hyperlipidemia hypertension depression skin cancer,  
score: 0.030799912

confidence of prediction: 0.754913  
Y\_true: [ 4 6 11 18 20 25 26 34]  
Y\_pred: [ 4 18 20 25 26 34]  
top three important windows for true positive code 25 (424.0: Mitral

valve disorders)  
severe mitral regurgitation mild left, score: 0.18679859  
mitral valve prolapse torn, score: 0.08067236  
mitral valve repair gortex, score: 0.055906337

confidence of prediction: 0.973801  
Y\_true: [ 4 6 11 18 20 25 26 34]  
Y\_pred: [ 4 18 20 25 26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation on pod and, score: 0.8139901  
atrial fibrillation heart rate s, score: 0.051365655  
fibrillation goal inr take, score: 0.0048613474

confidence of prediction: 0.660001  
Y\_true: [ 4 6 11 18 20 25 26 34]  
Y\_pred: [ 4 18 20 25 26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
retired teacher cigarettes smoked no, score: 0.010617232  
pilonidal cyst gerd past surgical history neck, score: 0.008875633  
pilonidal cyst gerd discharge condition alert, score: 0.008875633

confidence of prediction: 0.825158  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]  
Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
infarction hypertension hyperlipidemia diabetes mellitus mi years,  
score: 0.078511894  
history hypertension hyperlipidemia diabetes mellitus mi years,  
score: 0.07715552  
chronic renal insufficiency gout, score: 0.030639637

confidence of prediction: 0.982806  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]  
Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting to four, score: 0.101794526  
artery obtuse marginal and, score: 0.02278948  
mammary artery to left, score: 0.01950098

confidence of prediction: 0.982257  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]  
Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards his preoperative, score: 0.34817418  
cardiothoracic allergies patient recorded, score: 0.008981264  
washing incisions gently with mild soap, score: 0.0059155496

confidence of prediction: 0.676575  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]

Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
diabetes mellitus mi years ago chronic renal, score: 0.14211352  
failure myocardial infarction hypertension, score: 0.018597724  
coronary artery disease the, score: 0.0073645934

confidence of prediction: 0.975853  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]  
Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg acute, score: 0.14095353  
coronary artery disease the, score: 0.13417928  
years ago chronic renal, score: 0.075412065

confidence of prediction: 0.936947  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]  
Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
systolic heart failure myocardial infarction hypertension, score: 0.32470816  
bnp revealed chf chest ct showed, score: 0.07070505  
pulmonary infiltrates chf vs pna no, score: 0.019084157

confidence of prediction: 0.737413  
Y\_true: [ 4 5 13 14 18 21 22 23 24 26 27 29 35 36]  
Y\_pred: [ 2 4 13 18 23 24 27 36 38]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
ago chronic renal insufficiency gout past surgical, score: 0.0090990625  
pm pre drug post, score: 0.0060833287  
dental exam edentulous lives, score: 0.004182309

confidence of prediction: 0.985784  
Y\_true: [10 13 18 24]  
Y\_pred: [ 4 13 18 24 30]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass graft, score: 0.6634107  
coronary artery bypass graft x please, score: 0.037470322  
coronary artery bypass graft x past, score: 0.016217928

confidence of prediction: 0.979666  
Y\_true: [10 13 18 24]  
Y\_pred: [ 4 13 18 24 30]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic doctor first name, score: 0.16408677  
cardiothoracic allergies aspirin wellbutrin, score: 0.02989941  
tee was performed in, score: 0.007435046

confidence of prediction: 0.999104  
Y\_true: [10 13 18 24]  
Y\_pred: [ 4 13 18 24 30]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.6000691  
coronary artery disease s p coronary artery bypass graft, score:  
0.12703851  
coronary artery disease shortness, score: 0.029647755

confidence of prediction: 0.746719  
Y\_true: [ 4 13 14 16 18 21 24 34 37 38]  
Y\_pred: [ 4 13 18 20 24 34 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disease htn hl mild renal impairment l4, score: 0.08602603  
of hypertension hyperlipidemia and spinal stenosis, score:  
0.08446461

confidence of prediction: 0.878833  
Y\_true: [ 4 13 14 16 18 21 24 34 37 38]  
Y\_pred: [ 4 13 18 20 24 34 37]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary bypass grafting x3 with left, score: 0.06420067  
artery and reverse saphenous vein graft, score: 0.052700832  
wires were discontinued without, score: 0.05072512

confidence of prediction: 0.982409  
Y\_true: [ 4 13 14 16 18 21 24 34 37 38]  
Y\_pred: [ 4 13 18 20 24 34 37]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.70488816  
incisions gently with mild soap, score: 0.18477671  
diuresed toward the preoperative, score: 0.019888436

confidence of prediction: 0.973660  
Y\_true: [ 4 13 14 16 18 21 24 34 37 38]  
Y\_pred: [ 4 13 18 20 24 34 37]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease htn hl, score: 0.36887607  
coronary artery disease htn hl, score: 0.14412466  
descending artery and reverse saphenous vein, score: 0.026234314

confidence of prediction: 0.917362  
Y\_true: [ 4 13 14 16 18 21 24 34 37 38]  
Y\_pred: [ 4 13 18 20 24 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
pain clinic gerd social history lives with, score: 0.013158019  
pain clinic gerd past surgical history none, score: 0.013158019  
hypotensive requiring neosynephrine chest tubes, score: 0.009650282



confidence of prediction: 0.760615  
Y\_true: [ 4 13 14 16 18 21 24 34 37 38]  
Y\_pred: [ 4 13 18 20 24 34 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
started for uti he was transferred back, score: 0.105300434  
on phenylephrine infusion preserved biventricular function lvef  
aortic, score: 0.021353815  
sb resp o2 sat, score: 0.019351035

confidence of prediction: 0.722672  
Y\_true: [ 9 20 28 31]  
Y\_pred: [28 31 40 42]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.40128705  
otherwise normal egd to, score: 0.2807673  
had an egd two, score: 0.026601313

confidence of prediction: 0.972653  
Y\_true: [ 9 20 28 31]  
Y\_pred: [28 31 40 42]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
likely aspiration pneumonia secondary [UNK] c, score: 0.12400874  
aspiration possibly due to aspiration but worsening chest, score:  
0.008976984  
possible aspiration he was commenced on, score: 0.008504824

confidence of prediction: 0.811990  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia coronary artery disease status,  
score: 0.14512844  
secondary hypertension hyperlipidemia [UNK] reflux disease mild,  
score: 0.055059083  
sl prn omeprazole 20mg, score: 0.011036642

confidence of prediction: 0.989283  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left, score: 0.5698481  
descending saphenous vein graft to, score: 0.060880095  
coronary artery bypass graft x please, score: 0.032185778

confidence of prediction: 0.962159  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.50618315  
creams or powders to, score: 0.38502032  
marginal saphenous vein graft, score: 0.02036258

confidence of prediction: 0.910171  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
systemic arterial hypertension with a central, score: 0.25378072  
disease secondary hypertension hyperlipidemia [UNK] reflux disease,  
score: 0.12522149  
medical history hypertension hyperlipidemia, score: 0.09419416

confidence of prediction: 0.998050  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.34174407  
coronary artery disease secondary, score: 0.07234943  
coronary artery disease the, score: 0.068872295

confidence of prediction: 0.748751  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
in gastroesophageal reflux disease mild emphysema arthritis, score:  
0.1514903  
hyperlipidemia [UNK] reflux disease mild emphysema arthritis, score:  
0.023130564  
the rca has instent, score: 0.0065993303

confidence of prediction: 0.627101  
Y\_true: [ 4 13 14 18 20 24 34 38 47]  
Y\_pred: [ 4 13 18 20 24 34 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cath selective coronary angiography of this, score: 0.26040465  
cath history of present, score: 0.047978994  
marginal saphenous vein graft, score: 0.0470398

confidence of prediction: 0.990566  
Y\_true: [ 3 6 10 13 18 24 39]  
Y\_pred: [13 18 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft surgery x4 left, score: 0.539867  
obtuse marginal saphenous vein graft obtuse, score: 0.07321678  
descending saphenous vein graft diagonal, score: 0.05767704

confidence of prediction: 0.979551

Y\_true: [ 3 6 10 13 18 24 39]

Y\_pred: [13 18 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

lotions powders or ointments to, score: 0.222239

obtuse marginal saphenous vein graft, score: 0.01600951

cardiothoracic allergies patient recorded, score: 0.0088094175

confidence of prediction: 0.999167

Y\_true: [ 3 6 10 13 18 24 39]

Y\_pred: [13 18 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass graft, score: 0.5736656

coronary artery disease s p coronary artery bypas graft, score:  
0.12144872

descending saphenous vein graft, score: 0.024302416

confidence of prediction: 0.562946

Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]

Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

septic shock influenza pneumonia anuric, score: 0.045172494

pneumonia multisystem organ failure in, score: 0.03522622

septic shock discussed with family, score: 0.03226203

confidence of prediction: 0.938857

Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]

Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

baseline creatinine hyperlipidemia social history lives with, score:  
0.09731448

velcade prilosec advair inh, score: 0.0065647378

ppm placement copd not, score: 0.0040662494

confidence of prediction: 0.998631

Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]

Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib with as resolved, score: 0.047839414

afib and baseline cardiomyopathy, score: 0.009969244

atrial fibrillation sick sinus syndrome, score: 0.0018819161

confidence of prediction: 0.701766

Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]

Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)  
associated pneumonia multisystem organ, score: 0.17966504  
for pneumonia given question, score: 0.15718485  
bronchial lavage gram stain final, score: 0.07754869

confidence of prediction: 0.533462  
Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]  
Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
baseline with copd but no, score: 0.09394368  
ppm placement copd not on home, score: 0.028919404  
multiple myeloma copd pe who by report, score: 0.02519121

confidence of prediction: 0.914547  
Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]  
Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure multiple myeloma, score: 0.26536572  
influenza respiratory failure pt triggered, score: 0.12529914  
of respiratory failure he, score: 0.033736385

confidence of prediction: 0.688546  
Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]  
Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal insufficiency, score: 0.10112167  
acute renal failure hypoxic respiratory, score: 0.04614285  
renal failure in the, score: 0.03402352

confidence of prediction: 0.833331  
Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]  
Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal insufficiency baseline creatinine in creatinine,  
score: 0.11008973  
cri baseline creatinine hyperlipidemia social, score: 0.0331431  
admission velcade prilosec advair inh hospital1, score: 0.027400786

confidence of prediction: 0.791617  
Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]  
Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
intubation central venous line, score: 0.121273495  
patient was intubated for respiratory distress, score: 0.088881075

oncologist poor prognosis was established, score: 0.022865614

confidence of prediction: 0.719837

Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]

Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]

top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)

fungus isolated respiratory viral identification, score: 0.07477595

intubated for respiratory distress, score: 0.029379286

oncologist poor prognosis was, score: 0.029127736

confidence of prediction: 0.804737

Y\_true: [ 0 4 5 16 24 26 29 30 33 35 36 40 43 46]

Y\_pred: [ 0 4 7 12 17 19 21 26 29 30 31 33 35 36 40 42 43 44 46  
49]

top three important windows for true positive code 46 (995.92:  
Severe sepsis)

septic shock discussed with family, score: 0.04542611

septic shock influenza pneumonia anuric, score: 0.04294628

hypotensive with increasing pressor, score: 0.030206755

confidence of prediction: 0.693034

Y\_true: [ 3 20 47]

Y\_pred: [ 1 3 5 20]

top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)

caths hospital1 htn hyponatremia, score: 0.0075300955

tobacco use hypertension essential osteoporosis unspec social,  
score: 0.0052286247

fracture thoracic compression myopathy other hypercholesterolemia  
osteoarthritis r cmc joint, score: 0.0041283052

confidence of prediction: 0.995475

Y\_true: [ 3 20 47]

Y\_pred: [ 1 3 5 20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

caths hospital1 htn hyponatremia who presents with, score:  
0.37288913

hypertension essential osteoporosis unspec social, score: 0.33422387

hypertension continue home meds, score: 0.006197584

confidence of prediction: 0.784181

Y\_true: [ 3 20 48 49]

Y\_pred: [24 48 49]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg and, score: 0.50137013

quadruple vessel cabg his last dose, score: 0.07539198

cad s p vessel cabg echo showed no, score: 0.003760328

confidence of prediction: 0.789839

Y\_true: [ 3 20 48 49]  
Y\_pred: [24 48 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
for constipation coumadin mg tablet sig, score: 0.3958089  
patient on coumadin at, score: 0.20739734  
on admission warfarin toprol xl hctz lisinopril, score: 0.1657123

confidence of prediction: 0.727755  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
ago hypothyroidism hypercholesterolemia s p, score: 0.1702189  
aaa hypothyroidism hypercholesterolemia s p, score: 0.14023459  
with meals levothyroxine mcg daily amlodipine mg, score: 0.011128664

confidence of prediction: 0.806877  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 6 (276.2: Acidosis)  
septic in etiology potential sources, score: 0.033498406  
settings with wean fio2 by, score: 0.03153525  
vasopressors as necessary surgery, score: 0.022636486

confidence of prediction: 0.941433  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
esrd on hd and sdh, score: 0.12242683  
esrd on hd renal team, score: 0.07904855  
esrd on hd l avf dialyzed mwf left, score: 0.073912784

confidence of prediction: 0.708105  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi and pacemaker placement cabg, score: 0.4906371  
years ago aaa hypothyroidism, score: 0.0036007548  
45pm alt sgpt ast, score: 0.000655496

confidence of prediction: 0.997764  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation aggressive volume repletion, score: 0.0035721487  
ekg afib ivcd lad no ischemic, score: 0.00042211014  
cabg years ago aaa, score: 0.00015762915

confidence of prediction: 0.939572

Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
following respiratory failure intubated for airway protection,  
score: 0.31559238  
he was intubated and, score: 0.05710778  
was taken intubated and, score: 0.03376836

confidence of prediction: 0.794964  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was intubated and sedated, score: 0.28542015  
respiratory failure intubated for airway protection during, score:  
0.18500236  
he was intubated with mg, score: 0.039487965

confidence of prediction: 0.688698  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
respiratory failure intubated for airway protection during, score:  
0.098527536  
he was intubated and sedated with, score: 0.08887081  
family meeting was conducted, score: 0.019578

confidence of prediction: 0.668756  
Y\_true: [ 0 1 6 16 19 23 24 26 27 33 40 42 46]  
Y\_pred: [ 1 6 17 19 23 26 33 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
meeting was conducted all, score: 0.06589257  
pressors with increasing acidosis a, score: 0.045735188  
liver from sepsis fen npo access right, score: 0.033500504

confidence of prediction: 0.749256  
Y\_true: [ 4 12 24 27 36]  
Y\_pred: [ 4 21 24 27 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
interventional pulmonology concurrently replaced, score: 0.017181817  
p turp coronary artery disease hyperlipidemia hypertension bilateral  
claudication status, score: 0.010355444  
the brain tumor clinic and with, score: 0.009795834

confidence of prediction: 0.523854  
Y\_true: [ 4 12 24 27 36]  
Y\_pred: [ 4 21 24 27 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

coronary artery disease hyperlipidemia, score: 0.25105786  
htn cad pvd sibling w dm, score: 0.14752612  
and pulmonary stent placement, score: 0.05103223

confidence of prediction: 0.861488  
Y\_true: [ 4 12 24 27 36]  
Y\_pred: [ 4 21 24 27 36]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cell ca chf systolic dysfn w ef bph, score: 0.07232964  
isosorbide mononitrate imdur mg tablet, score: 0.015297633  
status post repair in, score: 0.010437998

confidence of prediction: 0.889432  
Y\_true: [ 4 12 24 27 36]  
Y\_pred: [ 4 21 24 27 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
stents chronic renal insufficiency baseline cr mgus social history  
current, score: 0.011259805  
excessively prolonged coughing fit, score: 0.0030504721  
allergies zetia attending first, score: 0.0025217605

confidence of prediction: 0.813734  
Y\_true: [ 1 4 11 20 24 26 27 49]  
Y\_pred: [ 1 20 26 30 37 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
daily levothyroxine mcg tablet sig one, score: 0.052237302  
digoxin levothyroxine diovan sertraline advair spiriva, score:  
0.03814078  
pleural effusions hypothyroidism depression anxiety carotid disease,  
score: 0.003725844

confidence of prediction: 0.756820  
Y\_true: [ 1 4 11 20 24 26 27 49]  
Y\_pred: [ 1 20 26 30 37 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ceas r l who presented, score: 0.060293652  
elderly female in nad, score: 0.055846427  
diovan sertraline advair spiriva combivent, score: 0.030527469

confidence of prediction: 0.930026  
Y\_true: [ 1 4 11 20 24 26 27 49]  
Y\_pred: [ 1 20 26 30 37 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with difficulty controlling and, score: 0.21405332  
afib with poor rate, score: 0.14874797  
fib she was transferred, score: 0.13945329

confidence of prediction: 0.539361  
Y\_true: [ 1 4 11 20 24 26 27 49]



Y\_pred: [ 1 20 26 30 37 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

toprol lasix coumadin digoxin, score: 0.44830856

with her coumadin until, score: 0.19539276

a day warfarin mg, score: 0.113571115

confidence of prediction: 0.842224

Y\_true: [ 6 7 12 26 40 41 43]

Y\_pred: [12 26 33 40 43]

top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)

echo bal klebsiella pan sensitive blood, score: 0.17479615

and his bal grew out klebsiella he, score: 0.08150478

to wean him to trach mask, score: 0.0122011695

confidence of prediction: 0.918068

Y\_true: [ 6 7 12 26 40 41 43]

Y\_pred: [12 26 33 40 43]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation worsening hypernatremia worsening, score: 0.1490102

af which broke after, score: 0.036981743

af after this was, score: 0.013826443

confidence of prediction: 0.862795

Y\_true: [ 6 7 12 26 40 41 43]

Y\_pred: [12 26 33 40 43]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

was reintubated for presumed fluid, score: 0.8002236

pain chlorhexidine gluconate mouthwash month, score: 0.020533517

peg perc tracheostomy past medical, score: 0.018051727

confidence of prediction: 0.763480

Y\_true: [ 6 7 12 26 40 41 43]

Y\_pred: [12 26 33 40 43]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours or more)

perc and peg d, score: 0.06998214

perc tracheostomy past medical, score: 0.06107011

was reintubated for presumed, score: 0.04832492

confidence of prediction: 0.998245

Y\_true: [ 3 16 20]

Y\_pred: [ 4 20]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

illness 54f presented to an, score: 0.08154723

redistribution of subarachnoid hemorrhage, score: 0.03241708

discontinued now dod she, score: 0.009011777

confidence of prediction: 0.915537  
Y\_true: [ 4 7 13 18 24 27]  
Y\_pred: [ 4 13 18 20 24 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
avr cabg hyperlipidemia idiopathic hyper ck, score: 0.3843903  
aortic stenosis hyperlipidemia and a remote history, score:  
0.10349662  
hyperlipidemia idiopathic hyper ck, score: 0.08094535

confidence of prediction: 0.999387  
Y\_true: [ 4 7 13 18 24 27]  
Y\_pred: [ 4 13 18 20 24 27]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
tee conclusions prebypass no, score: 0.0054686405  
incisions gently with mild, score: 0.0010038011  
procedure cabg x lima lad rsvg om, score: 0.00041117158

confidence of prediction: 0.987033  
Y\_true: [ 4 7 13 18 24 27]  
Y\_pred: [ 4 13 18 20 24 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7186502  
cabg x lima lad, score: 0.029305901  
diuresed toward the preoperative, score: 0.020276735

confidence of prediction: 0.999841  
Y\_true: [ 4 7 13 18 24 27]  
Y\_pred: [ 4 13 18 20 24 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease aortic, score: 0.0753071  
coronary artery disease aortic, score: 0.02942346  
from prebypass rv systolic, score: 0.01345183

confidence of prediction: 0.964382  
Y\_true: [ 4 7 13 18 24 27]  
Y\_pred: [ 4 13 18 20 24 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure ace inhibitor should, score: 0.40742734  
severely thickened deformed there, score: 0.0036205987  
unchanged from prebypass rv systolic function remains, score:  
0.003073004

confidence of prediction: 0.860461  
Y\_true: [20 24 27 34 35 37 46]  
Y\_pred: [ 0 6 20 24 27 34 35 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension home atenolol was held, score: 0.4242657  
of oxygen hypertension diastolic, score: 0.06359667

native hypertension dementia discharge condition mental, score:  
0.033595156

confidence of prediction: 0.715795

Y\_true: [20 24 27 34 35 37 46]

Y\_pred: [ 0 6 20 24 27 34 35 37]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
hypertension diastolic chf sinus, score: 0.13843407  
coronary artery disease ekg, score: 0.13723879  
coronary artery disease osteopenia, score: 0.076402225

confidence of prediction: 0.982170

Y\_true: [20 24 27 34 35 37 46]

Y\_pred: [ 0 6 20 24 27 34 35 37]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure pt presented, score: 0.7158269  
diastolic chf cad and mild vascular, score: 0.04559831  
[UNK] chf cad native hypertension dementia, score: 0.009376161

confidence of prediction: 0.793453

Y\_true: [20 24 27 34 35 37 46]

Y\_pred: [ 0 6 20 24 27 34 35 37]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
unknown etiology gerd osteoarthritis pulmonary nodules coronary,  
score: 0.03551125  
the illumigene dna amplification reference, score: 0.0025435917  
suggesting pre renal etiology ivf, score: 0.0022897632

confidence of prediction: 0.919643

Y\_true: [20 24 27 34 35 37 46]

Y\_pred: [ 0 6 20 24 27 34 35 37]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure creatinine vs baseline in, score: 0.09551139  
on chronic [UNK] chf, score: 0.0033281047  
discharge diagnosis sepsis due, score: 0.0030920156

confidence of prediction: 0.873180

Y\_true: [20 24 27 34 35 37 46]

Y\_pred: [ 0 6 20 24 27 34 35 37]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuk lg 25am urine, score: 0.14096417  
to uti patient is septic, score: 0.13729796  
uti of note patient, score: 0.09885223

confidence of prediction: 0.721489

Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]

Y\_pred: [ 5 13 14 15 18 24 34 38]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)

applied for hyponatremia he continued to make, score: 0.5870841  
the staff radiologist dr, score: 0.021548864  
service facility vna of, score: 0.02119474

confidence of prediction: 0.990704  
Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]  
Y\_pred: [ 5 13 14 15 18 24 34 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting to three, score: 0.5986189  
coronary artery bypass grafting to three vessels, score: 0.09157951  
descending artery saphenous vein graft, score: 0.045217227

confidence of prediction: 0.554097  
Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]  
Y\_pred: [ 5 13 14 15 18 24 34 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization selective coronary angiography of this,  
score: 0.14849393  
catheterization and he was, score: 0.02417735  
mid vessel stenosis limited, score: 0.02416398

confidence of prediction: 0.962152  
Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]  
Y\_pred: [ 5 13 14 15 18 24 34 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.4027078  
diuresed towards his preoperative, score: 0.3847718  
cardiothoracic allergies penicillins attending, score: 0.011753866

confidence of prediction: 0.999092  
Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]  
Y\_pred: [ 5 13 14 15 18 24 34 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.49029443  
coronary artery disease past, score: 0.09880991  
coronary artery disease the, score: 0.09880991

confidence of prediction: 0.881414  
Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]  
Y\_pred: [ 5 13 14 15 18 24 34 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
infarction depression gerd discharge condition stable discharge,  
score: 0.100829735  
flexeril mg prn discharge, score: 0.0033217845  
mg daily paroxetine mg, score: 0.0024860422

confidence of prediction: 0.853448  
Y\_true: [ 5 10 11 13 14 18 22 24 34 37 38]  
Y\_pred: [ 5 13 14 15 18 24 34 38]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization selective coronary angiography of this,  
score: 0.22215512  
vessel stenosis the lcx, score: 0.12174454  
mid vessel stenosis limited resting, score: 0.025434785

confidence of prediction: 0.894876  
Y\_true: [17 21 33 36 42 49]  
Y\_pred: [21 33 35 36 40 42 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney failure thought to, score: 0.076783314  
chronic renal failure discharge condition, score: 0.058083393  
ckd and left bka, score: 0.047797505

confidence of prediction: 0.776623  
Y\_true: [17 21 33 36 42 49]  
Y\_pred: [21 33 35 36 40 42 49]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
fio2 peep abg pending unable, score: 0.310174  
vent settings tidal volume, score: 0.06789558  
facility newbridge on the, score: 0.035412256

confidence of prediction: 0.811474  
Y\_true: [17 21 33 36 42 49]  
Y\_pred: [21 33 35 36 40 42 49]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
hypertension chronic kidney disease baseline creatinine gout, score:  
0.11546337  
chronic renal failure discharge condition, score: 0.09295883  
chronic kidney failure thought to, score: 0.08438322

confidence of prediction: 0.777978  
Y\_true: [17 21 33 36 42 49]  
Y\_pred: [21 33 35 36 40 42 49]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for airway protection, score: 0.32091364  
general intubated sedated but, score: 0.081433944  
of intubation with sedation levophed was, score: 0.055897836

confidence of prediction: 0.910729  
Y\_true: [17 21 33 36 42 49]  
Y\_pred: [21 33 35 36 40 42 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
pe on coumadin diagnosed, score: 0.37212795  
mg daily coumadin mg, score: 0.17945378  
for pain warfarin mg tablet sig, score: 0.04216734

confidence of prediction: 0.972812  
Y\_true: [ 8 18 20 25 26 30 39 49]  
Y\_pred: [18 20 25 26 30 39]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires removed on post, score: 0.0620507  
diuresed coumadin was started, score: 0.0274613  
transesophageal echocardiogram for evaluation, score: 0.01810498

confidence of prediction: 0.983029  
Y\_true: [ 8 18 20 25 26 30 39 49]  
Y\_pred: [18 20 25 26 30 39]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension obstructive sleep apnea, score: 0.14962496  
fibrillation flutter hypertension obstructive sleep apnea, score:  
0.14601503  
obesity gout psoriatic arthritis colon, score: 0.08967913

confidence of prediction: 0.696784  
Y\_true: [ 8 18 20 25 26 30 39 49]  
Y\_pred: [18 20 25 26 30 39]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
severe mitral regurgitation directed posteriorly, score: 0.234048  
mitral regurgitation hypertension obstructive sleep, score:  
0.09286297  
diagnosis mitral regurgitation s p, score: 0.063583635

confidence of prediction: 0.917424  
Y\_true: [ 8 18 20 25 26 30 39 49]  
Y\_pred: [18 20 25 26 30 39]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation and her digoxin, score: 0.027779125  
atrial fibrillation flutter hypertension obstructive, score:  
0.010171827  
copd atrial fibrillation flutter newly diagnosed, score: 0.003984287

confidence of prediction: 0.639643  
Y\_true: [ 8 18 20 25 26 30 39 49]  
Y\_pred: [18 20 25 26 30 39]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
name un copd atrial fibrillation flutter newly, score: 0.29477128  
regurgitation hypertension obstructive sleep apnea obesity, score:  
0.020519804  
chronic obstructive pulmonary disease on, score: 0.005947296

confidence of prediction: 0.538334  
Y\_true: [ 8 18 20 25 26 30 39 49]  
Y\_pred: [18 20 25 26 30 39]  
top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)  
transesophageal echocardiogram redo sternotomy, score: 0.48192948  
transesophageal echocardiogram for evaluation, score: 0.049824785  
wires removed on post, score: 0.035329916

confidence of prediction: 0.974963  
Y\_true: [ 1 3 20 24 33 37 40 41 43 49]  
Y\_pred: [20 33]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
mg daily hctz mg daily levothyroxine mcg, score: 0.14723082  
discharge condition expired discharge, score: 0.071871206  
episode of hypertension when, score: 0.036201254

confidence of prediction: 0.981151  
Y\_true: [ 1 3 20 24 33 37 40 41 43 49]  
Y\_pred: [20 33]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
fracture respiratory failure dysphagia pancytopenia, score:  
0.8704062  
subtle ground glass opacities, score: 0.013038747  
endotracheal tube tip projecting, score: 0.0065682475

confidence of prediction: 0.715527  
Y\_true: [ 4 5 20 24 29 44]  
Y\_pred: [ 4 5 20 29 44]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
gold hypertension hyperlipidemia social history pt was, score:  
0.085214294  
added morphine concentrate solution, score: 0.010181403  
burr pappenh acantho 30pm, score: 0.007876347

confidence of prediction: 0.703003  
Y\_true: [ 4 5 20 24 29 44]  
Y\_pred: [ 4 5 20 29 44]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
admission for hyponatremia see below he went, score: 0.39396837  
admission for hyponatremia now presents with altered, score:  
0.23808883  
for worsening hyponatremia his diuretic, score: 0.1444847

confidence of prediction: 0.981161  
Y\_true: [ 4 5 20 24 29 44]  
Y\_pred: [ 4 5 20 29 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
name gold hypertension hyperlipidemia social history pt, score:  
0.087297626  
ace inhibitors attending first, score: 0.027233178  
schisto burr pappenh acantho, score: 0.02656398

confidence of prediction: 0.552790  
Y\_true: [ 4 5 20 24 29 44]  
Y\_pred: [ 4 5 20 29 44]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
floor pneumonia pt with, score: 0.10490982  
possible pulmonary infiltrate on chest, score: 0.047114305  
healthcare acquired pneumonia initially covered with, score:  
0.03319771

confidence of prediction: 0.745445  
Y\_true: [ 4 5 20 24 29 44]  
Y\_pred: [ 4 5 20 29 44]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
received 2u prbcs during that admission, score: 0.39763054  
then had bleeding from the, score: 0.076937824  
a hematocrit drop with oozing from a, score: 0.026291803

confidence of prediction: 0.512709  
Y\_true: [ 1 20 34]  
Y\_pred: [ 1 20 34 44]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
lopressor levoxyl lescol remeron discharge medications, score:  
0.10569195  
hh hypothyroidism dep pvd claudication, score: 0.068498775  
day levothyroxine mcg tablet sig, score: 0.06685545

confidence of prediction: 0.992924  
Y\_true: [ 1 20 34]  
Y\_pred: [ 1 20 34 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
supra clavicular nodes lungs cta, score: 0.3651558  
history pmh htn gerd hh hypothyroidism, score: 0.07248497  
retired silk finisher daughter lives, score: 0.028037665

confidence of prediction: 0.717945  
Y\_true: [ 1 20 34]  
Y\_pred: [ 1 20 34 44]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
pmh htn gerd hh hypothyroidism dep pvd, score: 0.09324683  
stent via l cca, score: 0.040411357  
remeron discharge medications hydrochlorothiazide, score:  
0.025332822

confidence of prediction: 0.775202  
Y\_true: [ 4 8 13 16 17 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26 40 42 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
dvt tb hyperlipidemia htn atrial fibrillation past, score: 0.1374551



fibrillation and hyperlipidemia further cardiac work, score:  
0.050532367

confidence of prediction: 0.974947  
Y\_true: [ 4 8 13 16 17 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26 40 42 49]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
left internal mammary artery, score: 0.06293108  
coronary artery bypass graft, score: 0.057672936  
off pump coronary artery bypass graft, score: 0.021986619

confidence of prediction: 0.998148  
Y\_true: [ 4 8 13 16 17 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26 40 42 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
tb hyperlipidemia htn atrial fibrillation past surgical, score:  
0.2653222  
cv irreg irreg no, score: 0.034243852  
positive for hypertension atrial, score: 0.03126141

confidence of prediction: 0.994085  
Y\_true: [ 4 8 13 16 17 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26 40 42 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
urgent off pump coronary artery, score: 0.046663765  
s p urgent off pump coronary artery, score: 0.030850971  
s p urgent off pump coronary artery bypass graft, score: 0.030850971

confidence of prediction: 0.982508  
Y\_true: [ 4 8 13 16 17 20 24 26 47]  
Y\_pred: [ 4 13 18 20 24 26 40 42 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib rx warfarin mg, score: 0.37807134  
atrial fibrillation past surgical history, score: 0.05433928  
fibrillation and anticoagulation was, score: 0.023489336

confidence of prediction: 0.812985  
Y\_true: [ 7 20 34 40 42]  
Y\_pred: [ 7 20 28 34 40 42]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia requiring 2u prbc and, score: 0.11689125  
polyp in the antrum, score: 0.06259465  
history of present illness, score: 0.04431057

confidence of prediction: 0.572974  
Y\_true: [ 7 20 34 40 42]  
Y\_pred: [ 7 20 28 34 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

anemia gerd hypertension social history she lives, score: 0.3694225  
melenotic stools x2 on, score: 0.084496886  
monitoring emergent egd deferred, score: 0.074742995

confidence of prediction: 0.735648  
Y\_true: [ 7 20 34 40 42]  
Y\_pred: [ 7 20 28 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
deficiency anemia gerd hypertension social history she, score:  
0.05025015  
octreotide and protonix hepatology, score: 0.010499303  
hd1 and melenotic stools x2 on hd3, score: 0.0068865884

confidence of prediction: 0.502089  
Y\_true: [ 7 20 34 40 42]  
Y\_pred: [ 7 20 28 34 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was intubated for airway protection and, score: 0.44381815  
plans for intubation and emergent, score: 0.07308137  
illicit ivdu family history per, score: 0.03109385

confidence of prediction: 0.528627  
Y\_true: [ 7 20 34 40 42]  
Y\_pred: [ 7 20 28 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for airway protection and, score: 0.4057242  
were intubated and had, score: 0.06115561  
illicit ivdu family history per, score: 0.03750194

confidence of prediction: 0.940998  
Y\_true: [ 7 20 28 34]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
friable duodenum with multiple polyps antral, score: 0.4627678  
performed and endoscopy and, score: 0.21083944  
bleeding and death it, score: 0.047538377

confidence of prediction: 0.865296  
Y\_true: [ 7 20 28 34]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
anemia gerd hypertension social history she lives, score: 0.4172388  
ama upper gi bleed, score: 0.050123405  
moderate ascites endoscopy impression, score: 0.036378454

confidence of prediction: 0.755731  
Y\_true: [ 7 20 28 34]  
Y\_pred: [ 7 20 28 34]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
history of present illness 53f with history, score: 0.39858747  
performed and endoscopy and this, score: 0.2821099  
medical advice 53f with history, score: 0.023791831

confidence of prediction: 0.890201  
Y\_true: [ 7 20 28 34]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
deficiency anemia gerd hypertension social history she, score: 0.11615991  
friable duodenum with multiple polyps, score: 0.0051176264  
illness 53f with history, score: 0.0035636819

confidence of prediction: 0.598987  
Y\_true: [ 0 2 46]  
Y\_pred: [2]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
diabetes type ii controlled without, score: 0.21123922  
diabetes type ii without complications, score: 0.06141343  
chemo diabetes type ii asthma social, score: 0.022957617

confidence of prediction: 0.875341  
Y\_true: [ 9 19 49]  
Y\_pred: [18 19]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
consulted and hemodialysis was continued, score: 0.08959845  
at dialysis every tuesday, score: 0.07035967  
at dialysis results to, score: 0.052495215

confidence of prediction: 0.987080  
Y\_true: [13 18 20 24 25 26]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting x left, score: 0.5292115  
coronary artery bypass graft x left, score: 0.02989057  
bypass graft x past, score: 0.023398882

confidence of prediction: 0.979828  
Y\_true: [13 18 20 24 25 26]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
bypass grafting x left internal, score: 0.035321992  
cardiothoracic allergies motrin attending, score: 0.024379719  
diuresed towards his pre, score: 0.013149878

confidence of prediction: 0.982093

Y\_true: [13 18 20 24 25 26]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
cluster headaches hypertension renal insufficiency impaired fasting,  
score: 0.18116994  
artery disease hypertension mitral, score: 0.030988107  
complaint exertional angina burning, score: 0.0050286744

confidence of prediction: 0.999010  
Y\_true: [13 18 20 24 25 26]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.56437236  
coronary artery disease s p coronary artery bypass graft, score:  
0.119481266  
coronary artery disease hypertension, score: 0.027884075

confidence of prediction: 0.719977  
Y\_true: [ 2 27 35 48]  
Y\_pred: [ 2 21 27 35 36 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
flomax diabetes mellitus type ii held glipizide and treatd with,  
score: 0.096093506  
dm2 who presents with, score: 0.06916825  
type ii diabetes mellitus cad s p, score: 0.01885631

confidence of prediction: 0.958101  
Y\_true: [ 2 27 35 48]  
Y\_pred: [ 2 21 27 35 36 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure acute, score: 0.068463765  
and systolic chf cad status post cabg, score: 0.046564993  
chf flare and pulmonary, score: 0.039662916

confidence of prediction: 0.559743  
Y\_true: [ 2 27 35 48]  
Y\_pred: [ 2 21 27 35 36 48]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure the, score: 0.09474831  
on chronic renal failure discharge, score: 0.09474831  
acute renal failure was attributed, score: 0.072692215

confidence of prediction: 0.866063  
Y\_true: [ 2 27 35 48]  
Y\_pred: [ 2 21 27 35 36 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg ckd dm2, score: 0.41025364

status post cabg ckd, score: 0.13746743  
lad heart pacemaker in, score: 0.0031111254

confidence of prediction: 0.904185  
Y\_true: [ 4 13 17 18 20 24]  
Y\_pred: [ 4 13 17 18 20 24 26 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension hyperlipidemia breast cancer s p, score: 0.14476226  
cabg hypertension dyslipidemia history of endovascular, score:  
0.078950755  
of hypertension hyperlipidemia s p aaa repair, score: 0.0534164

confidence of prediction: 0.848133  
Y\_true: [ 4 13 17 18 20 24]  
Y\_pred: [ 4 13 17 18 20 24 26 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting left internal mammary artery to  
left, score: 0.09336431  
wires were discontinued without, score: 0.056932315  
coronary artery bypass grafting past medical, score: 0.054592118

confidence of prediction: 0.593639  
Y\_true: [ 4 13 17 18 20 24]  
Y\_pred: [ 4 13 17 18 20 24 26 34]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
picc line flush ml intravenous, score: 0.057101443  
resection gerd hypertension hyperlipidemia, score: 0.04357299  
niacin lovastatin advicor mg mg, score: 0.035240255

confidence of prediction: 0.985804  
Y\_true: [ 4 13 17 18 20 24]  
Y\_pred: [ 4 13 17 18 20 24 26 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7016909  
grafting left internal mammary, score: 0.03243138  
diuresed toward the preoperative, score: 0.019798227

confidence of prediction: 0.994673  
Y\_true: [ 4 13 17 18 20 24]  
Y\_pred: [ 4 13 17 18 20 24 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hydrochlorothiazide mg mg tablet, score: 0.34532192  
duodenal ulcer arthritis and, score: 0.077165514  
of perforated duodenal ulcer, score: 0.065701865

confidence of prediction: 0.919267  
Y\_true: [ 4 13 17 18 20 24]  
Y\_pred: [ 4 13 17 18 20 24 26 34]  
top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
descending with vein grafts to, score: 0.11349167  
coronary artery bypass grafting, score: 0.10995595  
coronary artery bypass grafting, score: 0.038008984

confidence of prediction: 0.857929

Y\_true: [ 4 10 17 30]

Y\_pred: [ 4 30 48]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

disease copd hyperlipidemia discharge condition mental, score:  
0.15100119

artery disease hyperlipidemia hypertension chronic obstructive  
pulmonary, score: 0.06560519

simvastatin mg daily senna, score: 0.011872351

confidence of prediction: 0.611568

Y\_true: [ 4 10 17 30]

Y\_pred: [ 4 30 48]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)

since discharge copd hx with 3l nighttime, score: 0.065008715

chronic obstructive pulmonary disease psh coronary, score:  
0.014984751

disease copd hyperlipidemia discharge condition mental, score:  
0.0064862375

confidence of prediction: 0.637133

Y\_true: [ 0 16 33 34 40 42 46]

Y\_pred: [17 29 33 40 42]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

acute respiratory failure and sepsis, score: 0.17427059

she was intubated the morning, score: 0.07481175

to be intubated for a short, score: 0.028882043

confidence of prediction: 0.717760

Y\_true: [ 0 16 33 34 40 42 46]

Y\_pred: [17 29 33 40 42]

top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

term intubation she was intubated the morning, score: 0.066975825

to be intubated for a short time, score: 0.019206462

be intubated should she fail on bipap, score: 0.015434496

confidence of prediction: 0.770489

Y\_true: [ 0 16 33 34 40 42 46]

Y\_pred: [17 29 33 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

be intubated should she fail on, score: 0.024562895

term intubation she was intubated the morning, score: 0.010781315

became resistant to clarithromycin, score: 0.0050906204

confidence of prediction: 0.958250  
Y\_true: [ 1 4 17 33 34 40 42]  
Y\_pred: [ 1 21 36 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
ss hypothyroidism last tsh in, score: 0.6788997  
home levothyroxine hypertension patient on, score: 0.13134639  
hypertension hypothyroidism gerd past surgical, score: 0.055884693

confidence of prediction: 0.643541  
Y\_true: [ 1 4 17 33 34 40 42]  
Y\_pred: [ 1 21 36 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
recommending that you take, score: 0.036013164  
pe gen intubated sedation heent anicteric cv, score: 0.03386823  
lead to intubation for airway protection although, score:  
0.023483833

confidence of prediction: 0.506832  
Y\_true: [ 4 20 25 26 49]  
Y\_pred: [ 4 20 25 26 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
50mg hospital1 while in, score: 0.03677112  
capped hypertension hyperlipidemia bph s p turp, score: 0.020512892  
carvedilol mg twice a, score: 0.019712273

confidence of prediction: 0.818098  
Y\_true: [ 4 20 25 26 49]  
Y\_pred: [ 4 20 25 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hyperlipidemia bph s p, score: 0.22325495  
chronic atrial fibrillation ventricular tachycardia, score:  
0.08557116  
pulmonary artery hypertension brief hospital course, score:  
0.03006644

confidence of prediction: 0.745450  
Y\_true: [ 4 20 25 26 49]  
Y\_pred: [ 4 20 25 26 27]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
severe mitral regurgitation is seen, score: 0.13154253  
severe mitral regurgitation moderate to severe, score: 0.13154253  
severe mitral regurgitation moderate to, score: 0.13154253

confidence of prediction: 0.969143  
Y\_true: [ 4 20 25 26 49]  
Y\_pred: [ 4 20 25 26 27]  
top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation on dofetilide for, score: 0.112022825

afib with rvr palpitations, score: 0.09577636

afib vt on dofetilide, score: 0.09319189

confidence of prediction: 0.972925

Y\_true: [18]

Y\_pred: [ 4 18 20 27 49]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were eventually removed, score: 0.13590296

cardiothoracic allergies no known, score: 0.022723928

washing incisions gently with mild soap, score: 0.008397632

confidence of prediction: 0.558055

Y\_true: [ 4 8 9 13 14 18 22 24 38 39 47]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

medical history hl psoriasis s p bilateral, score: 0.09839325

h o hl and psoriasis transferred from, score: 0.08022564

and home simvastatin was continued patient, score: 0.029983634

confidence of prediction: 0.996587

Y\_true: [ 4 8 9 13 14 18 22 24 38 39 47]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

cabg x4 lima lad, score: 0.38769597

coronary artery bypass grafting x4 with, score: 0.20371075

coronary artery reverse saphenous vein single, score: 0.05294359

confidence of prediction: 0.985239

Y\_true: [ 4 8 9 13 14 18 22 24 38 39 47]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.70861965

incisions gently with mild soap, score: 0.18575487

cabg x4 lima lad, score: 0.0191915

confidence of prediction: 0.999565

Y\_true: [ 4 8 9 13 14 18 22 24 38 39 47]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting, score: 0.4225354

descending coronary reverse saphenous vein, score: 0.13855234

coronary artery reverse saphenous vein graft, score: 0.090878196

confidence of prediction: 0.804276

Y\_true: [ 4 19 27 30 47 48]

Y\_pred: [ 4 19 24 27 34 37 48]

top three important windows for true positive code 4 (272.4: Other



and unspecified hyperlipidemia)  
hld continued atorvastatin transitional issues, score: 0.28609788  
rle htn hyperlipidemia seizure disorder sensorineural hearing,  
score: 0.0614329  
carvedilol mg hospital1 clopidogrel, score: 0.022165416

confidence of prediction: 0.911347  
Y\_true: [ 4 19 27 30 47 48]  
Y\_pred: [ 4 19 24 27 34 37 48]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
of dialysis catheter resides, score: 0.1465888  
on hd mwf and, score: 0.08565711  
non dialysis days ttss, score: 0.05529814

confidence of prediction: 0.981786  
Y\_true: [ 4 19 27 30 47 48]  
Y\_pred: [ 4 19 24 27 34 37 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure this, score: 0.24840444  
dchf echo lvef who presents, score: 0.14646976  
dchf echo lvef who presented, score: 0.14646976

confidence of prediction: 0.616426  
Y\_true: [ 4 19 27 30 47 48]  
Y\_pred: [ 4 19 24 27 34 37 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
dialysis history of present, score: 0.048020896  
s p bypass in, score: 0.03279297  
and urgent dialysis with liter of, score: 0.0113264965

confidence of prediction: 0.767758  
Y\_true: [ 4 6 17 26 40 42]  
Y\_pred: [ 4 6 17 26 33 35 40 42 43]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
risk factors dyslipidemia cardiac history cabg none, score:  
0.056704964  
prior provoked dvt prior, score: 0.009624985  
dermatitis ulcers scars or, score: 0.008899143

confidence of prediction: 0.633253  
Y\_true: [ 4 6 17 26 40 42]  
Y\_pred: [ 4 6 17 26 33 35 40 42 43]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
comment recta 16am blood, score: 0.04137998  
resuscitated and intubated at, score: 0.03449529  
significant metabolic acidosis with arterial ph she, score:  
0.024499955

confidence of prediction: 0.922413

Y\_true: [ 4 6 17 26 40 42]  
Y\_pred: [ 4 6 17 26 33 35 40 42 43]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
hypothermia protocol central venous line placement history of, score: 0.059349984  
ventilate dyssynchrony cvl was placed and the, score: 0.0443803  
she underwent cta chest, score: 0.023212623

confidence of prediction: 0.925837  
Y\_true: [ 4 6 17 26 40 42]  
Y\_pred: [ 4 6 17 26 33 35 40 42 43]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib she does not, score: 0.20030518  
afib rvr which was, score: 0.18137963  
afib with rvr she, score: 0.107210316

confidence of prediction: 0.670930  
Y\_true: [ 4 6 17 26 40 42]  
Y\_pred: [ 4 6 17 26 33 35 40 42 43]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
being intubated family history, score: 0.14244846  
was intubated and sedated, score: 0.12134677  
being intubated physical exam, score: 0.10812607

confidence of prediction: 0.753396  
Y\_true: [ 4 6 17 26 40 42]  
Y\_pred: [ 4 6 17 26 33 35 40 42 43]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
was intubated and sedated, score: 0.11961758  
was intubated paralyzed sedated, score: 0.11414969  
being intubated family history, score: 0.078269646

confidence of prediction: 0.926765  
Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]  
Y\_pred: [ 4 10 13 18 20 26 34]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
with hypertension hyperlipidemia last name un syndrome, score: 0.13866654  
and underwent cabg x, score: 0.031671118  
s p cabg icd, score: 0.018445415

confidence of prediction: 0.681280  
Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]  
Y\_pred: [ 4 10 13 18 20 26 34]  
top three important windows for true positive code 10 (305.1: Tobacco use disorder)  
lifestyle tobacco smokes ppd [UNK] least 20yrs, score: 0.009783989  
underwent cardiac catheterization that, score: 0.0010545502

om diag rsvg pda, score: 0.00089176325

confidence of prediction: 0.965225

Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]

Y\_pred: [ 4 10 13 18 20 26 34]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

wires were discontinued without, score: 0.04170658

cardiothoracic doctor first name, score: 0.019229867

underwent cabg x with dr, score: 0.016140196

confidence of prediction: 0.986110

Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]

Y\_pred: [ 4 10 13 18 20 26 34]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.70288295

incisions gently with mild soap, score: 0.18425108

cardiothoracic doctor first name, score: 0.047585323

confidence of prediction: 0.977200

Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]

Y\_pred: [ 4 10 13 18 20 26 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

56yom with hypertension hyperlipidemia last name un, score:

0.40175968

hypertrophic cardiomyopathy htn hyperlipidemia kidney stones gerd,

score: 0.06065678

right cath perclose left, score: 0.035144377

confidence of prediction: 0.947316

Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]

Y\_pred: [ 4 10 13 18 20 26 34]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib s p remote ear, score: 0.09512609

atrial fibrillation pt was found, score: 0.050991338

amiodarone per cardiology with, score: 0.001397046

confidence of prediction: 0.971970

Y\_true: [ 4 7 10 13 18 20 22 24 26 34 35]

Y\_pred: [ 4 10 13 18 20 26 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

kidney stones gerd obesity nstemi afib, score: 0.39456773

om diag rsvg pda plv, score: 0.007195642

illness 56yom with hypertension hyperlipidemia, score: 0.0022671716

confidence of prediction: 0.532699

Y\_true: [ 6 29 33 42]

Y\_pred: [20 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96

consecutive hours)  
exacerbation requiring intubation for day, score: 0.064962335  
she remained intubated for day, score: 0.048049968  
post intubation discharged on, score: 0.02997548

confidence of prediction: 0.673732  
Y\_true: [34 37 46]  
Y\_pred: [37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuk mod 40pm urine rbc, score: 0.2243428  
urinary tract and c diff, score: 0.0883281  
urosepsis a severe infection of, score: 0.052132603

confidence of prediction: 0.641814  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension diabetes dyslipidemia schizoaffective disorder  
discharge, score: 0.25425526  
hyperlipidemia patient s statin was, score: 0.2334356  
back pain hyperlipidemia gastroesophageal reflux s p, score:  
0.014796976

confidence of prediction: 0.787083  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease h o, score: 0.08604347  
patient has cri at, score: 0.061872523  
htn dmii ckd asthma presents to, score: 0.021608641

confidence of prediction: 0.699775  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi htn dmii, score: 0.4737072  
s p mi schizoaffective disorder htn dmii, score: 0.4737072  
likely require dialysis within, score: 0.002080681

confidence of prediction: 0.853505  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
bypass with atherectomy in after, score: 0.3897303  
s p mi htn, score: 0.081961446  
coronary artery disease hypertension, score: 0.035377253

confidence of prediction: 0.945145

Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure coronary artery disease, score: 0.10164943  
chf and this may have, score: 0.06792788  
congestive heart failure we gave you, score: 0.06700186

confidence of prediction: 0.586602  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
primary asthma pneumonia secondary systolic, score: 0.15820873  
with pneumonia she was, score: 0.14959233  
a lll infiltrate and though she, score: 0.08412419

confidence of prediction: 0.841806  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hyperlipidemia gastroesophageal reflux s p exploratory, score:  
0.13920274  
and hypertensive nephropathy a, score: 0.01085614  
revisions of her aorto, score: 0.009321288

confidence of prediction: 0.636885  
Y\_true: [ 4 21 23 24 27 29 34 35 36]  
Y\_pred: [ 2 4 21 23 24 27 29 34 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
patient has cri at, score: 0.102521084  
chronic kidney disease h o, score: 0.083212964  
renal failure renal was, score: 0.024980038

confidence of prediction: 0.702213  
Y\_true: [24 35]  
Y\_pred: [17 29 31 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute kidney injury mr known, score: 0.12198891  
in renal function aspiration, score: 0.043367337  
ag legionella urinary antigen, score: 0.025553152

confidence of prediction: 0.938181  
Y\_true: [ 4 10 14 20 24 34 38]  
Y\_pred: [ 4 20 24 25 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
simvastatin gemfibrozil 600mg prilosec 40mg qd, score: 0.1459544  
hld p w inferior stemi, score: 0.14057378  
chronic issues hld his simvastatin was discontinued, score:  
0.04333747

confidence of prediction: 0.987939  
Y\_true: [ 4 10 14 20 24 34 38]  
Y\_pred: [ 4 20 24 25 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
smoking obestiy hypertension cardiac history percutaneous coronary  
interventions des x2, score: 0.56645894  
gemfibrozil 600mg prilosec 40mg qd celexa 20mg, score: 0.086103916  
chronic issues hld his, score: 0.02014798

confidence of prediction: 0.957824  
Y\_true: [ 4 10 14 20 24 34 38]  
Y\_pred: [ 4 20 24 25 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p des to, score: 0.14380036  
pci with placement of, score: 0.08114488  
vessel disease the lmca, score: 0.06869212

confidence of prediction: 0.968008  
Y\_true: [ 4 10 14 20 24 34 38]  
Y\_pred: [ 4 20 24 25 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
medical history gerd anxiety osa social history, score: 0.010316683  
and celexa gerd stable he was continued, score: 0.0052054715  
high dose atorvastatin captopril, score: 0.0038163466

confidence of prediction: 0.796164  
Y\_true: [ 4 8 20 27 33 47 49]  
Y\_pred: [ 4 20 29 33]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
on hypertension hyperlipidemia history of cvas tias, score:  
0.29495734  
oupatient furosemide hyperlipidemia discontinued atorvastatin given  
evidence, score: 0.015134423  
potentially nonsmall cell lung cancer, score: 0.008138342

confidence of prediction: 0.758474  
Y\_true: [ 4 8 20 27 33 47 49]  
Y\_pred: [ 4 20 29 33]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
multiple cores status post prostate, score: 0.15279625  
continued enoxaparin htn continued outpatient furosemide  
hyperlipidemia, score: 0.101447284  
on hypertension hyperlipidemia history of cvas, score: 0.028765872

confidence of prediction: 0.748156  
Y\_true: [ 4 8 20 27 33 47 49]  
Y\_pred: [ 4 20 29 33]  
top three important windows for true positive code 33 (518.81: Acute

respiratory failure)  
rare 55am lactate 45am, score: 0.07237282  
and superimposed pna rather than, score: 0.058333937  
pneumonia lung infection and progression, score: 0.04076864

confidence of prediction: 0.823147  
Y\_true: [ 7 9 20 25]  
Y\_pred: [ 1 2 7 20]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia secondary to lower, score: 0.16634987  
and a tagged rbc, score: 0.08861169  
recorded as having no, score: 0.05696918

confidence of prediction: 0.949725  
Y\_true: [ 7 9 20 25]  
Y\_pred: [ 1 2 7 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn and dm on no, score: 0.1557334  
to diverticulosis htn dm hypothyroidism on no, score: 0.09711072  
to diverticulosis htn not, score: 0.09711072

confidence of prediction: 0.631492  
Y\_true: [ 4 13 17 18 20 24 26 48]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stenosis hypertension hyperlipidemia malignant melanoma excised  
from, score: 0.34255898  
fibrillation hypertension hyperlipidemia malignant melanoma excised  
from, score: 0.06541948  
social history race caucasian, score: 0.015175837

confidence of prediction: 0.970163  
Y\_true: [ 4 13 17 18 20 24 26 48]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
x irregular x murmur, score: 0.016810248  
incisions gently with mild, score: 0.012804263  
avr stjude tissue cabg x2 lima lad svg rca, score: 0.011894774

confidence of prediction: 0.978451  
Y\_true: [ 4 13 17 18 20 24 26 48]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires removed per protocol, score: 0.1446416  
cabg x2 lima lad, score: 0.027883442  
washing incisions gently with mild soap, score: 0.0070360443

confidence of prediction: 0.818344  
Y\_true: [ 4 13 17 18 20 24 26 48]

Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
echocardiograms his echocardiograms have shown, score: 0.33699232  
own practice in hospital1 cigarettes, score: 0.034804452  
aortic stenosis hypertension hyperlipidemia malignant melanoma  
excised, score: 0.032100927

confidence of prediction: 0.924897  
Y\_true: [ 4 13 17 18 20 24 26 48]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cabg x2 lima lad, score: 0.15190928  
coronary artery disease postop atrial fibrillation, score:  
0.10307767  
lad proximal mid vessel with stenosis and, score: 0.0907437

confidence of prediction: 0.883906  
Y\_true: [ 4 13 17 18 20 24 26 48]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib dose held for, score: 0.3025788  
fib and amiodarone and coumadin started, score: 0.123442076  
fib we will follow, score: 0.108278036

confidence of prediction: 0.989098  
Y\_true: [24 26 32 34]  
Y\_pred: [26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf of note aspirin is, score: 0.68751264  
afib with rvr of, score: 0.1380528  
afib but was in, score: 0.017588023

confidence of prediction: 0.878364  
Y\_true: [31]  
Y\_pred: [20 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
episodes aspiration pneumonia discharge condition improved, score:  
0.1306592  
mild aspiration pneumonia on atelectasis, score: 0.08150919  
of aspiration pneumonia and pt started, score: 0.048937123

confidence of prediction: 0.936872  
Y\_true: [ 4 7 11 19 34 47]  
Y\_pred: [ 4 7 19 26 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
as above hyperlipidemia continued simvastatin oa continued, score:  
0.09240704  
simvastatin mg po qhs, score: 0.005118966



heart block hyperlipidemia htn gerd depression anemia atrial fib,  
score: 0.0044722627

confidence of prediction: 0.847202

Y\_true: [ 4 7 11 19 34 47]

Y\_pred: [ 4 7 19 26 34]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

anemia hyperkalemia discharge condition, score: 0.5259355

anemia patient presented with, score: 0.3045452

anemia and gib with, score: 0.05542693

confidence of prediction: 0.695351

Y\_true: [ 4 7 11 19 34 47]

Y\_pred: [ 4 7 19 26 34]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)

esrd on hd hcv, score: 0.110385925

esrd on hd m w, score: 0.094870694

esrd on hd hcv, score: 0.06784132

confidence of prediction: 0.779333

Y\_true: [ 4 7 11 19 34 47]

Y\_pred: [ 4 7 19 26 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

htn gerd depression anemia atrial fib, score: 0.18919301

in past gerd on ppi as above, score: 0.052809663

continued home lantus plus, score: 0.029885797

confidence of prediction: 0.783372

Y\_true: [31 49]

Y\_pred: [29 31]

top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)

as aspiration pneumonia she was transitioned, score: 0.047982916

criteria so she was, score: 0.020781765

have pneumonia who improved, score: 0.017186005

confidence of prediction: 0.933912

Y\_true: [ 1 12 17 40 42]

Y\_pred: [ 1 33 40 42]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

refills levothyroxine mcg tablet sig one, score: 0.010349042

schizoid disorder hypothyroidism social history no, score:

0.0018052035

commensal respiratory bacteria and 2k gnrs, score: 0.000910627

confidence of prediction: 0.897057

Y\_true: [ 1 12 17 40 42]

Y\_pred: [ 1 33 40 42]

top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

required re intubation she was successfully extubated, score:  
0.18633217  
she was intubated for her, score: 0.044128634  
medication while intubated she was, score: 0.018389693

confidence of prediction: 0.759761  
Y\_true: [ 1 12 17 40 42]  
Y\_pred: [ 1 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
required re intubation she was successfully extubated, score:  
0.16451201  
while intubated she was maintained, score: 0.07083364  
decompensation requiring intubation although initially, score:  
0.061671298

confidence of prediction: 0.750327  
Y\_true: [ 4 5 17 20 24 31 33 41 42]  
Y\_pred: [ 4 5 20 24 31 41 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia cad preserved ef, score:  
0.17860214  
cardiovascular hypertension hyperlipidemia as above home  
antihypertensives, score: 0.10502287  
and valsartan simvastatin therapy was continued, score: 0.044407763

confidence of prediction: 0.966026  
Y\_true: [ 4 5 17 20 24 31 33 41 42]  
Y\_pred: [ 4 5 20 24 31 41 42]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
continued renal hyponatremia mrs known, score: 0.80125844  
lastname was hyponatremic na on arrival but, score: 0.10035386  
so trileptal therapy was initiated, score: 0.007335797

confidence of prediction: 0.962655  
Y\_true: [ 4 5 17 20 24 31 33 41 42]  
Y\_pred: [ 4 5 20 24 31 41 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hyperlipidemia as above home, score: 0.45969737  
records and discussions with, score: 0.10511965  
medical history hypertension hyperlipidemia cad preserved, score:  
0.06673855

confidence of prediction: 0.963556  
Y\_true: [ 4 5 17 20 24 31 33 41 42]  
Y\_pred: [ 4 5 20 24 31 41 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
hyperlipidemia cad preserved ef per latest, score: 0.00822329  
her daughter says all, score: 0.004898489

a stable appearing intraparenchymal, score: 0.0038107964

confidence of prediction: 0.817990

Y\_true: [ 4 5 17 20 24 31 33 41 42]

Y\_pred: [ 4 5 20 24 31 41 42]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

for presumed aspiration pneumonia these should be, score: 0.0452874

received pna on the, score: 0.007936462

all eeg and imaging, score: 0.007813957

confidence of prediction: 0.621445

Y\_true: [ 4 5 17 20 24 31 33 41 42]

Y\_pred: [ 4 5 20 24 31 41 42]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

on tube feeds should continue, score: 0.5691841

angiopathy an mri was, score: 0.030359568

radiopaque foreign bodies irregularity, score: 0.018456405

confidence of prediction: 0.628990

Y\_true: [ 4 5 17 20 24 31 33 41 42]

Y\_pred: [ 4 5 20 24 31 41 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

general intubated off sedation nad, score: 0.11288729

the patient intubated and sedated on, score: 0.042271335

on tube feeds should, score: 0.023592496

confidence of prediction: 0.730149

Y\_true: [16 42]

Y\_pred: [42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

and attempting to roll, score: 0.054490972

language intubated but follows, score: 0.04604407

of mannitol was administered, score: 0.042405568

confidence of prediction: 0.983932

Y\_true: [20 49]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

history pmh htn pe yrs ago, score: 0.19829749

losartan hctz coumadin discharge medications oxycodone, score:  
0.11881659

ulna with volar and radial angulation mm, score: 0.022369064

confidence of prediction: 0.520811

Y\_true: [ 1 6 17 30 32 33 35 41 43 46]

Y\_pred: [ 0 1 6 26 30 33 35 37 40 42 46]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)  
in hypothyroidism tobacco etoh copd, score: 0.2960512  
metabolic acidosis in addition, score: 0.019114101  
transaminitis uti the patient, score: 0.004383503

confidence of prediction: 0.556626  
Y\_true: [ 1 6 17 30 32 33 35 41 43 46]  
Y\_pred: [ 0 1 6 26 30 33 35 37 40 42 46]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
to maintain adequate blood, score: 0.11391068  
metabolic acidosis in addition to, score: 0.0790586  
and metabolic acidosis the patient was, score: 0.049749635

confidence of prediction: 0.574340  
Y\_true: [ 1 6 17 30 32 33 35 41 43 46]  
Y\_pred: [ 0 1 6 26 30 33 35 37 40 42 46]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
post mortem autopsy medications on admission no, score: 0.013592595  
bnp abg post intubation, score: 0.0023190517  
igm neg varicella zoster, score: 0.0018988658

confidence of prediction: 0.990373  
Y\_true: [ 1 6 17 30 32 33 35 41 43 46]  
Y\_pred: [ 0 1 6 26 30 33 35 37 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
with respiratory failure and, score: 0.17631151  
post intubation abg pre intubation 42am, score: 0.16372104  
post intubated abg was worsened, score: 0.045765225

confidence of prediction: 0.524556  
Y\_true: [ 1 6 17 30 32 33 35 41 43 46]  
Y\_pred: [ 0 1 6 26 30 33 35 37 40 42 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure and, score: 0.08589188  
to have arf transaminitis uti, score: 0.07376389  
b19 antibodies varicella zoster antibody, score: 0.058616873

confidence of prediction: 0.552713  
Y\_true: [ 1 6 17 30 32 33 35 41 43 46]  
Y\_pred: [ 0 1 6 26 30 33 35 37 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
to maintain adequate blood, score: 0.14844048  
septic and hypotensive already, score: 0.066057384  
discharge diagnosis sepsis discharge condition expired discharge,  
score: 0.034138445

confidence of prediction: 0.822766  
Y\_true: [26 29 35]  
Y\_pred: [20 26 31 35]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib and received [UNK], score: 0.16513029  
af and complained of, score: 0.14418243  
afib with rvr onc history, score: 0.13665663

confidence of prediction: 0.961703  
Y\_true: [26 29 35]  
Y\_pred: [20 26 31 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
family arf patient had had, score: 0.43151352  
thought her arf was multifactorial, score: 0.07754052  
new arf with creatinine of, score: 0.06525955

confidence of prediction: 0.785436  
Y\_true: [ 2 10 11 27 35]  
Y\_pred: [ 2 20 27]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
metformin 500mg hospital1 hydroxyzine, score: 0.22106849  
ii dm home [UNK] was, score: 0.1734659  
continue metformin continue hydroxyzine, score: 0.052609418

confidence of prediction: 0.933126  
Y\_true: [ 2 10 11 27 35]  
Y\_pred: [ 2 20 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic congestive heart failure discharge condition mental,  
score: 0.2641579  
chf presentation and cxr, score: 0.131553  
chf pt says she took, score: 0.033954423

confidence of prediction: 0.929516  
Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]  
Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia gerd s p tonsillectomy, score:  
0.07867071  
myocardial infarction hyperlipidemia s p coronary artery, score:  
0.028114546  
and underwent coronary artery, score: 0.0027510752

confidence of prediction: 0.996189  
Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]  
Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x4 lima lad svg, score: 0.064787164  
bypass grafts x gastric, score: 0.02982383  
coronary artery bypass grafts x lima lad sv dg sv, score:

0.014395122

confidence of prediction: 0.782310

Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]

Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

left heart catheterization coronary angiogram coronary artery, score: 0.030918948

mitral regurgitation is seen, score: 0.002608596

chf small bilateral effusions, score: 0.002064532

confidence of prediction: 0.973568

Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]

Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

creams or powders to, score: 0.51628876

bypass grafting x4 lima lad, score: 0.06755902

tee was performed in, score: 0.008603914

confidence of prediction: 0.943759

Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]

Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hyperlipidemia gerd s p, score: 0.22705011

hypertension and [UNK] who, score: 0.1173584

cabg with expected prominence, score: 0.04269149

confidence of prediction: 0.753149

Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]

Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

non st elevation myocardial infarction hyperlipidemia, score: 0.018629376

non st elevation myocardial infarction major surgical, score: 0.01353656

heart catheterization coronary angiogram coronary, score: 0.008820115

confidence of prediction: 0.906221

Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]

Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

sv dg sv om1 sv om2 history, score: 0.13175789

coronary angiogram coronary artery bypass grafts, score: 0.053112283

coronary artery bypass grafting, score: 0.05273234

confidence of prediction: 0.922242

Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]

Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hypertension hyperlipidemia gerd s p tonsillectomy social, score:  
0.025061533  
x gastric reflux discharge condition stable, score: 0.019178592  
conclusions for listing of medications conclusions pre, score:  
0.01098651

confidence of prediction: 0.889345  
Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]  
Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
significant interval change the, score: 0.018224357  
days for uti disp tablet s, score: 0.0141153205  
mis in 60s brother, score: 0.00599658

confidence of prediction: 0.934610  
Y\_true: [ 4 13 14 18 20 22 24 34 37 38 44]  
Y\_pred: [ 4 13 14 18 20 22 24 34 37 38 40 42]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
left heart catheterization coronary angiogram coronary artery,  
score: 0.11607768  
cardiac catheterization revealed a totally, score: 0.0032292882  
op tee for cabg, score: 0.0029092587

confidence of prediction: 0.965016  
Y\_true: [ 1 2 4 18 21 23 24 35 36]  
Y\_pred: [ 1 2 4 8 18 20 23 24 30 34 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
home cri hypothyroidism anxiety depression anemia gerd, score:  
0.001196384  
avr 21mm ce pericardial, score: 0.00017839827  
500mcg 50mcg one puff, score: 0.00014346903

confidence of prediction: 0.912197  
Y\_true: [ 1 2 4 18 21 23 24 35 36]  
Y\_pred: [ 1 2 4 8 18 20 23 24 30 34 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
htn iddm cad copd asthma emphysema, score: 0.19777007  
pcis copd iddm and sleep apnea, score: 0.01770743  
stenosis htn iddm cad copd asthma emphysema, score: 0.016543

confidence of prediction: 0.556737  
Y\_true: [ 1 2 4 18 21 23 24 35 36]  
Y\_pred: [ 1 2 4 8 18 20 23 24 30 34 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
of htn hyperlipidemia s p multiple pcis, score: 0.07428469

trusopt one drop right, score: 0.06755753  
avr cad s p, score: 0.041447747

confidence of prediction: 0.960761  
Y\_true: [ 1 2 4 18 21 23 24 35 36]  
Y\_pred: [ 1 2 4 8 18 20 23 24 30 34 48]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.503993  
cardiothoracic allergies patient recorded, score: 0.009448318  
tolerated the operation well, score: 0.0043692766

confidence of prediction: 0.703932  
Y\_true: [ 1 2 4 18 21 23 24 35 36]  
Y\_pred: [ 1 2 4 8 18 20 23 24 30 34 48]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
medical history mi s p pci cad s p pci at, score: 0.114512816  
cabg x3 mi s p pci cad s p pci at, score: 0.032640863  
iddm cad copd asthma, score: 0.011695086

confidence of prediction: 0.934312  
Y\_true: [ 1 2 4 18 21 23 24 35 36]  
Y\_pred: [ 1 2 4 8 18 20 23 24 30 34 48]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p cabg x3, score: 0.066443525  
s p pci cad s p pci at, score: 0.04976997  
copd asthma emphysema chronic, score: 0.023896275

confidence of prediction: 0.863354  
Y\_true: [34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hiatal hernia gerd l3, score: 0.07122047  
reflux and extensive motrin, score: 0.046785332  
us gerd barrett s esophagus, score: 0.045844644

confidence of prediction: 0.926293  
Y\_true: [ 0 1 20]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
fe deficiency htn allergic rhinitis s p, score: 0.37013713  
protonix [UNK] niferex cymbalta, score: 0.10766144  
bypass roux en y, score: 0.032335237

confidence of prediction: 0.804046  
Y\_true: [ 4 17 20 34 42]  
Y\_pred: [42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)



was intubated and sedated on, score: 0.28349695  
decadron intubated and placed on, score: 0.061777532  
and intubated her her, score: 0.04185063

confidence of prediction: 0.907876  
Y\_true: [34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
migraine headache gerd social history she lives, score: 0.066094585  
and has gerd her paternal grandfather, score: 0.0500114  
lesion was shown to, score: 0.0021912153

confidence of prediction: 0.954067  
Y\_true: [ 3 20]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hydrochlorothiazide mg daily which, score: 0.25358728  
to be hypertension underlying vascular malformation, score:  
0.12767027  
started on hctz mg daily speech, score: 0.050420813

confidence of prediction: 0.811665  
Y\_true: [ 2 5 17 20 35 46]  
Y\_pred: [ 0 2 5 17 20 35 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes type ii controlled without, score: 0.1858756  
type diabetes last a1c hypertension, score: 0.03270258  
metformin mg tablet sig, score: 0.032612927

confidence of prediction: 0.983691  
Y\_true: [ 2 5 17 20 35 46]  
Y\_pred: [ 0 2 5 17 20 35 46]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
renal failure hyponatremia diabetes type ii controlled, score:  
0.39177302  
staples scant serosanguinous drainage, score: 0.038870607  
she was having some, score: 0.004372651

confidence of prediction: 0.797284  
Y\_true: [ 2 5 17 20 35 46]  
Y\_pred: [ 0 2 5 17 20 35 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
required transfusion of 3u, score: 0.09501655  
picc line placement history of, score: 0.08026239  
arthritis of the left, score: 0.020537566

confidence of prediction: 0.992044  
Y\_true: [ 2 5 17 20 35 46]

Y\_pred: [ 0 2 5 17 20 35 46]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)  
 without complications hypertension morbid obesity edema anasarca  
 secondary, score: 0.073417015  
 without complications hypertension morbid obesity edema, score:  
 0.073417015  
 a1c hypertension osteoarthritis obesity asthma, score: 0.034999  
  
 confidence of prediction: 0.690142  
 Y\_true: [ 2 5 17 20 35 46]  
 Y\_pred: [ 0 2 5 17 20 35 46]  
 top three important windows for true positive code 35 (584.9: Acute  
 kidney failure, unspecified)  
 acute renal failure hyponatremia diabetes type, score: 0.09953569  
 staples scant serosanguinous drainage, score: 0.024168696  
 subsequent acute renal failure on pod, score: 0.008405501  
  
 confidence of prediction: 0.999097  
 Y\_true: [ 2 5 17 20 35 46]  
 Y\_pred: [ 0 2 5 17 20 35 46]  
 top three important windows for true positive code 46 (995.92:  
 Severe sepsis)  
 diagnosis severe sepsis septic shock septic arthritis of, score:  
 0.01599619  
 anemai required transfusion of 3u, score: 0.012536236  
 sepsis septic shock septic arthritis of, score: 0.0076326546  
  
 confidence of prediction: 0.767117  
 Y\_true: [ 2 6 10 27]  
 Y\_pred: [ 2 4 6 27]  
 top three important windows for true positive code 2 (250.00:  
 Diabetes mellitus without mention of complication, type II or  
 unspecified type, not stated as uncontrolled)  
 type ii dm held orals while, score: 0.39417198  
 ef hypertension diabetes melitus type ii migraines, score:  
 0.010765577  
 metformin mg tablet tablet, score: 0.009182648  
  
 confidence of prediction: 0.547534  
 Y\_true: [ 2 6 10 27]  
 Y\_pred: [ 2 4 6 27]  
 top three important windows for true positive code 6 (276.2:  
 Acidosis)  
 chronic respiratory acidosis i e co2, score: 0.581689  
 continued home methadone dose, score: 0.038589325  
 had ongoing cellulitis hypercarbia hypoxia pt, score: 0.021775011  
  
 confidence of prediction: 0.962922  
 Y\_true: [ 2 6 10 27]  
 Y\_pred: [ 2 4 6 27]  
 top three important windows for true positive code 27 (428.0:  
 Congestive heart failure, unspecified)  
 dchf echo in ef hypertension, score: 0.1929125

dchf exacerbation who presents, score: 0.14276132  
of her dchf and hypertension she, score: 0.13950029

confidence of prediction: 0.573367  
Y\_true: [ 3 4 48]  
Y\_pred: [ 4 24 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
and stent hld prior tia three, score: 0.13790405  
artery disease hyperlipidemia hypercholesterolemia, score:  
0.09218314  
trigeminal neuralgia memory loss, score: 0.050541494

confidence of prediction: 0.854362  
Y\_true: [ 3 4 48]  
Y\_pred: [ 4 24 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg and, score: 0.4459527  
s p cabg x stent x, score: 0.4459527  
followed by cabgx5 hospital1 stents and, score: 0.04799146

confidence of prediction: 0.702836  
Y\_true: [ 7 9 11 28]  
Y\_pred: [28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.70291257  
abuse and depression presenting, score: 0.039337248  
with an appt if, score: 0.014530976

confidence of prediction: 0.582480  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
urosepsis and multiple orthopedic injuries, score: 0.05451278  
septic shock either from a, score: 0.051262666  
profound septic shock and hypercarbic hypoxemic, score: 0.038190294

confidence of prediction: 0.600972  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
history currently smokes ppd x years family, score: 0.045626096  
heart failure hypercholesterolemia vitamin, score: 0.016611068  
by ams simvastatin mg, score: 0.0044172728

confidence of prediction: 0.965596  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

of cad chf and a fib, score: 0.06743038  
stenosis occlusion coronary artery disease social history, score:  
0.044626303  
k to reverse supratherapeutic inr, score: 0.023138417

confidence of prediction: 0.984901  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib on coumadin admitted, score: 0.3594679  
irregularly irregular s1 s2 no, score: 0.05163905  
afib with hr street, score: 0.04298775

confidence of prediction: 0.612614  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
had worsening pneumonia as above she, score: 0.20173894  
hip fracture pneumonia discharge condition patient, score:  
0.017151615  
became increasingly obtunded and, score: 0.01096677

confidence of prediction: 0.798749  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxemic respiratory failure on hypercarbic, score: 0.2177304  
hypoxemic respiratory failure patient admitted, score: 0.14678831  
hypoxemic respiratory failure septic shocks, score: 0.14678831

confidence of prediction: 0.917013  
Y\_true: [ 0 6 10 16 24 26 29 30 33 46]  
Y\_pred: [ 0 10 22 24 26 27 29 33 35 46 49]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock either from a, score: 0.04275757  
urosepsis and multiple orthopedic injuries, score: 0.032192044  
profound septic shock and hypercarbic hypoxemic, score: 0.024345418

confidence of prediction: 0.668031  
Y\_true: [ 3 9 10 20]  
Y\_pred: [ 3 10 20]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
htn and hypercholesterolemia who was referred, score: 0.24115634  
smokes ppd x years, score: 0.02700737  
smoking hypertension remained stable with, score: 0.013667174

confidence of prediction: 0.642674  
Y\_true: [ 3 9 10 20]  
Y\_pred: [ 3 10 20]

top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
above smokes pop x years remote, score: 0.3361284  
abuse tobacco abuse social history lives, score: 0.06417918  
management thrombocytopenia patient remained, score: 0.007936564

confidence of prediction: 0.998606  
Y\_true: [ 3 9 10 20]  
Y\_pred: [ 3 10 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hypercholesterolemia depression with  
psychotic, score: 0.16755378  
hypertension remained stable with, score: 0.0289457  
transaminitis thrombocytopenia discharge condition stable, score:  
0.019931518

confidence of prediction: 0.956383  
Y\_true: [ 4 14 22 24 27 36 38]  
Y\_pred: [ 2 4 21 22 24 27 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
toe amputation hyperlipidemia hypertension cataracts glaucoma,  
score: 0.11627383  
as above hld simvastatin in lieu of, score: 0.02424154  
htn and hl who, score: 0.023760855

confidence of prediction: 0.763903  
Y\_true: [ 4 14 22 24 27 36 38]  
Y\_pred: [ 2 4 21 22 24 27 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
st elevation myocardial infarction coronary artery, score:  
0.30375862  
an nstemi with elevated troponins she, score: 0.08921298  
nstemi and acute chf exacerbation nstemi cardiac cath showed, score:  
0.052560914

confidence of prediction: 0.961976  
Y\_true: [ 4 14 22 24 27 36 38]  
Y\_pred: [ 2 4 21 22 24 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.14067544  
coronary artery disease severely elevated lvedp, score: 0.14067544  
coronary artery disease the, score: 0.0839426

confidence of prediction: 0.960076  
Y\_true: [ 4 14 22 24 27 36 38]  
Y\_pred: [ 2 4 21 22 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure type, score: 0.32191712  
systolic heart failure type diabetes, score: 0.12500611

heart failure tte at, score: 0.03543603

confidence of prediction: 0.783365

Y\_true: [ 4 14 22 24 27 36 38]

Y\_pred: [ 2 4 21 22 24 27 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization history of present, score: 0.6898412

rca and tortuous proximal, score: 0.067824684

cardiac cath showed lcx and, score: 0.012762721

confidence of prediction: 0.941687

Y\_true: [ 1 4 10]

Y\_pred: [ 1 4 6 24]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

hyperlipidemia hypothyroidism osteopenia descending aortic

dissection, score: 0.17465015

lipitor hypothyroidism continued synthroid tsh checked, score:  
0.13478354

daily levothyroxine mcg tablet sig, score: 0.012632532

confidence of prediction: 0.862413

Y\_true: [ 1 4 10]

Y\_pred: [ 1 4 6 24]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

oa pud hyperlipidemia hypothyroidism osteopenia descending aortic,  
score: 0.6127795

depression asthma copd cataracts, score: 0.01218751

atorvastatin mg tablet sig, score: 0.0073172534

confidence of prediction: 0.959668

Y\_true: [ 2 20 24 37 42]

Y\_pred: [ 2 17 20 37 41]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

keppra metformin metoprolol timolol vit d, score: 0.015033122

cad htn niddm b l cataract surgery, score: 0.00630107

intubated but interacting on exam, score: 0.0006448383

confidence of prediction: 0.953018

Y\_true: [ 2 20 24 37 42]

Y\_pred: [ 2 17 20 37 41]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

keppra metformin metoprolol timolol vit d senna, score: 0.07238872

however developed hypertension and, score: 0.04722698

history cad htn niddm b l cataract, score: 0.03414333

confidence of prediction: 0.585848

Y\_true: [ 2 20 24 37 42]

Y\_pred: [ 2 17 20 37 41]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a uti pt remained lethargic and, score: 0.26626703  
holes and sdh evacuation placement, score: 0.17426512  
cosopt lisinopril attending first, score: 0.025550801

confidence of prediction: 0.858097

Y\_true: [19 26 34]

Y\_pred: [ 4 19 26 34]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)

w f dialysis schedule electrolytes were routinely, score:  
0.028247157

his normal dialysis schedule on friday am, score: 0.013476972  
end organ ischemia prophylaxis, score: 0.008355268

confidence of prediction: 0.973312

Y\_true: [19 26 34]

Y\_pred: [ 4 19 26 34]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib oa hep c psh, score: 0.8763112

graft with nonreversed saphenous, score: 0.011054594  
was a pleasure to take, score: 0.0046323338

confidence of prediction: 0.863959

Y\_true: [19 26 34]

Y\_pred: [ 4 19 26 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

fistula creation multiple foot, score: 0.0057548326

healing r hallux amputation site, score: 0.0051285387

right hallux amputation site, score: 0.005111337

confidence of prediction: 0.867728

Y\_true: [ 0 2 3 11 17 20 27 31 35 37 41 46]

Y\_pred: [ 2 4 11 20 31 35 37]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

htn dm2 and recent admission for, score: 0.06505183

htn and diabetes physical exam admission, score: 0.019077985

htn and dm2 with recent admission for, score: 0.007707328

confidence of prediction: 0.706822

Y\_true: [ 0 2 3 11 17 20 27 31 35 37 41 46]

Y\_pred: [ 2 4 11 20 31 35 37]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)

depression social history had children, score: 0.26453707

chronic issues depression stable on home duloxetine hld stable,  
score: 0.08514619

qd duloxetine mg capsule, score: 0.0036395395

confidence of prediction: 0.978389  
 Y\_true: [ 0 2 3 11 17 20 27 31 35 37 41 46]  
 Y\_pred: [ 2 4 11 20 31 35 37]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)  
 of cva htn and dm2 with recent, score: 0.117716305  
 for cva htn dm2 and recent admission, score: 0.10085786  
 history of htn and diabetes physical, score: 0.06552894

confidence of prediction: 0.950948  
 Y\_true: [ 0 2 3 11 17 20 27 31 35 37 41 46]  
 Y\_pred: [ 2 4 11 20 31 35 37]  
 top three important windows for true positive code 31 (507.0:  
 Pneumonitis due to inhalation of food or vomitus)  
 have aspiration pna active issues aspiration pna presented with,  
 score: 0.17354819  
 multifocal aspiration pna on chest, score: 0.16761826  
 diagnosis aspiration pneumonia g tube leak, score: 0.10873156

confidence of prediction: 0.842916  
 Y\_true: [ 0 2 3 11 17 20 27 31 35 37 41 46]  
 Y\_pred: [ 2 4 11 20 31 35 37]  
 top three important windows for true positive code 35 (584.9: Acute  
 kidney failure, unspecified)  
 w pre renal etiology creatinine on discharge, score: 0.01918174  
 of and creatinine of, score: 0.011955357  
 years now resides in, score: 0.008945477

confidence of prediction: 0.892351  
 Y\_true: [ 0 2 3 11 17 20 27 31 35 37 41 46]  
 Y\_pred: [ 2 4 11 20 31 35 37]  
 top three important windows for true positive code 37 (599.0:  
 Urinary tract infection, site not specified)  
 and uti presents with fever and, score: 0.4029483  
 of uti patient was treated, score: 0.16818869  
 source with vanc and, score: 0.04531824

confidence of prediction: 0.552188  
 Y\_true: [ 4 21 23 36 39 44 47 48]  
 Y\_pred: [ 4 21 24 27 30 36 39 44]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 niaspan qhs crestor spiriva w handihaler, score: 0.4166773  
 fenofibrate micronized mg tablet, score: 0.033201724  
 daily daily rosuvastatin mg tablet sig, score: 0.011140844

confidence of prediction: 0.526793  
 Y\_true: [ 4 21 23 36 39 44 47 48]  
 Y\_pred: [ 4 21 24 27 30 36 39 44]  
 top three important windows for true positive code 21 (403.90:  
 Hypertensive chronic kidney disease, unspecified, with chronic  
 kidney disease stage I through stage IV, or unspecified)  
 chronic renal failure discharge disposition, score: 0.25958177  
 acute renal failure on chronic renal failure first name11, score:



0.014301644

4v cabg s w, score: 0.011071354

confidence of prediction: 0.527595

Y\_true: [ 4 21 23 36 39 44 47 48]

Y\_pred: [ 4 21 24 27 30 36 39 44]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic renal failure discharge disposition, score: 0.26789835

4v cabg s w, score: 0.013363644

4v cabg s with, score: 0.013363644

confidence of prediction: 0.525932

Y\_true: [ 4 21 23 36 39 44 47 48]

Y\_pred: [ 4 21 24 27 30 36 39 44]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

tee history of hyperlipdemia, score: 0.47629926

diuresed postop tee progressive as history, score: 0.11340915

lad graft by cath lima lad svg dg om rca, score: 0.011541732

confidence of prediction: 0.778033

Y\_true: [ 4 21 23 36 39 44 47 48]

Y\_pred: [ 4 21 24 27 30 36 39 44]

top three important windows for true positive code 44 (99.04:

Transfusion of packed cells)

hct units prbc iv [UNK] continued insulin, score: 0.07922823

loss anemia transfused postoperative, score: 0.032597955

enzymes cycled transfused unit prbcs hct swan, score: 0.0037696287

confidence of prediction: 0.901690

Y\_true: [ 4 14 20 22 24 27 38]

Y\_pred: [ 4 22 24 27 38]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

in hospital hld chronic stable issue trig, score: 0.09476627

and plavix 600mg on, score: 0.016946599

hypertension dyslipidemia discharge condition mental, score:

0.013308541

confidence of prediction: 0.789775

Y\_true: [ 4 14 20 22 24 27 38]

Y\_pred: [ 4 22 24 27 38]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

with nstemi pt was in, score: 0.05854192

non st elevation myocardial infarction diabetes mellitus, score:

0.014269814

coronary ischemia nstemi was thought to be, score: 0.012964116

confidence of prediction: 0.959737

Y\_true: [ 4 14 20 22 24 27 38]

Y\_pred: [ 4 22 24 27 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
coronary artery disease tortuous right, score: 0.09137311  
s p multiple pci, score: 0.072462775  
unstable angina cad chf ef by, score: 0.0343024

confidence of prediction: 0.855657  
Y\_true: [ 4 14 20 22 24 27 38]  
Y\_pred: [ 4 22 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
angina cad chf ef by cardiac cath, score: 0.20175026  
nitrostat mg tablet sublingual sig, score: 0.031234862  
80mg daily nitrostat sl for chest pain, score: 0.016455239

confidence of prediction: 0.821349  
Y\_true: [ 4 14 20 22 24 27 38]  
Y\_pred: [ 4 22 24 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath history of present, score: 0.4557736  
mid vessel the previously placed, score: 0.030786011  
cardiac catheterization was done this, score: 0.019502232

confidence of prediction: 0.688925  
Y\_true: [ 1 8 17 26 32]  
Y\_pred: [ 1 26 27 44]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
medications levothyroxine mcg tablet sig, score: 0.05702161  
hyponatremia anemia hypothyroid chronic back pain, score:  
0.029689837  
prilosec senokot synthroid 50mcg tylenol 1gram daily, score:  
0.012404694

confidence of prediction: 0.978378  
Y\_true: [ 1 8 17 26 32]  
Y\_pred: [ 1 26 27 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation discharge condition hemodynamically, score:  
0.13591671  
atrial fibrillation several recommendations were, score:  
0.0026301031  
endocarditis prophylaxis recommendations the, score: 0.0022903834

confidence of prediction: 0.937642  
Y\_true: [14 20 22 24 38]  
Y\_pred: [15 20 24 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diagnosed with hypertension past medical history somewhat, score:  
0.14207238  
tall r waves and, score: 0.13456114  
tall r waves persisted, score: 0.11393511

confidence of prediction: 0.958934  
Y\_true: [14 20 22 24 38]  
Y\_pred: [15 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p bms to, score: 0.07487687  
stemi std resolved in, score: 0.058896344  
cardiac catheterization with bms, score: 0.032649413

confidence of prediction: 0.871324  
Y\_true: [14 20 22 24 38]  
Y\_pred: [15 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with bms to lcx, score: 0.79217386  
cath lab and received bms to, score: 0.019807642  
lmca normal lcx total, score: 0.015405786

confidence of prediction: 0.637469  
Y\_true: [ 3 20 27]  
Y\_pred: [ 3 20 27]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
dvt htn hypercholesterolemia fibromyalgia social history married,  
score: 0.33962741  
metformin they will set, score: 0.005616088  
history cad htn no myasthenia, score: 0.0027656683

confidence of prediction: 0.912315  
Y\_true: [ 3 20 27]  
Y\_pred: [ 3 20 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
able to sustain upgaze greater than seconds, score: 0.2469418  
history cad htn no myasthenia or, score: 0.18645865  
metformin mg tablet sig, score: 0.04416519

confidence of prediction: 0.845917  
Y\_true: [ 3 20 27]  
Y\_pred: [ 3 20 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cardiomyopathy c b chf r dvt htn hypercholesterolemia, score:  
0.008320966  
mg hospital1 lasix mg, score: 0.0069146995  
was arranged it should be considered, score: 0.004477767

confidence of prediction: 0.769390  
Y\_true: [10 29 33]  
Y\_pred: [29 33]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
possible atypical pneumonia asthma smoking, score: 0.108272605

shows rll pneumonia the, score: 0.05908999  
community acquired pneumonia and oseltamivir for, score: 0.056574777

confidence of prediction: 0.889225

Y\_true: [10 29 33]

Y\_pred: [29 33]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

hypoxic respiratory failure in setting, score: 0.23559196

acute hypoxic respiratory failure possible atypical, score:  
0.026318412

sputum gram stain and, score: 0.018198743

confidence of prediction: 0.988556

Y\_true: [ 3 13 18 21 24 26 36 49]

Y\_pred: [ 4 13 18 21 24 26 35 36]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafting times left, score: 0.49051157

descending reverse saphenous vein grafts, score: 0.11208487

coronary artery bypass graft x please, score: 0.027704746

confidence of prediction: 0.979393

Y\_true: [ 3 13 18 21 24 26 36 49]

Y\_pred: [ 4 13 18 21 24 26 35 36]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

reverse saphenous vein grafts, score: 0.009573668

cardiothoracic allergies penicillins isosorbide, score: 0.009246477

pacing wires were removed per, score: 0.0081208525

confidence of prediction: 0.814295

Y\_true: [ 3 13 18 21 24 26 36 49]

Y\_pred: [ 4 13 18 21 24 26 35 36]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

in chronic kidney disease fall transurethral, score: 0.029441673

failure d t left, score: 0.024295567

acute renal failure obstruction, score: 0.0051887105

confidence of prediction: 0.999057

Y\_true: [ 3 13 18 21 24 26 36 49]

Y\_pred: [ 4 13 18 21 24 26 35 36]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting, score: 0.53139096

coronary artery disease s p coronary artery bypass graft, score:  
0.112498894

coronary artery disease and, score: 0.10709217

confidence of prediction: 0.930166

Y\_true: [ 3 13 18 21 24 26 36 49]

Y\_pred: [ 4 13 18 21 24 26 35 36]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib acetaminophen mg tablet, score: 0.09833837

atrial fibrillation post op history, score: 0.0717635

atrial fibrillation and underwent usual, score: 0.01904432

confidence of prediction: 0.743414

Y\_true: [ 3 13 18 21 24 26 36 49]

Y\_pred: [ 4 13 18 21 24 26 35 36]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

in chronic kidney disease fall transurethral, score: 0.022241037

renal failure d t left, score: 0.009365862

confidence of prediction: 0.931851

Y\_true: [ 2 11 18 20 26 34 39 49]

Y\_pred: [ 2 18 20 26 34 49]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

htn dm type ii as afib, score: 0.1124662

mdi metformin 500mg hospital1 protonix mg, score: 0.020721387

diagnosis hypertension niddm aortic stenosis arthritis depression,  
score: 0.008512231

confidence of prediction: 0.986165

Y\_true: [ 2 11 18 20 26 34 39 49]

Y\_pred: [ 2 18 20 26 34 49]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

pacing wires were discontinued on pod, score: 0.0036029767

hypertension electronically signed by, score: 0.0032130703

washing incisions gently with mild soap, score: 0.0022816923

confidence of prediction: 0.937650

Y\_true: [ 2 11 18 20 26 34 39 49]

Y\_pred: [ 2 18 20 26 34 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

metformin 500mg hospital1 protonix, score: 0.08681089

medical history htn dm type ii as, score: 0.08675012

discharge diagnosis hypertension niddm aortic stenosis arthritis,  
score: 0.06741842

confidence of prediction: 0.994483

Y\_true: [ 2 11 18 20 26 34 39 49]

Y\_pred: [ 2 18 20 26 34 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib on coumadin last dose, score: 0.9166484

afib tablet po daily, score: 0.046107385

atrial fibrillation she has had, score: 0.00762136

confidence of prediction: 0.849798

Y\_true: [ 2 11 18 20 26 34 39 49]  
Y\_pred: [ 2 18 20 26 34 49]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
p cva gerd discharge condition discharge condition, score: 0.081080884  
for reflux metoprolol tartrate mg, score: 0.043987297  
gerd cholecystectomy social history lives, score: 0.039870832  
  
confidence of prediction: 0.553970  
Y\_true: [ 2 11 18 20 26 34 39 49]  
Y\_pred: [ 2 18 20 26 34 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on coumadin last dose, score: 0.8078543  
40mg daily coumadin 5mg, score: 0.06998835  
anticoagulated with coumadin she, score: 0.03475206  
  
confidence of prediction: 0.956305  
Y\_true: [37 41]  
Y\_pred: [37]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
escherichia coli organisms ml presumptive, score: 0.12576112  
urinary tract infection sepsis, score: 0.099576674  
urinary tract infection you, score: 0.08103318  
  
confidence of prediction: 0.512329  
Y\_true: [ 0 6 27 29]  
Y\_pred: [ 0 4 17 22 27 31 33 40 42 43]  
top three important windows for true positive code 0 (038.9: Unspecified septicemia)  
vt discharge condition death, score: 0.08263669  
for presumed sepsis from an abdominal catastrophe, score: 0.057721183  
complicated by sepsis from hypoperfusion causing visceral ischemia medications, score: 0.054245397  
  
confidence of prediction: 0.984221  
Y\_true: [ 0 6 27 29]  
Y\_pred: [ 0 4 17 22 27 31 33 40 42 43]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chf acute systolic chf with globally depressed, score: 0.10638649  
from her chf caused ischemia of, score: 0.008331261  
congestive heart failure she presented, score: 0.0060043056  
  
confidence of prediction: 0.506508  
Y\_true: [ 8 9 20 26 27 34 37 49]  
Y\_pred: [ 9 20 37 49]  
top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)  
surgery allergies darvon morphine penicillins attending first, score: 0.2429994

management was agreed upon, score: 0.008642727  
ra gerd h o, score: 0.004825827

confidence of prediction: 0.761244  
Y\_true: [ 8 9 20 26 27 34 37 49]  
Y\_pred: [ 9 20 37 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn chf a fib ra gerd h o, score: 0.24817862  
surgery allergies darvon morphine penicillins attending first,  
score: 0.13865241  
chronic ischemia of the, score: 0.006506677

confidence of prediction: 0.725288  
Y\_true: [ 8 9 20 26 27 34 37 49]  
Y\_pred: [ 9 20 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
treatment of uti dispo physical therapy, score: 0.12581119  
wbcs and bacteria culture pending, score: 0.059281226  
home with vna services, score: 0.019986441

confidence of prediction: 0.541026  
Y\_true: [ 8 9 20 26 27 34 37 49]  
Y\_pred: [ 9 20 37 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
her home coumadin was held due, score: 0.52557516  
dvt on coumadin past, score: 0.14306457  
s refills warfarin mg tablet sig, score: 0.06346412

confidence of prediction: 0.767405  
Y\_true: [ 2 4 11 20 26 27 30 34 47]  
Y\_pred: [ 4 27 29 30 34 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stenosis htn hld dmii psoriasis h o, score: 0.21834508  
2lnc baseline obstructive sleep apnea, score: 0.017880866  
depression continued duloxetine gerd continued omeprazole  
transitional, score: 0.016755529

confidence of prediction: 0.982193  
Y\_true: [ 2 4 11 20 26 27 30 34 47]  
Y\_pred: [ 4 27 29 30 34 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure moderate aortic, score: 0.4023133  
dchf [UNK] currently appearing euvoletic, score: 0.10596506  
dchf p w fever cough, score: 0.08763099

confidence of prediction: 0.676663  
Y\_true: [ 2 4 11 20 26 27 30 34 47]  
Y\_pred: [ 4 27 29 30 34 37]  
top three important windows for true positive code 30 (496: Chronic

airway obstruction, not elsewhere classified)  
obstructive pulmonary disease without, score: 0.23224802  
copd on 3l home o2, score: 0.1851046  
copd on 3l home o2, score: 0.13491416

confidence of prediction: 0.968178  
Y\_true: [ 2 4 11 20 26 27 30 34 47]  
Y\_pred: [ 4 27 29 30 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
continued duloxetine gerd continued omeprazole transitional issues,  
score: 0.1545653  
metformin at home although, score: 0.0018512605  
[UNK] na134 k4 [UNK], score: 0.0017572992

confidence of prediction: 0.679235  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus chronic hepatitis c, score:  
0.088072084  
glyburide 5mg hospital1 discharge, score: 0.008286526  
glyburide mg tablet sig, score: 0.0065209805

confidence of prediction: 0.971931  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery reverse saphenous vein single, score: 0.14908484  
coronary artery reverse saphenous vein single, score: 0.13070773  
coronary artery reverse saphenous vein single, score: 0.09067305

confidence of prediction: 0.947441  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards her preoperative, score: 0.23265779  
bypass grafting x4 left internal, score: 0.03986133  
grafting to four vessels, score: 0.025154134

confidence of prediction: 0.734226  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
st elevation myocardial infarction aortic valve, score: 0.34589714  
intraaortic balloon was placed, score: 0.019183567  
heart catheterization coronary angiogram placement, score:  
0.008057517



confidence of prediction: 0.995187  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery reverse saphenous vein single, score: 0.14244692  
coronary artery disease s p coronary artery bypass grafts, score:  
0.14021374  
coronary artery reverse saphenous vein single, score: 0.13790579

confidence of prediction: 0.923861  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
developed atrial fibrillation and was treated, score: 0.01321346  
diuresed towards her preoperative, score: 0.004808401  
irregular murmur iii vi, score: 0.0034448998

confidence of prediction: 0.892643  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
heart catheterization coronary angiogram placement, score:  
0.04284414  
pump history of present, score: 0.023000736  
varicosities none x neuro, score: 0.01729122

confidence of prediction: 0.870312  
Y\_true: [ 2 5 13 15 18 21 22 24 26 27 36 38 41 43]  
Y\_pred: [ 2 13 14 18 20 22 24 26 38 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
was tube fed transiently and was, score: 0.16321322  
time tube feeds were stopped physical, score: 0.043752685  
cephalexin mg capsule sig, score: 0.017572135

confidence of prediction: 0.928432  
Y\_true: [ 2 4 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pain hypertension hyperlipidemia benign prostatic hypertrophy,  
score: 0.037553623  
pci with des to, score: 0.0071297074  
ciprofloxacin lipitor atorvastatin attending, score: 0.0062617916

confidence of prediction: 0.978262  
Y\_true: [ 2 4 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies lisinopril oxycodone, score: 0.037397947

bypass grafting x past medical, score: 0.033482123  
grafting x2 with saphenous, score: 0.011332403

confidence of prediction: 0.819872  
Y\_true: [ 2 4 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hyperlipidemia benign prostatic hypertrophy, score:  
0.15199518  
branch block diabetes mellitus, score: 0.12359459  
schatzki s ring per egd, score: 0.052108068

confidence of prediction: 0.946555  
Y\_true: [ 2 4 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p pci with des to, score: 0.30779138  
5x15mm promus des gastroesophageal, score: 0.035237674  
coronary artery disease s, score: 0.029541813

confidence of prediction: 0.922747  
Y\_true: [ 2 4 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib dr last name stitle, score: 0.5685875  
atrial fibrillation and was placed, score: 0.057750758  
furosemide mg daily disp, score: 0.01481191

confidence of prediction: 0.799503  
Y\_true: [ 2 4 18 20 24 26 34]  
Y\_pred: [ 4 13 18 20 24 26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
des gastroesophageal reflux disease left bundle branch, score:  
0.02910314  
history gastroesophageal reflux disease left bundle branch, score:  
0.02840272  
coa reductase inhibitors ciprofloxacin lipitor, score: 0.0042246175

confidence of prediction: 0.517266  
Y\_true: [20 26 27 35]  
Y\_pred: [20 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension significant anxiety osteoarthritis, score: 0.035880167  
amiodarone 200mg twice daily, score: 0.033693645  
hf and leukocytosis on, score: 0.032973517

confidence of prediction: 0.989346  
Y\_true: [20 26 27 35]  
Y\_pred: [20 26 27]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib dilt discontinued started, score: 0.7356178  
irregularly irregular tachycardic sem, score: 0.030884273  
atrial fibrillation we gave you, score: 0.01945502

confidence of prediction: 0.891180  
Y\_true: [20 26 27 35]  
Y\_pred: [20 26 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure discharge condition medically, score:  
0.25445697  
chf exacerbation he had, score: 0.15743445  
chf exacerbation and new, score: 0.117602214

confidence of prediction: 0.614547  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
rca diabetes dyslipidemia hypertension chronic renal insufficiency,  
score: 0.14150321  
travatan z drops ophthalmic, score: 0.020265345  
cabg anemia diabetes mellitus dyslipidemia hypertension chronic  
renal insufficiency, score: 0.016690783

confidence of prediction: 0.983124  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x left internal mammary artery to left,  
score: 0.6623247  
descending saphenous vein graft to, score: 0.07075989  
coronary artery bypass graft surgery please, score: 0.040466692

confidence of prediction: 0.971196  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies codeine iodine iodine, score: 0.15113723  
washing incisions gently with mild soap, score: 0.008159955  
bypass graft x left, score: 0.0073111155

confidence of prediction: 0.686317  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
hypertension chronic renal insufficiency b l cre gerd pud, score:  
0.06913169

hypertension chronic renal insufficiency creatinine  
gastroesophageal, score: 0.06913169  
anemia diabetes mellitus dyslipidemia, score: 0.014229758

confidence of prediction: 0.998758  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.5758095  
coronary artery disease s p cabg anemia, score: 0.12190258  
coronary artery disease s p, score: 0.047628913

confidence of prediction: 0.716201  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
creatinine gastroesophageal reflux disease hiatal hernia spinal,  
score: 0.045605585  
l cre gerd pud hiatal hernia spinal, score: 0.045125775  
history race immigrant from country, score: 0.0074449624

confidence of prediction: 0.808813  
Y\_true: [ 4 8 9 13 18 21 24 34 36]  
Y\_pred: [ 2 4 13 17 18 21 24 27 34 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
anemia diabetes mellitus dyslipidemia, score: 0.013779251  
history race immigrant from, score: 0.011009826  
hypertension chronic renal insufficiency b l cre, score: 0.010725148

confidence of prediction: 0.934071  
Y\_true: [ 1 7 11 21 24 26 27 28 49]  
Y\_pred: [ 1 11 23 24 26 27 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
outpt hypothyroidism synthroid was continued code, score: 0.25233588  
daily levothyroxine mcg tablet sig one, score: 0.00891595  
day levothyroxine mcg tablet sig one, score: 0.0065729395

confidence of prediction: 0.669698  
Y\_true: [ 1 7 11 21 24 26 27 28 49]  
Y\_pred: [ 1 11 23 24 26 27 49]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
deal of survivor guilt extending, score: 0.021756211  
necrosis requiring toe amputation, score: 0.007006148  
social history retired engineer, score: 0.004316507

confidence of prediction: 0.739064  
Y\_true: [ 1 7 11 21 24 26 27 28 49]  
Y\_pred: [ 1 11 23 24 26 27 49]  
top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
pmhx cad aicd chf ef ckd, score: 0.06805516  
asa was decreased from, score: 0.06068641  
cad s p mi medically managed ppm aicd placed, score: 0.033987544

confidence of prediction: 0.998063  
Y\_true: [ 1 7 11 21 24 26 27 28 49]  
Y\_pred: [ 1 11 23 24 26 27 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin r colostomy, score: 0.48097405  
afib with aberrancy now presenting, score: 0.032987908  
atrial fibrillation his digoxin was, score: 0.0020662076

confidence of prediction: 0.979956  
Y\_true: [ 1 7 11 21 24 26 27 28 49]  
Y\_pred: [ 1 11 23 24 26 27 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cad aicd chf ef ckd cr, score: 0.09262004  
chronic systolic chf w ef s p, score: 0.016231395  
placed about chf ef reported by patient, score: 0.0052564326

confidence of prediction: 0.726278  
Y\_true: [ 1 7 11 21 24 26 27 28 49]  
Y\_pred: [ 1 11 23 24 26 27 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin r, score: 0.46905774  
afib on coumadin s p long hospitalization in summer of, score:  
0.46905774  
noted above coumadin should, score: 0.026282199

confidence of prediction: 0.929957  
Y\_true: [ 4 8 13 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 30 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension hyperlipidemia copd gerd h o, score: 0.076759405  
history hypertension hyperlipidemia chronic obstructive pulmonary  
disease, score: 0.0536266  
for hypertension hyperlipidemia and chronic obstructive pulmonry,  
score: 0.042113885

confidence of prediction: 0.975477  
Y\_true: [ 4 8 13 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 30 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending saphenous vein graft, score: 0.087012745  
coronary artery bypass grafting times four, score: 0.046001457  
off pump coronary artery bypass graft x4 left, score: 0.04598273

confidence of prediction: 0.975208

Y\_true: [ 4 8 13 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 30 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hyperlipidemia chronic obstructive  
pulmonary, score: 0.11537255  
artery disease hypertension shortness, score: 0.070814684  
hypertension hyperlipidemia copd gerd h, score: 0.048855405  
  
confidence of prediction: 0.995767  
Y\_true: [ 4 8 13 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 30 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
off pump coronary artery bypass graft x4 left, score: 0.33647835  
descending saphenous vein graft, score: 0.0654429  
coronary artery disease hypertension, score: 0.05248505  
  
confidence of prediction: 0.695848  
Y\_true: [ 4 8 13 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 30 34]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
hypertension hyperlipidemia copd gerd, score: 0.028987318  
hyperlipidemia chronic obstructive pulmonary disease gastro, score:  
0.0014851522  
that he would benefit, score: 0.0009822685  
  
confidence of prediction: 0.613504  
Y\_true: [ 4 8 13 20 24 30 34]  
Y\_pred: [ 4 13 18 20 24 30 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gastro esophageal reflux disease stomach ulcer treated, score:  
0.1075641  
copd gerd h o stomach ulcer, score: 0.026203718  
pressors and extubated by the, score: 0.0031619512  
  
confidence of prediction: 0.666708  
Y\_true: [ 2 20 23 24 34]  
Y\_pred: [ 2 20 24 34]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes a1c in normal range, score: 0.20147078  
glaucoma borderline dm asthma gerd coronary artery, score:  
0.14032072  
glaucoma borderline dm asthma gerd coronary artery, score:  
0.052124918  
  
confidence of prediction: 0.939799  
Y\_true: [ 2 20 23 24 34]  
Y\_pred: [ 2 20 24 34]  
top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)  
away the patient ended, score: 0.10330278  
hypertension and diabetes can, score: 0.07477827  
hypertension glaucoma borderline dm asthma, score: 0.074550435

confidence of prediction: 0.731713  
Y\_true: [ 2 20 23 24 34]  
Y\_pred: [ 2 20 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease history of, score: 0.17577472  
coronary artery disease status post multiple mis, score: 0.16042337  
coronary artery disease discharge condition, score: 0.16042337

confidence of prediction: 0.918760  
Y\_true: [ 2 20 23 24 34]  
Y\_pred: [ 2 20 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
borderline dm asthma gerd coronary artery disease status, score:  
0.0015402104  
borderline dm asthma gerd coronary artery disease discharge, score:  
0.0015402104

confidence of prediction: 0.877517  
Y\_true: [ 2 4 18 20 24 27 34 37]  
Y\_pred: [ 2 18 20 24 27 34]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diet controlled diabetes hypertension dyslipidemia nonalcoholic  
steatohepatitis gastroesophageal reflux, score: 0.18326455  
diet controlled diabetes hypertension dyslipidemia nonalcoholic  
steatohepatitis gerd diastolic, score: 0.044638224

confidence of prediction: 0.925934  
Y\_true: [ 2 4 18 20 24 27 34 37]  
Y\_pred: [ 2 18 20 24 27 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders on, score: 0.65345585  
csru am chest port, score: 0.2339911  
cardiothoracic allergies pneumovax attending, score: 0.022298275

confidence of prediction: 0.931916  
Y\_true: [ 2 4 18 20 24 27 34 37]  
Y\_pred: [ 2 18 20 24 27 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
85f with critical aortic, score: 0.2122885  
controlled diabetes hypertension dyslipidemia nonalcoholic  
steatohepatitis gerd diastolic and, score: 0.10343839  
controlled diabetes hypertension dyslipidemia nonalcoholic  
steatohepatitis gastroesophageal, score: 0.10343839

confidence of prediction: 0.833315  
Y\_true: [ 2 4 18 20 24 27 34 37]  
Y\_pred: [ 2 18 20 24 27 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease totally occluded rca severe, score:  
0.124944665  
coronary artery disease saphenous vein graft, score: 0.09265188  
coronary artery disease s p coronary artery bypass graft, score:  
0.08727677

confidence of prediction: 0.986532  
Y\_true: [ 2 4 18 20 24 27 34 37]  
Y\_pred: [ 2 18 20 24 27 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure secondary to aortic, score: 0.41286287  
diastolic heart failure secondary diet controlled, score: 0.41286287  
diastolic heart failure and coronary artery, score: 0.08764016

confidence of prediction: 0.879787  
Y\_true: [ 2 4 18 20 24 27 34 37]  
Y\_pred: [ 2 18 20 24 27 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
nonalcoholic steatohepatitis gerd diastolic and systolic, score:  
0.16145061  
nonalcoholic steatohepatitis gastroesophageal reflux disease  
discharge condition deconditioned, score: 0.013438316  
cvl in the right, score: 0.012813506

confidence of prediction: 0.947602  
Y\_true: [ 4 20 23 24]  
Y\_pred: [ 4 20 22 23 24 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
un atenolol hyperlipidemia recent lipid panel showed, score:  
0.07530272  
ef dyslipidemia hypertension social history works, score: 0.01697796  
cardiomyopathy ef hyperlipidemia htn who presents s, score:  
0.010131895

confidence of prediction: 0.959894  
Y\_true: [ 4 20 23 24]  
Y\_pred: [ 4 20 22 23 24 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ef dyslipidemia hypertension social history works, score:  
0.085170224  
artery disease hypertension discharge condition mental, score:  
0.0715949  
mi in vt with, score: 0.07139995



confidence of prediction: 0.620992  
Y\_true: [ 4 20 23 24]  
Y\_pred: [ 4 20 22 23 24 27]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi in, score: 0.21983226  
s p mi in s p cardiac, score: 0.21983226  
s p nstemi with discharge, score: 0.2088944

confidence of prediction: 0.852957  
Y\_true: [ 4 20 23 24]  
Y\_pred: [ 4 20 22 23 24 27]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p mi in, score: 0.1022593  
s p nstemi with discharge, score: 0.05775249  
coronary artery disease hypertension, score: 0.056355987

confidence of prediction: 0.702040  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
endobronchial stent placement for, score: 0.014578319  
p turp coronary artery disease hyperlipidemia hypertension bilateral claudication status, score: 0.009659183  
mg qhs lipitor mg daily colace, score: 0.0086584855

confidence of prediction: 0.767222  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 22 (410.71: Subendocardial infarction, initial episode of care)  
consulted nstemi cad pt has a, score: 0.05006662  
and statin nstemi felt to be due, score: 0.019797692  
demand ischemia in setting of, score: 0.008900944

confidence of prediction: 0.554533  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery disease hyperlipidemia, score: 0.12706135  
s p stent removal, score: 0.07893257  
htn cad pvd sibling, score: 0.07466354

confidence of prediction: 0.942968  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation transferred to, score: 0.12104372  
atrial fibrillation pt had initial, score: 0.10707692  
afib w rvr and, score: 0.1010688

confidence of prediction: 0.976696  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chronic systolic chf ef on tte this, score: 0.019171188  
cell ca chf systolic dysfn w ef, score: 0.00700384  
nSTEMI felt to be, score: 0.0024164182

confidence of prediction: 0.908462  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
for respiratory failure and, score: 0.36223763  
neuro sedated intubated brief hospital, score: 0.062841214  
gen sedated intubated heent perrl right sided, score: 0.024593432

confidence of prediction: 0.691696  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
neuro sedated intubated brief hospital, score: 0.15412828  
gen sedated intubated heent perrl right sided, score: 0.0995858  
was then intubated he was, score: 0.047202103

confidence of prediction: 0.829756  
Y\_true: [ 4 17 22 24 26 27 33 40 42]  
Y\_pred: [ 4 21 22 23 24 26 27 29 33 36 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
neuro sedated intubated brief hospital, score: 0.10285043  
was then intubated he was started, score: 0.022819139  
primary oncologist for his, score: 0.018186273

confidence of prediction: 0.506066  
Y\_true: [ 4 19 23 24 26 29 30 47 48]  
Y\_pred: [ 4 19 24 26 29 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
anticoagulation hypertension dyslipidemia peripheral vascular  
disease, score: 0.08111412  
hyperlipidemia she was continued on, score: 0.045194753  
coronary artery disease s, score: 0.008403211

confidence of prediction: 0.914152  
Y\_true: [ 4 19 23 24 26 29 30 47 48]  
Y\_pred: [ 4 19 24 26 29 30]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on hd lung cancer, score: 0.09273616

esrd on hd mwf non small, score: 0.08198498  
the dialysis catheter ends, score: 0.050441373

confidence of prediction: 0.982594  
Y\_true: [ 4 19 23 24 26 29 30 47 48]  
Y\_pred: [ 4 19 24 26 29 30]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p nstemi des in, score: 0.124587536  
mid lad stent h o, score: 0.045983255  
hemodialysis history of present, score: 0.034547664

confidence of prediction: 0.721561  
Y\_true: [ 4 19 23 24 26 29 30 47 48]  
Y\_pred: [ 4 19 24 26 29 30]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with rvr her pneumonia, score: 0.37691545  
atrial fibrillation not on anticoagulation, score: 0.067106344  
pathogens after ct demonstrated, score: 0.010063403

confidence of prediction: 0.729556  
Y\_true: [ 4 19 23 24 26 29 30 47 48]  
Y\_pred: [ 4 19 24 26 29 30]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
associated pneumonia lung cancer, score: 0.41482788  
associated pneumonia possibly from aspiration vs, score: 0.20261008  
be aspiration in etiology, score: 0.042320944

confidence of prediction: 0.547203  
Y\_true: [ 4 19 23 24 26 29 30 47 48]  
Y\_pred: [ 4 19 24 26 29 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
recurrence severe copd on 3l o2 at, score: 0.12718447  
in severe copd on 5l o2, score: 0.09814229  
copd pt had limited, score: 0.0814852

confidence of prediction: 0.960157  
Y\_true: [20 42]  
Y\_pred: [20 37 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
secondary dementia hypertension discharge condition oriented, score:  
0.1802998  
remarkable for htn colon ca s, score: 0.13554125  
hydrochlorothiazide mg tablet sig, score: 0.09001214

confidence of prediction: 0.717809  
Y\_true: [20 42]  
Y\_pred: [20 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96

consecutive hours)  
osh requiring intubation she was reportedly, score: 0.075941294  
at osh extubation at hospital1, score: 0.074278034  
to noxious stimuli with, score: 0.015903197

confidence of prediction: 0.982515  
Y\_true: [20]  
Y\_pred: [ 2 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmhx dementia htn neuropathy dm borderline glaucoma psh bilateral,  
score: 0.110703625  
drop qid cosopt l eye hospital1, score: 0.021999594  
qid l diamox discharge, score: 0.019327372

confidence of prediction: 0.901289  
Y\_true: [ 1 4 17 20 26 31 41 49]  
Y\_pred: [ 1 3 20 26 31 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
day levothyroxine 112mcg qd clonazepam 5mg, score: 0.19546987  
hours levothyroxine mcg tablet sig one, score: 0.0067960247  
medical history hypothyroidism hypertension bp at pc, score:  
0.002038992

confidence of prediction: 0.996284  
Y\_true: [ 1 4 17 20 26 31 41 49]  
Y\_pred: [ 1 3 20 26 31 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of thrombus hypertension antihypertensives were initially held,  
score: 0.042634252  
breast cancer hypertension hypercholesterolemia who was found,  
score: 0.033948  
hypothyroidism hypertension bp at, score: 0.032849856

confidence of prediction: 0.996810  
Y\_true: [ 1 4 17 20 26 31 41 49]  
Y\_pred: [ 1 3 20 26 31 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin inr, score: 0.86687285  
fibrillation prescribed coumadin anxiety, score: 0.06559904  
atrial fibrillation discharge condition left, score: 0.014500728

confidence of prediction: 0.961145  
Y\_true: [ 1 4 17 20 26 31 41 49]  
Y\_pred: [ 1 3 20 26 31 49]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
have an aspiration pna she was started, score: 0.015830737  
mca stroke aspiration pneumonia secondary atrial fibrillation,  
score: 0.003456422  
also have pneumonia and should, score: 0.0013286102

confidence of prediction: 0.770300

Y\_true: [ 1 4 17 20 26 31 41 49]

Y\_pred: [ 1 3 20 26 31 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

afib on coumadin inr, score: 0.83589804

fibrillation prescribed coumadin anxiety, score: 0.05202809

subtherapeutic on coumadin prior, score: 0.02311279

confidence of prediction: 0.527934

Y\_true: [17 24 26 27 33 47]

Y\_pred: [17 20 24 26 30 33 37 40 42 43]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

to pursue a conservative, score: 0.08331858

vulnerable subject prisoner [UNK] enrollment in, score: 0.055635218

experimental protocols in the, score: 0.029837161

confidence of prediction: 0.639963

Y\_true: [17 24 26 27 33 47]

Y\_pred: [17 20 24 26 30 33 37 40 42 43]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

coronary artery disease hepatitis c, score: 0.2007925

coronary artery disease status post pci in, score: 0.12696862

coronary artery disease status post pci in, score: 0.064833485

confidence of prediction: 0.935320

Y\_true: [17 24 26 27 33 47]

Y\_pred: [17 20 24 26 30 33 37 40 42 43]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation complicated by rapid, score: 0.036014542

af was eventually brought, score: 0.02028402

af c rvr respiratory, score: 0.011176103

confidence of prediction: 0.745859

Y\_true: [17 24 26 27 33 47]

Y\_pred: [17 20 24 26 30 33 37 40 42 43]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

by respiratory failure gastrointestinal bleeding, score: 0.11942521

further respiratory impairment and, score: 0.0979615

despite aggressive attempts at, score: 0.09633923

confidence of prediction: 0.821146

Y\_true: [ 2 10 20 37 39 41 42]

Y\_pred: [ 2 20 39]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

history including dm hypertension and tobacco, score: 0.10384442

on metformin hospital1 infectious disease sputum, score: 0.10245369

admission metformin mg po, score: 0.03552905

confidence of prediction: 0.898519

Y\_true: [ 2 10 20 37 39 41 42]

Y\_pred: [ 2 20 39]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

history dm htn social history recently widowed, score: 0.086494766

history including dm hypertension and tobacco use, score: 0.04631791

on metformin hospital1 infectious disease, score: 0.009623468

confidence of prediction: 0.686377

Y\_true: [ 2 10 20 37 39 41 42]

Y\_pred: [ 2 20 39]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

transesophageal echo which showed you, score: 0.61427045

riss increased riss d c d on, score: 0.03140561

floor tee showed no thrombus, score: 0.009439364

confidence of prediction: 0.855164

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

failure anemia hyperlipidemia copd social history tob, score:

0.041921645

failure anemia hyperlipidemia copd discharge condition vital, score:

0.041921645

although metastatic disease cannot, score: 0.004891366

confidence of prediction: 0.717547

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

puff q6hours prn atenolol 75mg po, score: 0.058539893

central venous line history of present illness, score: 0.0437697

was placed and neo, score: 0.021072282

confidence of prediction: 0.836446

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

htn af cri who presents, score: 0.07445472

htn chronic renal failure anemia hyperlipidemia copd, score:

0.045201845

confidence of prediction: 0.959061

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib with rvr hr, score: 0.15061022

afib with rvr on, score: 0.1322799

afib for years vs, score: 0.11466414

confidence of prediction: 0.671733

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

diagnosis primary pneumonia atrial fibrillation with, score:  
0.14370471

to a pneumonia you were, score: 0.023139477

dehydration neutropenia secondary stage, score: 0.011301504

confidence of prediction: 0.700187

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)

anemia hyperlipidemia copd social history tob quit, score: 0.1498644

anemia hyperlipidemia copd discharge condition vital signs, score:  
0.1498644

in general patient is, score: 0.007020886

confidence of prediction: 0.824606

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

htn af cri who presents, score: 0.10422807

htn chronic renal failure anemia hyperlipidemia copd, score:  
0.035400648

confidence of prediction: 0.642593

Y\_true: [ 2 4 5 8 17 21 26 29 30 32 36 44]

Y\_pred: [ 4 17 21 26 29 30 36 44]

top three important windows for true positive code 44 (99.04:

Transfusion of packed cells)

he was transfused units prbcs over his course, score: 0.0747859

you said you had already, score: 0.04197854

pos ambulatory discharge instructions, score: 0.017374335

confidence of prediction: 0.800034

Y\_true: [ 1 2 4 13 18 24 30]

Y\_pred: [ 1 2 4 13 18 20 23 24 30]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

pain hypothyroidism gout anemia erosive gastritis, score: 0.15826651

pain hypothyroidism gout anemia erosive, score: 0.15826651

qd synthroid 75mcg qd ferrous sulfate, score: 0.134931

confidence of prediction: 0.660270

Y\_true: [ 1 2 4 13 18 24 30]

Y\_pred: [ 1 2 4 13 18 20 23 24 30]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
lad diabetes mellitus type ii hyperlipidemia chronic, score:  
0.022867782  
actos 30mg qd omeprazole, score: 0.0023876058  
to lad diabetes mellitus type ii hyperlipidemia chronic, score:  
0.0019118121

confidence of prediction: 0.941759  
Y\_true: [ 1 2 4 13 18 24 30]  
Y\_pred: [ 1 2 4 13 18 20 23 24 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
type ii hyperlipidemia chronic obstructive pulmonary disease, score:  
0.03154443  
valsartan mg tablet sig, score: 0.009031347  
[UNK] eye gtts discharge, score: 0.0043074912

confidence of prediction: 0.980214  
Y\_true: [ 1 2 4 13 18 24 30]  
Y\_pred: [ 1 2 4 13 18 20 23 24 30]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting times four, score: 0.600103  
coronary artery bypass grafting times four, score: 0.033894617  
coronary artery bypass grafting with dr, score: 0.02291892

confidence of prediction: 0.971678  
Y\_true: [ 1 2 4 13 18 24 30]  
Y\_pred: [ 1 2 4 13 18 20 23 24 30]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.41234383  
lotions powders or ointments to, score: 0.19501254  
incisions no baths or, score: 0.16962142

confidence of prediction: 0.997670  
Y\_true: [ 1 2 4 13 18 24 30]  
Y\_pred: [ 1 2 4 13 18 20 23 24 30]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.5085757  
[UNK] eye gtts discharge, score: 0.063567325  
coronary artery disease s p pci cypher, score: 0.042067576

confidence of prediction: 0.676453  
Y\_true: [ 1 2 4 13 18 24 30]  
Y\_pred: [ 1 2 4 13 18 20 23 24 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
chronic obstructive pulmonary disease prior, score: 0.012047366  
obesity chronic low back, score: 0.0015024643



systolic function lvef right, score: 0.0011748285

confidence of prediction: 0.991291

Y\_true: [24 47]

Y\_pred: [ 4 14 20 24 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

one vessel coronary artery disease of, score: 0.03478683

lad with a cypher, score: 0.031864703

code stemi was called, score: 0.029802948

confidence of prediction: 0.810854

Y\_true: [ 2 4 20 29 30 34 37 41]

Y\_pred: [ 4 29 37]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

type ii hyperlipidemia tardive dyskinesias secondary, score:  
0.09748712

simvastatin 10mg daily vitamin, score: 0.013102244

simvastatin for cad hld stopped heparin for, score: 0.006289901

confidence of prediction: 0.603372

Y\_true: [ 2 4 20 29 30 34 37 41]

Y\_pred: [ 4 29 37]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

infiltrate on cxr concerning for pneumonia gave pt, score:  
0.17086923

lobe pneumonia brief hospital course, score: 0.095384955

and for pneumonia palliative care, score: 0.04807115

confidence of prediction: 0.877433

Y\_true: [ 2 4 20 29 30 34 37 41]

Y\_pred: [ 4 29 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

urinary tract infection and for, score: 0.26226655

for uti with sepsis who was, score: 0.20519428

urinary tract infection pneumonia discharge condition, score:  
0.08366366

confidence of prediction: 0.782466

Y\_true: [42]

Y\_pred: [42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

hospital1 intubated and sedated, score: 0.04815977

[UNK] intubated and sedated, score: 0.03700745

patient was intubated after etomidate, score: 0.022349454

confidence of prediction: 0.732021

Y\_true: [ 3 5 6 8 17 21 35 36 37]

Y\_pred: [ 3 21 35 36 37]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
hydrochlorothiazide was discontinued during, score: 0.009079678  
hydrochlorothiazide mg by mouth daily, score: 0.006093346  
recon soln injection q6h, score: 0.004542992

confidence of prediction: 0.576071

Y\_true: [ 3 5 6 8 17 21 35 36 37]

Y\_pred: [ 3 21 35 36 37]

top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
chronic renal failure he was, score: 0.2230616  
chronic renal failure urinary tract, score: 0.2230616  
kidney injury hyperkalemia bilateral hydronephrosis, score: 0.036365237

confidence of prediction: 0.880186

Y\_true: [ 3 5 6 8 17 21 35 36 37]

Y\_pred: [ 3 21 35 36 37]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
kidney injury patient s, score: 0.18874155  
on chronic renal failure he, score: 0.07247961  
on chronic renal failure urinary, score: 0.07247961

confidence of prediction: 0.556470

Y\_true: [ 3 5 6 8 17 21 35 36 37]

Y\_pred: [ 3 21 35 36 37]

top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
chronic renal failure he was, score: 0.22543149  
chronic renal failure urinary tract, score: 0.22543149  
kidney injury hyperkalemia bilateral hydronephrosis, score: 0.04809603

confidence of prediction: 0.930984

Y\_true: [ 3 5 6 8 17 21 35 36 37]

Y\_pred: [ 3 21 35 36 37]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
urinary tract infection secondary diagnosis, score: 0.15143771  
urinary tract infection acute kidney, score: 0.11953615  
culture escherichia coli ampicillin, score: 0.10895967

confidence of prediction: 0.795250

Y\_true: [ 3 7 11 20 28 37]

Y\_pred: [ 0 3 4 10 11 20 28 37]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
work hypertension hypercholesterolemia erectile dysfunction depression, score: 0.05659253  
multiple strokes hypertension hyperlipidemia, score: 0.0020980234  
tear sepsis secondary to, score: 0.0013974883

confidence of prediction: 0.559210  
Y\_true: [ 3 7 11 20 28 37]  
Y\_pred: [ 0 3 4 10 11 20 28 37]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
hyperlipidemia and depression presenting to, score: 0.03542198  
in the antrum compatible, score: 0.010235496  
erectile dysfunction depression elevated psa social history, score:  
0.005949257

confidence of prediction: 0.970780  
Y\_true: [ 3 7 11 20 28 37]  
Y\_pred: [ 0 3 4 10 11 20 28 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
multiple cvas htn and hl who, score: 0.18463734  
multiple strokes hypertension hyperlipidemia and depression  
presenting, score: 0.04436912  
to discharge htn initially his antihypertensives were, score:  
0.028934246

confidence of prediction: 0.648575  
Y\_true: [ 3 7 11 20 28 37]  
Y\_pred: [ 0 3 4 10 11 20 28 37]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.46319947  
in the antrum compatible, score: 0.16533907  
otherwise normal egd to second part of, score: 0.116218954

confidence of prediction: 0.935629  
Y\_true: [ 3 7 11 20 28 37]  
Y\_pred: [ 0 3 4 10 11 20 28 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a urinary tract infection and were, score: 0.062094986  
a urinary tract infection he was, score: 0.043748315  
to urinary tract infection secondary diagnosis, score: 0.032955658

confidence of prediction: 0.962791  
Y\_true: [35]  
Y\_pred: [20 24 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure pre renal with creatinine of on, score:  
0.0071775396  
of progressive short term, score: 0.0023512149  
chronic in nature with, score: 0.0011928891

confidence of prediction: 0.984027  
Y\_true: [11 24 27 30]  
Y\_pred: [10 20 27 30]  
top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)  
diastolic heart failure differential, score: 0.18328208  
diastolic heart failure pulmonary, score: 0.18328208  
diastolic heart failure patient, score: 0.18328208

confidence of prediction: 0.785960  
Y\_true: [11 24 27 30]  
Y\_pred: [10 20 27 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
chronic issues copd pt did not, score: 0.25857246  
aortic stenosis copd obstructive sleep apnea discharge, score:  
0.04330701  
to her copd and took her, score: 0.03452914

confidence of prediction: 0.913493  
Y\_true: [ 4 16 17 20 23 24 28 34 40 42]  
Y\_pred: [ 4 20 34 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disease hypertension dyslipidemia gerd sleep apnea treated, score:  
0.06497976  
plavix mg simvastatin qhs ventolin inh lisinopril 20mg, score:  
0.016201705  
ezetimibe mg po daily, score: 0.008953034

confidence of prediction: 0.711458  
Y\_true: [ 4 16 17 20 23 24 28 34 40 42]  
Y\_pred: [ 4 20 34 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
according to urology presumably, score: 0.29346004  
artery disease hypertension dyslipidemia gerd sleep apnea, score:  
0.20461297  
hemorrhage hypertension obstructive sleep apnea, score: 0.033420607

confidence of prediction: 0.737007  
Y\_true: [ 4 16 17 20 23 24 28 34 40 42]  
Y\_pred: [ 4 20 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
according to urology presumably, score: 0.05871608  
artery disease hypertension dyslipidemia gerd sleep apnea treated,  
score: 0.026951136  
carotid stent registry and this, score: 0.02342198

confidence of prediction: 0.856012  
Y\_true: [ 4 16 17 20 23 24 28 34 40 42]  
Y\_pred: [ 4 20 34 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
patient was intubated for a upper gi, score: 0.0759575  
lle and rue rle, score: 0.0008931345  
increase your activities and distance, score: 0.00079150166

confidence of prediction: 0.796380  
Y\_true: [ 4 16 17 20 23 24 28 34 40 42]  
Y\_pred: [ 4 20 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
patient was intubated for a upper gi, score: 0.028056392  
patient developed two episodes of, score: 0.0024173185  
lle and rue rle, score: 0.0010600708

confidence of prediction: 0.627768  
Y\_true: [ 8 9 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
the uterus thrombocytopenia her initial thrombocytopenia raised  
concern, score: 0.40286928  
continued to downtrend c, score: 0.03763848  
anemia with a likely, score: 0.022653483

confidence of prediction: 0.542631  
Y\_true: [ 8 9 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
gnrs x unspeciated upon transfer, score: 0.13981234  
diagnosed as septic shock she required one, score: 0.06847149  
continued to downtrend c, score: 0.044854023

confidence of prediction: 0.763142  
Y\_true: [ 8 9 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
consistent with sepsis discharge, score: 0.15749311  
gnrs x unspeciated upon transfer, score: 0.048188075  
myelos 15pm hypochrom normal, score: 0.03520332

confidence of prediction: 0.667804  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
on diabetes mellitus atrial fibrillation, score: 0.05743549  
history diabetes mellitus atrial fibrillation, score: 0.04713799  
lispro protam lispro unit, score: 0.016602505

confidence of prediction: 0.667236  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

atrial fibrillation dyslipidemia hypertension coronary artery dz,  
score: 0.12258232  
myocardial infarction developmental delay, score: 0.018915927

confidence of prediction: 0.983742  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x3 left internal mammary artery to  
left, score: 0.48731503  
coronary artery bypass graft x3 left internal mammary artery to  
left, score: 0.02977396  
coronary artery bypass graft x3 on, score: 0.011913043

confidence of prediction: 0.975225  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires removed coreg for, score: 0.23189628  
cardiothoracic allergies no known, score: 0.018107932  
washing incisions gently with mild soap, score: 0.0066917907

confidence of prediction: 0.840347  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
fibrillation dyslipidemia hypertension coronary artery dz s, score:  
0.10438518  
continued gi aggressive bowel, score: 0.08430875  
dm chol htn and family hx, score: 0.059810832

confidence of prediction: 0.998570  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.60326934  
coronary artery disease major, score: 0.033824727  
s p coronary artery bypass graft, score: 0.024273608

confidence of prediction: 0.930812  
Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation were continued ace, score: 0.24343526  
atrial fibrillation dyslipidemia hypertension coronary, score:  
0.11686224  
atrial fibrillation on pod the, score: 0.07117641

confidence of prediction: 0.943199

Y\_true: [ 2 4 8 9 13 18 20 23 24 26 27]  
Y\_pred: [ 2 4 13 18 20 24 26 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
sl ntg coumadin 6mg 7mg, score: 0.015056713  
for systolic heart failure ef and amiodarone for chronic atrial  
fibrillation, score: 0.0067437175  
heart rrr irregular x, score: 0.0060462975  
  
confidence of prediction: 0.758200  
Y\_true: [ 1 4 8 23 26 29 47 49]  
Y\_pred: [ 1 4 20 26 29]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
gout hypothyroidism prostate cancer arthritis, score: 0.2886911  
mg levothyroxine mcg primidone mg, score: 0.16190551  
hyperlipidemia hypothyroidism prostate cancer, score: 0.15826407  
  
confidence of prediction: 0.920739  
Y\_true: [ 1 4 8 23 26 29 47 49]  
Y\_pred: [ 1 4 20 26 29]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
nf coenzyme q10 br coenzyme q10 vitamin e, score: 0.15289202  
tia history hyperlipidemia hypothyroidism prostate cancer, score:  
0.036099985  
tia hyperlipidemia atrial fibrillation gout hypothyroidism, score:  
0.017438807  
  
confidence of prediction: 0.982536  
Y\_true: [ 1 4 8 23 26 29 47 49]  
Y\_pred: [ 1 4 20 26 29]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fib compared to tracing, score: 0.2671183  
atrial fibrillation as an outpatient, score: 0.002185558  
hyperlipidemia atrial fibrillation gout hypothyroidism prostate,  
score: 0.00047932178  
  
confidence of prediction: 0.782880  
Y\_true: [ 1 4 8 23 26 29 47 49]  
Y\_pred: [ 1 4 20 26 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
diagnosis primary pneumonia coagulopathy super therapeutic, score:  
0.103720926  
for pneumonia and the, score: 0.04798404  
pneumonia given that the, score: 0.022508048  
  
confidence of prediction: 0.882160  
Y\_true: [ 2 7 17 20 32 33 40 42]  
Y\_pred: [20 40 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

htn cva with residual, score: 0.59697765  
hctz hydralazine insulin nph 20u sc metoprolol oxycodone, score:  
0.088047884  
dm ii discharge condition, score: 0.047845542

confidence of prediction: 0.702066  
Y\_true: [ 2 7 17 20 32 33 40 42]  
Y\_pred: [20 40 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
she was intubated and transferred, score: 0.19772081  
see attached scale famotidine mg tablet, score: 0.008823987  
she was bronched which showed thick tan, score: 0.0043565687

confidence of prediction: 0.918674  
Y\_true: [ 7 20 28]  
Y\_pred: [20 28]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension her antihypertensives were initially, score: 0.179823  
history of htn and, score: 0.14592603  
medical history hypertension osteopenia h o, score: 0.09268122

confidence of prediction: 0.752955  
Y\_true: [ 7 20 28]  
Y\_pred: [20 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.36442754  
underwent an endoscopy which revealed likely, score: 0.14680906  
to definitively establish a, score: 0.06804737

confidence of prediction: 0.959182  
Y\_true: [ 3 10 15 20 22 24 27 30 38]  
Y\_pred: [ 4 20 22 24 27 30 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
on oa htn social history lives, score: 0.2747858  
diagnosis copd htn oa discharge condition alert, score: 0.05888293  
patient was managed with, score: 0.0558758

confidence of prediction: 0.716744  
Y\_true: [ 3 10 15 20 22 24 27 30 38]  
Y\_pred: [ 4 20 22 24 27 30 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
an nstemi she refused cardiac, score: 0.16102602  
nstemi pt with a, score: 0.081608444  
history nstemi in other, score: 0.06821106

confidence of prediction: 0.995200  
Y\_true: [ 3 10 15 20 22 24 27 30 38]  
Y\_pred: [ 4 20 22 24 27 30 38]  
top three important windows for true positive code 24 (414.01:



Coronary atherosclerosis of native coronary artery)  
cad nstemi secondary diagnosis copd, score: 0.15561524  
cardiac catheterization history of, score: 0.08257431  
showed left circumflex lesion, score: 0.056981623

confidence of prediction: 0.980737  
Y\_true: [ 3 10 15 20 22 24 27 30 38]  
Y\_pred: [ 4 20 22 24 27 30 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
and possible chf dyspnea likely multifactorial, score: 0.045030385  
chronic systolic chf w ef of and, score: 0.016773954  
ntg and was brought, score: 0.0072917086

confidence of prediction: 0.636209  
Y\_true: [ 3 10 15 20 22 24 27 30 38]  
Y\_pred: [ 4 20 22 24 27 30 38]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
history neuropathy copd on oa htn social, score: 0.16666022  
diagnosis copd htn oa discharge condition, score: 0.13236418  
hyperlipidemia copd on home o2 and, score: 0.061176997

confidence of prediction: 0.804512  
Y\_true: [ 3 10 15 20 22 24 27 30 38]  
Y\_pred: [ 4 20 22 24 27 30 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.5079812  
catheterization catheterization showed left circumflex, score:  
0.055271007  
cath lab most of the, score: 0.0470685

confidence of prediction: 0.516805  
Y\_true: [ 2 14 20 24 38]  
Y\_pred: [14 15 20 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization with des to, score: 0.25864482  
lab tropes peaked at, score: 0.04037744  
cath lab cath showed proximal, score: 0.03606053

confidence of prediction: 0.851109  
Y\_true: [ 2 14 20 24 38]  
Y\_pred: [14 15 20 24 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
was administered htn he was hypertensive, score: 0.10898206  
hypertension range [UNK] systolic, score: 0.05112309  
htn multiple basal squamous cell, score: 0.040914953

confidence of prediction: 0.993610  
Y\_true: [ 2 14 20 24 38]  
Y\_pred: [14 15 20 24 38]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
rca occlusion with thrombus, score: 0.13856393  
coronary artery disease the, score: 0.094613  
coronary artery disease distal, score: 0.094613

confidence of prediction: 0.882901  
Y\_true: [ 2 14 20 24 38]  
Y\_pred: [14 15 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with des, score: 0.45390016  
cath lab cath showed proximal, score: 0.042535733  
lab tropes peaked at, score: 0.036463294

confidence of prediction: 0.519320  
Y\_true: [20 28]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
esophageal varices hypertension benign pulmonary, score: 0.56464046  
bled causing hematemesis and, score: 0.12580416  
developed hematemesis with subsequent, score: 0.05394384

confidence of prediction: 0.858407  
Y\_true: [20 28]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.60724247  
otherwise normal egd to, score: 0.03009331  
name endoscopy suite after having found, score: 0.019464308

confidence of prediction: 0.668023  
Y\_true: [9]  
Y\_pred: [9]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
by discharge thrombocytopenia the patient s platelet, score:  
0.66572666  
health park plaza fourth floor location, score: 0.01090209  
anemia prosthetic left eye, score: 0.0037321094

confidence of prediction: 0.586626  
Y\_true: [ 3 13 18 20 24 26]  
Y\_pred: [ 3 13 18 20 24 26]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
obesity hypertension hypercholesterolemia s p carpal tunnel, score:  
0.14517179  
coronary stents obesity insulin, score: 0.0014480496  
zyrtec 10mg d cozaar, score: 0.0009903713

confidence of prediction: 0.975047

Y\_true: [ 3 13 18 20 24 26]  
Y\_pred: [ 3 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafts x lima lad, score: 0.29441917  
coronary artery bypass grafts x lima lad svg dg svg, score:  
0.020074092  
tee for cabg procedure, score: 0.019265577

confidence of prediction: 0.923570  
Y\_true: [ 3 13 18 20 24 26]  
Y\_pred: [ 3 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.76555175  
tee was performed in, score: 0.012757863  
bypass grafts x lima lad, score: 0.011123367

confidence of prediction: 0.961323  
Y\_true: [ 3 13 18 20 24 26]  
Y\_pred: [ 3 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
humalog ssi zyrtec 10mg d cozaar, score: 0.1772498  
diabetes mellitus hypertension hypercholesterolemia s p, score:  
0.10891947  
mellitus obesity hypertension hypercholesterolemia s p, score:  
0.08839359

confidence of prediction: 0.966072  
Y\_true: [ 3 13 18 20 24 26]  
Y\_pred: [ 3 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafts, score: 0.21637931  
coronary artery disease s p coronary artery bypass grafts, score:  
0.16139732  
coronary artery disease s p coronary stents obesity insulin, score:  
0.06306002

confidence of prediction: 0.948957  
Y\_true: [ 3 13 18 20 24 26]  
Y\_pred: [ 3 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation and was begun, score: 0.102377824  
atrial fibrillation depression s p, score: 0.028089218  
amiodarone mg tablet sig, score: 0.009914187

confidence of prediction: 0.533737  
Y\_true: [ 4 6 20]  
Y\_pred: [ 4 7 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

surgeries hypertension hyperlipidemia insomnia hx h, score:  
0.118262745

her hypotension hyperlipidemia the patient s home, score:  
0.054108426

squamous carcinoma [UNK] further, score: 0.051477928

confidence of prediction: 0.531849

Y\_true: [15 24 25 27 38]

Y\_pred: [15 20 27 38]

top three important windows for true positive code 15 (37.23:

Combined right and left heart cardiac catheterization)

cardiac catheterization history of present, score: 0.7774383

cardiac catheterization selective angiography in this, score:  
0.0074294405

cardiac catheterization was performed which, score: 0.0057600457

confidence of prediction: 0.941861

Y\_true: [15 24 25 27 38]

Y\_pred: [15 20 27 38]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

systolic heart failure secondary diagnoses congenital, score:  
0.40135565

systolic heart failure with an ef, score: 0.06941034

diastolic filling pressures but, score: 0.02330058

confidence of prediction: 0.860228

Y\_true: [15 24 25 27 38]

Y\_pred: [15 20 27 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization history of present, score: 0.49667022

cardiac catheterization selective angiography in this, score:  
0.0128397215

cardiac catheterization was performed which, score: 0.012106985

confidence of prediction: 0.841104

Y\_true: [39]

Y\_pred: [ 4 24 39]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

vegetation is seen on, score: 0.019086739

left carotid stent and, score: 0.016170382

transformation the areas of ischemia, score: 0.014831986

confidence of prediction: 0.882178

Y\_true: [ 4 18 25 26]

Y\_pred: [ 4 18 20 25 26]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

history asthma hyperlipidemia hypertension [UNK] vertigo h, score:  
0.19012277

valve repair hyperlipidemia asthma hypertension paroxysmal atrial  
fibrillation, score: 0.026603393

incisions sternal healing well, score: 0.0028287577

confidence of prediction: 0.985867

Y\_true: [ 4 18 25 26]

Y\_pred: [ 4 18 20 25 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed physical, score: 0.7390383

cardiothoracic allergies xopenex attending, score: 0.0032516306

washing incisions gently with mild soap, score: 0.0024533162

confidence of prediction: 0.875438

Y\_true: [ 4 18 25 26]

Y\_pred: [ 4 18 20 25 26]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

severe mitral regurgitation is seen, score: 0.3759595

mitral valve repair 33mm, score: 0.074818574

mitral valve prolapse the, score: 0.015018571

confidence of prediction: 0.945361

Y\_true: [ 4 18 25 26]

Y\_pred: [ 4 18 20 25 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation h o vertigo, score: 0.3715486

atrial fibrillation peripheral neuropathy social, score: 0.051867884

severe mitral regurgitation is, score: 0.017479178

confidence of prediction: 0.652990

Y\_true: [ 4 10 14 22 23 24 38]

Y\_pred: [ 4 10 15 22 27 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

factors diabetes dyslipidemia hypertension cardiac history

percutaneous, score: 0.2428439

myocardial infarction hyperlipidemia and lyme disease, score: 0.16153672

artery disease dyslipidemia discharge condition mental, score: 0.06850489

confidence of prediction: 0.608963

Y\_true: [ 4 10 14 22 23 24 38]

Y\_pred: [ 4 10 15 22 27 38]

top three important windows for true positive code 10 (305.1:

Tobacco use disorder)

social history smokes one ppd family history no, score: 0.041181058

lmca and lad had, score: 0.001623989

cath comments selective coronary, score: 0.0015964459

confidence of prediction: 0.689179

Y\_true: [ 4 10 14 22 23 24 38]

Y\_pred: [ 4 10 15 22 27 38]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)  
indx ctropnt 37am ck, score: 0.1367631  
cardiac cath comments selective coronary, score: 0.011389884  
vessel and filled from, score: 0.010474197

confidence of prediction: 0.794331  
Y\_true: [ 4 10 14 22 23 24 38]  
Y\_pred: [ 4 10 15 22 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath comments selective coronary angiography of this, score:  
0.079994686  
mid vessel and filled from, score: 0.0212532  
vessel cad total occlusion, score: 0.007920241

confidence of prediction: 0.615515  
Y\_true: [ 0 6 12 16 17 29 37 39 40 42]  
Y\_pred: [ 4 17 33 39 40 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
prn line flush picc heparin dependent flush with, score: 0.06068932  
illness and developed ards requiring intubation, score: 0.019163784  
illness and developed acute, score: 0.019163784

confidence of prediction: 0.788396  
Y\_true: [ 0 6 12 16 17 29 37 39 40 42]  
Y\_pred: [ 4 17 33 39 40 43]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
vegetation or partial flail leaflet this is best, score: 0.1856796  
transesophageal echocardiogram tee history of present, score:  
0.16260758  
tee showed a growth, score: 0.14226872

confidence of prediction: 0.607822  
Y\_true: [ 0 6 12 16 17 29 37 39 40 42]  
Y\_pred: [ 4 17 33 39 40 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
ards requiring intubation extubated successfully, score: 0.23299417  
your respiratory failure incidentally, score: 0.01728355  
capsule capsule s by, score: 0.014490445

confidence of prediction: 0.687671  
Y\_true: [17 24 29 35 45]  
Y\_pred: [17 20]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement history of present illness, score: 0.6538289  
the superior vena cava there is, score: 0.08923943  
[UNK] tube sbo copd, score: 0.012851188

confidence of prediction: 0.931996  
Y\_true: [ 6 20 34 46]

Y\_pred: [34]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
history hypertension gerd s p ccy s, score: 0.045273367  
9pm levoquin and flagyl, score: 0.002902264  
pigtail stent placed pt, score: 0.002733498  
  
confidence of prediction: 0.917133  
Y\_true: [ 1 4 6 20 32 49]  
Y\_pred: [ 1 4 44]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
medications levothyroxine mcg tablet sig, score: 0.06928976  
wekk levothyroxine mcg tablet tablet s, score: 0.035267916  
anhydrase the tumor was, score: 0.016487628  
  
confidence of prediction: 0.623328  
Y\_true: [ 1 4 6 20 32 49]  
Y\_pred: [ 1 4 44]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hypertension hypothyroidism hyperlipidemia anxiety with panic agoraphobia, score: 0.07594452  
female with cholangiocarcinoma scheduled, score: 0.07337953  
rosuvastatin mg tablet sig, score: 0.032469373  
  
confidence of prediction: 0.511657  
Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]  
Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]  
top three important windows for true positive code 6 (276.2: Acidosis)  
11am blood lactate 04am, score: 0.08346798  
central ve po2 pco2 ph, score: 0.068110794  
crystalloid and colloid fluid, score: 0.060488574  
  
confidence of prediction: 0.503731  
Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]  
Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]  
top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
is black about 500cc melenotic stools, score: 0.07389743  
bleeding and klebsiella bacteremia, score: 0.059131447  
inr klebsiella pneumoniae bacteremia, score: 0.056181673  
  
confidence of prediction: 0.679213  
Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]  
Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]  
top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)  
inr and thrombocytopenia also likely exacerbated this, score: 0.23560987  
cirrhosis including thrombocytopenia splenomegaly coagulopathy, score: 0.14872776  
splenomegaly with thrombocytopenia new, score: 0.08917865

confidence of prediction: 0.793399

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous line placement arterial line placement, score: 0.29409453

soon thereafter respiratory failure, score: 0.051722497

crystalloid and colloid fluid from, score: 0.036917966

confidence of prediction: 0.921109

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

retired truck salesman family, score: 0.6769173

medical history hypertension hl diabetes diet controlled, score: 0.03367113

cvl ogt ouptut is black about 500cc melenotic stools, score:

0.018453296

confidence of prediction: 0.785051

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

previously normal egd years, score: 0.11566011

on admission egd showed an esophageal ulcer, score: 0.09748551

coffee ground emesis and, score: 0.06335411

confidence of prediction: 0.895162

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

he was intubated for airway protection, score: 0.0964378

respiratory failure intubated for airway protection, score: 0.09249878

he is intubated and, score: 0.07350836

confidence of prediction: 0.929121

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

kidney injury pre renal hypovolemic etiology likely, score: 0.4541758

shock acute renal failure hypoglycemia and, score: 0.033805147

to acute kidney injury gi bleed, score: 0.013837267

confidence of prediction: 0.676751

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 42 (96.71:



Continuous invasive mechanical ventilation for less than 96 consecutive hours)

general intubated sedated overbreathing, score: 0.091169454

respiratory failure intubated for airway protection, score: 0.0899633

he was intubated for airway protection, score: 0.07970116

confidence of prediction: 0.876106

Y\_true: [ 2 6 7 9 16 17 20 27 28 33 35 42 46]

Y\_pred: [ 0 4 6 7 9 17 20 28 33 35 37 40 42 43 44 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

ve po2 pco2 ph, score: 0.1398137

shock leading to acute, score: 0.042930037

septic shock cultures from hospital, score: 0.036576584

confidence of prediction: 0.976508

Y\_true: [ 4 20 27]

Y\_pred: [4]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

years ago hyperlipidemia gout social history lives, score: 0.109570496

gentleman with history that includes, score: 0.0014638252

keppra 1500mg hospital1 and gabapentin, score: 0.000392343

confidence of prediction: 0.735101

Y\_true: [ 4 21 36]

Y\_pred: [ 4 21 36]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

undetected bph hyperlipidemia htn aortic dissection stable, score: 0.2516432

history hypertension dyslipidemia chronic kidney disease ocular, score: 0.07735685

mentions global events memory registration items, score: 0.00926698

confidence of prediction: 0.822677

Y\_true: [ 4 21 36]

Y\_pred: [ 4 21 36]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

dyslipidemia chronic kidney disease ocular migraines, score: 0.019486846

fistula chronic renal insufficiency hypertension discharge condition, score: 0.015914693

parent heavy smokers with, score: 0.015068207

confidence of prediction: 0.628545

Y\_true: [ 4 21 36]

Y\_pred: [ 4 21 36]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic kidney disease ocular migraines, score: 0.2747659  
parent heavy smokers with, score: 0.03271497  
fistula chronic renal insufficiency hypertension discharge  
condition, score: 0.026374577

confidence of prediction: 0.760565  
Y\_true: [10 12 30 34 41 43]  
Y\_pred: [20 33 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
oliguria secondary gerd discharge condition mental status, score:  
0.124713  
intrapulmonary shunting left ventricular, score: 0.007054031  
quart of vodka several, score: 0.004848086

confidence of prediction: 0.658573  
Y\_true: [ 3 10 12 16 17 33 41 43]  
Y\_pred: [ 6 17 27 33 35 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement arterial line placement history of, score: 0.22067496  
a line placed review, score: 0.04868985  
ed femoral cvl placed regarding ecgs, score: 0.029403972

confidence of prediction: 0.574558  
Y\_true: [ 3 10 12 16 17 33 41 43]  
Y\_pred: [ 6 17 27 33 35 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
normalized respiratory failure pt was intubated in field due, score:  
0.24976535  
had gtc en route to, score: 0.10115716  
overdose respiratory failure pancreatitis pneumonia, score:  
0.070838846

confidence of prediction: 0.991052  
Y\_true: [11 20 29]  
Y\_pred: [20 29 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn anxiety depression add, score: 0.4378088  
medical history hypertension anxiety depression add, score:  
0.04518089  
unstable and become off, score: 0.04309912

confidence of prediction: 0.722158  
Y\_true: [11 20 29]  
Y\_pred: [20 29 35]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia curb score, score: 0.13018139  
diagnosis pneumonia secondary hypertension, score: 0.07710904  
community acquired pneumonia with day, score: 0.06768461

confidence of prediction: 0.815543

Y\_true: [ 9 35]

Y\_pred: [ 5 9 35]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

cirrhosis diagnosis thrombocytopenia etoh abuse, score: 0.17706156

anemia and thrombocytopenia patient continues, score: 0.14652798

anemia and thrombocytopenia euvoletic hyponatremia it, score:  
0.14652798

confidence of prediction: 0.525413

Y\_true: [ 9 35]

Y\_pred: [ 5 9 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

s departure arf baseline unknown cr at, score: 0.3738066

t97 hr86 bp122 rr16 o2sat98 he, score: 0.023077397

recorded as having no, score: 0.017838247

confidence of prediction: 0.612063

Y\_true: [ 6 16 33 35 41 42]

Y\_pred: [17 26 35 40 42]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

pretreatment for arf see below, score: 0.2059

of discharge arf likely hypovolemia due, score: 0.17401597

to protect airway due, score: 0.019218007

confidence of prediction: 0.664202

Y\_true: [ 6 16 33 35 41 42]

Y\_pred: [17 26 35 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

was intubated and sedated, score: 0.11755797

puncture and intubation at doctor, score: 0.050512183

intubated sedated opens eyes, score: 0.048283715

confidence of prediction: 0.516072

Y\_true: [ 7 28 44]

Y\_pred: [44]

top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)

you were transfused units of, score: 0.12794182

patient was transfused with u prbc with improvement, score:  
0.019918386

source of bleeding colonoscopy showed, score: 0.01651261

confidence of prediction: 0.914021

Y\_true: [ 0 4 6 16 20 23 24 26 32 34]

Y\_pred: [ 4 20 24 34 37]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

cad htn hld who presented with abdominal, score: 0.025497245

reflux disease hyperlipidemia memory difficulties past surgical,  
score: 0.018004784  
simvastatin mg tablet sig, score: 0.016512578

confidence of prediction: 0.982350  
Y\_true: [ 0 4 6 16 20 23 24 26 32 34]  
Y\_pred: [ 4 20 24 34 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
cva cad hypertension gastroesophageal reflux, score: 0.18807407  
of cad htn hld who presented with, score: 0.08883812  
glucagon human recombinant mg, score: 0.026611168

confidence of prediction: 0.878739  
Y\_true: [ 0 4 6 16 20 23 24 26 32 34]  
Y\_pred: [ 4 20 24 34 37]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
pci with stents 5yrs, score: 0.15925092  
endoscopic retrograde cholangiopancreatography ercp, score:  
0.053448267  
w pad cad she, score: 0.041081633

confidence of prediction: 0.909653  
Y\_true: [ 0 4 6 16 20 23 24 26 32 34]  
Y\_pred: [ 4 20 24 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
cad htn gerd h o cva with, score: 0.027747672  
hypertension gastroesophageal reflux disease hyperlipidemia memory,  
score: 0.026420569  
per lumen glucagon human recombinant mg, score: 0.0024934001

confidence of prediction: 0.814503  
Y\_true: [ 1 8 25 26 27]  
Y\_pred: [ 1 4 20 26 27 44]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
synthroid 88mcg qd [UNK] po, score: 0.59531444  
home synthroid anemia hct remained, score: 0.09446954  
day levothyroxine mcg tablet sig, score: 0.023594018

confidence of prediction: 0.907002  
Y\_true: [ 1 8 25 26 27]  
Y\_pred: [ 1 4 20 26 27 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib pt remained rate, score: 0.31129876  
atrial fibrillation severe pulmonary htn, score: 0.09959009  
atrial fibrillation severe pulmonary hypertension, score:  
0.070044294

confidence of prediction: 0.955771  
Y\_true: [ 1 8 25 26 27]

Y\_pred: [ 1 4 20 26 27 44]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

dCHF and Afib were, score: 0.18038714

CHF w ef severe, score: 0.14098775

CHF with diastolic dysfunction ef, score: 0.11273922

confidence of prediction: 0.553975

Y\_true: [ 0 3 20 24 37 46 49]

Y\_pred: [ 2 3 11 20 24 30 49]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)

disease hypertension hypercholesterolemia hyperthyroidism depression

social history, score: 0.26555

temp of 3c on, score: 0.0027050704

6units of nph and, score: 0.0025260996

confidence of prediction: 0.996567

Y\_true: [ 0 3 20 24 37 46 49]

Y\_pred: [ 2 3 11 20 24 30 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hypotension secondary diabetes mellitus discharge, score: 0.11138814

artery disease hypertension hypercholesterolemia hyperthyroidism

depression social history, score: 0.046765164

coumadin cad diabetes on home insulin, score: 0.03727454

confidence of prediction: 0.782917

Y\_true: [ 0 3 20 24 37 46 49]

Y\_pred: [ 2 3 11 20 24 30 49]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

Alzheimer's disease her, score: 0.029482406

type coronary artery disease hypertension hypercholesterolemia, score: 0.012031135

coumadin cad diabetes on home insulin, score: 0.010524571

confidence of prediction: 0.924833

Y\_true: [ 0 3 20 24 37 46 49]

Y\_pred: [ 2 3 11 20 24 30 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

embolism on coumadin inr, score: 0.8153232

s on coumadin cad, score: 0.049013622

of ciprofloxacin coumadin was, score: 0.020645792

confidence of prediction: 0.932953

Y\_true: [ 4 13 14 18 20 22 24 32 38 39]

Y\_pred: [ 4 13 18 20 22 24]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

pmh hypertension hyperlipidemia actinic keratosis discharge

condition, score: 0.2559764

history hypertension hyperlipidemia actinic keratosis exposure to,

score: 0.08646447  
and underwent coronary artery, score: 0.0030236184

confidence of prediction: 0.967279  
Y\_true: [ 4 13 14 18 20 22 24 32 38 39]  
Y\_pred: [ 4 13 18 20 22 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft, score: 0.17624384  
descending saphenous vein graft ramus, score: 0.12307852  
coronary artery bypass graft, score: 0.028163

confidence of prediction: 0.973703  
Y\_true: [ 4 13 14 18 20 22 24 32 38 39]  
Y\_pred: [ 4 13 18 20 22 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
lotions powders or ointments to, score: 0.27359968  
incisions no baths or, score: 0.23797631  
cardiothoracic doctor first name, score: 0.16183847

confidence of prediction: 0.999740  
Y\_true: [ 4 13 14 18 20 22 24 32 38 39]  
Y\_pred: [ 4 13 18 20 22 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hyperlipidemia actinic keratosis  
exposure, score: 0.06982572  
32yrs retired lawyer computer, score: 0.011701428  
peak pmh hypertension hyperlipidemia actinic keratosis discharge,  
score: 0.007719721

confidence of prediction: 0.785792  
Y\_true: [ 4 13 14 18 20 22 24 32 38 39]  
Y\_pred: [ 4 13 18 20 22 24]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
st elevation myocardial infarction he reports, score: 0.26025158  
st elevation myocardial infarction troponin peak, score: 0.26025158  
non st elevation myocardial infarction with peak, score: 0.012205094

confidence of prediction: 0.979494  
Y\_true: [ 4 13 14 18 20 22 24 32 38 39]  
Y\_pred: [ 4 13 18 20 22 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p coronary artery bypass non, score:  
0.20295988  
coronary artery disease on, score: 0.1932056  
s p coronary artery bypass graft, score: 0.08465929

confidence of prediction: 0.712368  
Y\_true: [ 4 10 20]  
Y\_pred: [ 4 20]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
injury hypertension hyperlipidemia he describes his, score: 0.13727853  
history dm2 hl father, score: 0.08738907  
600mg hospital1 nexium 20mg, score: 0.051223475

confidence of prediction: 0.893096  
Y\_true: [ 4 10 20]  
Y\_pred: [ 4 20]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
diabetes mellitus hypertension [UNK] discharge condition, score: 0.2685228  
controlled dm2 htn hl bipolar disorder who, score: 0.0860368  
hypertension hyperlipidemia he describes, score: 0.071860254

confidence of prediction: 0.762115  
Y\_true: [47 49]  
Y\_pred: [30 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
female on coumadin came to hospital1, score: 0.06800791  
q6h prn warfarin discharge medications famotidine, score: 0.016768878  
and had been placed on coumadin on she underwent, score: 0.001794659

confidence of prediction: 0.967624  
Y\_true: [ 2 4 11 20 26 31]  
Y\_pred: [ 4 20 23 26 31]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
dm depression hyperlipidemia psh open cholecystectomy social, score: 0.03831321  
travatan z nf travoprost ou qpm, score: 0.010785438  
pilocarpine hcl drops sig, score: 0.001957271

confidence of prediction: 0.669059  
Y\_true: [ 2 4 11 20 26 31]  
Y\_pred: [ 4 20 23 26 31]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
afib dm htn [UNK] from hospital, score: 0.20470299  
htn who presented with, score: 0.10901053  
fib dm depression hyperlipidemia, score: 0.0614374

confidence of prediction: 0.984650  
Y\_true: [ 2 4 11 20 26 31]  
Y\_pred: [ 4 20 23 26 31]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib h o cva htn, score: 0.7124586  
afib with hr 130s, score: 0.1030026  
afib with rvr likely, score: 0.06485887

confidence of prediction: 0.958539  
Y\_true: [ 2 4 11 20 26 31]  
Y\_pred: [ 4 20 23 26 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
and aspiration pneumonia he will be, score: 0.24220733  
to aspiration pneumonia and pulmonary edema, score: 0.15444273  
for aspiration pneumonia and was satting, score: 0.12544514

confidence of prediction: 0.879723  
Y\_true: [ 7 28 47]  
Y\_pred: [28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
esophagogastroduodenoscopy history of present illness, score:  
0.050090022  
had an egd esophagogastroduodenoscopy or [UNK] endoscopy which,  
score: 0.041458003  
egd was performed which showed, score: 0.025165608

confidence of prediction: 0.726205  
Y\_true: [ 2 20 26 35 36 48]  
Y\_pred: [ 2 21 26 35 36 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus cad s p, score: 0.15562224  
diabetes on glargine and, score: 0.09267337  
htn dm s p mvc, score: 0.07361506

confidence of prediction: 0.895481  
Y\_true: [ 2 20 26 35 36 48]  
Y\_pred: [ 2 21 26 35 36 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation patient with what, score: 0.16955836  
atrial fibrillation secondary cad s, score: 0.04943374  
atrial fibrillation with rvr for, score: 0.04653912

confidence of prediction: 0.805386  
Y\_true: [ 2 20 26 35 36 48]  
Y\_pred: [ 2 21 26 35 36 48]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure medications were, score: 0.17557248  
renal function improved with, score: 0.08004683  
approached baseline arf on cri patient with, score: 0.04034029

confidence of prediction: 0.861614  
Y\_true: [ 2 20 26 35 36 48]  
Y\_pred: [ 2 21 26 35 36 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)



htn dementia cri discharge condition hemodynamically, score:  
0.3496151  
insufficiency with baseline creatinine appearing, score: 0.12063129  
approached baseline arf on cri patient with history of, score:  
0.010478885

confidence of prediction: 0.886103  
Y\_true: [ 2 20 26 35 36 48]  
Y\_pred: [ 2 21 26 35 36 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg who initially, score: 0.24778742  
s p cabg patient without, score: 0.24778742  
s p cabg htn dementia, score: 0.24778742

confidence of prediction: 0.814731  
Y\_true: [17 35]  
Y\_pred: [17 27 35]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
a picc line the tip of, score: 0.20278212  
bilateral emboli suspected portable, score: 0.07322497  
the picc line projects over the, score: 0.04951603

confidence of prediction: 0.774585  
Y\_true: [17 35]  
Y\_pred: [17 27 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
pt and strengthening medications, score: 0.014816458  
overlap acute renal failure patient was, score: 0.0145808915  
due to renal failure revealed multiple bilateral, score:  
0.0072643696

confidence of prediction: 0.972699  
Y\_true: [20 35]  
Y\_pred: [20 35 40]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
sbo with colostomy and reversal in htn social history patient lives,  
score: 0.09381111  
correction in cr to, score: 0.009113916  
infrarenal aorta is normal, score: 0.0071633486

confidence of prediction: 0.827155  
Y\_true: [20 35]  
Y\_pred: [20 35 40]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
with pre renal azotemia and this, score: 0.14856151  
in cr to after, score: 0.022509111  
discharge acute kidney injury peak cr of at, score: 0.018882561

confidence of prediction: 0.500431

Y\_true: [ 8 17 20 27 30 33 34 37 40 42]  
Y\_pred: [20 27 29 30 33 37 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
on steroids htn as unknown valve, score: 0.12865144  
medical history htn dchf copd right hemidiaphragm, score: 0.08020618  
suggesting pulmonary hypertension aortic, score: 0.034922905

confidence of prediction: 0.972565  
Y\_true: [ 8 17 20 27 30 33 34 37 40 42]  
Y\_pred: [20 27 29 30 33 37 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf exacerbation bipap lasix 40mg, score: 0.31852937  
chf the patient did, score: 0.09425036  
diastolic heart failure compensated hypertension, score: 0.05727012

confidence of prediction: 0.902688  
Y\_true: [ 8 17 20 27 30 33 34 37 40 42]  
Y\_pred: [20 27 29 30 33 37 40 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
htn dchf copd right hemidiaphragm paralysis dermatomyositis, score:  
0.053875886  
htn dchf copd presents with sob her, score: 0.02131535  
chf exacerbation bipap lasix 40mg, score: 0.00030192884

confidence of prediction: 0.947862  
Y\_true: [ 8 17 20 27 30 33 34 37 40 42]  
Y\_pred: [20 27 29 30 33 37 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure dermatomyositis, score: 0.24065305  
to respiratory failure most, score: 0.14797938  
hypoxic hypercarbic respiratory failure respiratory failure  
initially thought, score: 0.03298868

confidence of prediction: 0.915086  
Y\_true: [ 8 17 20 27 30 33 34 37 40 42]  
Y\_pred: [20 27 29 30 33 37 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a urinary tract infection you were, score: 0.07529219  
dermatomyositis urinary tract infection avn of, score: 0.05556003  
bisphosphonate urinary tract infection positive ua, score:  
0.033537548

confidence of prediction: 0.778365  
Y\_true: [ 8 17 20 27 30 33 34 37 40 42]  
Y\_pred: [20 27 29 30 33 37 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
she was intubated for respiratory distress, score: 0.1758057  
to be reintubated dermatomyositis diffuse, score: 0.07168269

heent ett ogt in place, score: 0.018789528

confidence of prediction: 0.628049

Y\_true: [ 8 17 20 27 30 33 34 37 40 42]

Y\_pred: [20 27 29 30 33 37 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

she was intubated for respiratory distress and, score: 0.13464956

be reintubated dermatomyositis diffuse, score: 0.047716863

extubation history of present, score: 0.018852176

confidence of prediction: 0.628946

Y\_true: [ 2 11 21 23 24 27 34 35 36]

Y\_pred: [21 24 27 34 36 48]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

aicd diabetes bpv and hypertension, score: 0.024956027

was added chronic utis, score: 0.018725675

urgency ckd baseline cr renal cell carcinoma s, score: 0.01870359

confidence of prediction: 0.613340

Y\_true: [ 2 11 21 23 24 27 34 35 36]

Y\_pred: [21 24 27 34 36 48]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

s p prior cabg s, score: 0.106855

and experienced intermittent chest, score: 0.041764468

hypertension who presents with, score: 0.019687522

confidence of prediction: 0.983343

Y\_true: [ 2 11 21 23 24 27 34 35 36]

Y\_pred: [21 24 27 34 36 48]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic heart failure hypertension discharge, score: 0.48333386

chronic diastolic chf ef pt has worsening, score: 0.012131813

of her dchf she presented this admission, score: 0.0033254025

confidence of prediction: 0.864463

Y\_true: [ 2 11 21 23 24 27 34 35 36]

Y\_pred: [21 24 27 34 36 48]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

cipro bactrim gerd depression h pylori reportedly, score: 0.1595927

bpv and hypertension who, score: 0.0034680848

diaphragmatic irritation accounting for, score: 0.0028368866

confidence of prediction: 0.784675

Y\_true: [ 2 11 21 23 24 27 34 35 36]

Y\_pred: [21 24 27 34 36 48]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

aicd diabetes bpv and hypertension, score: 0.020314725  
prove social history the, score: 0.015516225  
urgency ckd baseline cr renal cell carcinoma s, score: 0.0138071235

confidence of prediction: 0.927752

Y\_true: [ 2 4 17 20 41]

Y\_pred: [ 2 4 11 17 20 40 42]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
htn type dm hld fatty liver depression, score: 0.117743246  
admission metformin mg hospital1 citalopram, score: 0.02861425  
history type diabetes mellitus hypertension hyperlipidemia benign,  
score: 0.017611742

confidence of prediction: 0.874908

Y\_true: [ 2 4 17 20 41]

Y\_pred: [ 2 4 11 17 20 40 42]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
mellitus hypertension hyperlipidemia benign prostatic hypertrophy  
depression, score: 0.08707626  
type dm hld fatty liver depression and, score: 0.057225257  
simvastatin mg discharge medications, score: 0.004955639

confidence of prediction: 0.582206

Y\_true: [ 2 4 17 20 41]

Y\_pred: [ 2 4 11 17 20 40 42]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
of picc line residual per radiology, score: 0.15276033  
d his picc line and it was, score: 0.03720558  
multiple attempts were made to, score: 0.030046528

confidence of prediction: 0.970510

Y\_true: [ 2 4 17 20 41]

Y\_pred: [ 2 4 11 17 20 40 42]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pt had hypertension bradycardia and, score: 0.45068058  
pmh of htn type dm hld fatty, score: 0.10682732  
diabetes mellitus hypertension hyperlipidemia benign prostatic  
hypertrophy, score: 0.053564884

confidence of prediction: 0.956721

Y\_true: [17 31 34]

Y\_pred: [31]

top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
an aspiration pneumonia that happens, score: 0.11071259  
developing aspiration pneumonia but the, score: 0.027194366  
alcohol withdrawal aspiration pneumonia secondary diagnoses gerd,  
score: 0.018302131

confidence of prediction: 0.556263  
Y\_true: [ 4 19 27 48]  
Y\_pred: [ 4 19 27 29 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
cabg and des to, score: 0.064956784  
month copd hl pvd htn recent admission, score: 0.06400001  
neuropathy hyperlipidemia pt was discharged, score: 0.03751257

confidence of prediction: 0.924909  
Y\_true: [ 4 19 27 48]  
Y\_pred: [ 4 19 27 29 48]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
she received dialysis this morning, score: 0.17348  
on hd started last, score: 0.116802596  
esrd on hd cad s, score: 0.08330837

confidence of prediction: 0.961013  
Y\_true: [ 4 19 27 48]  
Y\_pred: [ 4 19 27 29 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chronic diastolic chf diabetic neuropathy who, score: 0.23122048  
to lmca dchf dmii esrd on hd, score: 0.023241818  
chronic diastolic chf cva subacute stroke, score: 0.014546521

confidence of prediction: 0.877235  
Y\_true: [ 4 19 27 48]  
Y\_pred: [ 4 19 27 29 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg and des to, score: 0.4287828  
s p cabg chronic diastolic, score: 0.4287828  
p 5v cabg echo cath showed 3v disease cath, score: 0.106310084

confidence of prediction: 0.928840  
Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]  
Y\_pred: [ 1 2 7 12 20 34 40 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
htn hypothyroidism cervical spondylosis and, score: 0.45258334  
anemia hypothyroidism diabetes mellitus type, score: 0.38531247  
daily levothyroxine mcg tablet sig, score: 0.012503841

confidence of prediction: 0.792237  
Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]  
Y\_pred: [ 1 2 7 12 20 34 40 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hypothyroidism diabetes mellitus type gerd chronic low, score:  
0.03158363  
of discharge dm2 hb discussed with patient, score: 0.00890387

extension ankle dorsiflexion and, score: 0.002035327

confidence of prediction: 0.967047

Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]

Y\_pred: [ 1 2 7 12 20 34 40 42]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

extension ankle dorsiflexion and plantar, score: 0.43372852

laminectomy fusion instrumentation on recovering well occasional, score: 0.009459228

fusion with instrumentation c4, score: 0.009011025

confidence of prediction: 0.923010

Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]

Y\_pred: [ 1 2 7 12 20 34 40 42]

top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)

am bronchoalveolar lavage right bronchial lavage final report, score: 0.22071354

am bronchoalveolar lavage left bronchial lavage final report gram, score: 0.09894554

confidence of prediction: 0.971789

Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]

Y\_pred: [ 1 2 7 12 20 34 40 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

history obesity htn hypothyroidism cervical spondylosis and, score: 0.4014651

picture she developed low, score: 0.020560391

pulmonary edema hypertension delirium pneumonia anemia, score: 0.011612936

confidence of prediction: 0.809858

Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]

Y\_pred: [ 1 2 7 12 20 34 40 42]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

hypothyroidism diabetes mellitus type gerd chronic low back pain, score: 0.00562142

picture she developed low, score: 0.0032573047

she was delirious and, score: 0.0028137905

confidence of prediction: 0.893770

Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]

Y\_pred: [ 1 2 7 12 20 34 40 42]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

emergently re intubated she remained, score: 0.16550289

was subsequently reintubated for a similar, score: 0.08178639

requiring additional intubation high blood, score: 0.039730504

confidence of prediction: 0.623705

Y\_true: [ 1 2 7 12 20 27 33 34 40 41 42]

Y\_pred: [ 1 2 7 12 20 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was subsequently reintubated for a similar clinical, score:  
0.088340834  
requiring additional intubation high blood pressure, score:  
0.059340347  
emergently re intubated she remained, score: 0.044903133

confidence of prediction: 0.681488  
Y\_true: [ 2 6 7 20]  
Y\_pred: [ 6 20 24 35 40]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
a respiratory acidosis resulting in a, score: 0.06236795  
glucagon human recombinant mg, score: 0.02971525  
icu metabolic acidosis abg showed an acidemic, score: 0.018748162

confidence of prediction: 0.684106  
Y\_true: [ 2 6 7 20]  
Y\_pred: [ 6 20 24 35 40]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
dmii htn hysterectomy and bilateral oophorectomy, score: 0.085940465  
triamterene hydrochlorothiazide mwf effexor 150mg folic, score:  
0.03786479  
numeric identifier mwf pentasa, score: 0.0330714

confidence of prediction: 0.966281  
Y\_true: [ 4 24 29]  
Y\_pred: [ 4 9 20 24 29]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
cea in hypertension dyslipidemia untreated obstructive sleep apnea,  
score: 0.002651822  
pravastatin mg tablet sig, score: 0.002039715  
consumption hypertension antihypertensives were held while, score:  
0.0019892175

confidence of prediction: 0.744842  
Y\_true: [ 4 24 29]  
Y\_pred: [ 4 9 20 24 29]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
grand daughter with cold on, score: 0.086076416  
decompensated liver disease viral hepatitis, score: 0.051808715  
his cad with h o des, score: 0.02955404

confidence of prediction: 0.744049  
Y\_true: [ 4 24 29]  
Y\_pred: [ 4 9 20 24 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

and lingular pneumonia mildly nodular, score: 0.21844174  
community acquired pneumonia based on, score: 0.18689585  
possibly pneumonia underlying atelectasis, score: 0.048922304

confidence of prediction: 0.988806  
Y\_true: [10 11 22 26 27 33 35 40 42 49]  
Y\_pred: [26 27 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with rvr given, score: 0.04305497  
atrial fibrillation on coumadin who, score: 0.041153926  
atrial fibrillation on coumadin copd, score: 0.033332866

confidence of prediction: 0.944592  
Y\_true: [10 11 22 26 27 33 35 40 42 49]  
Y\_pred: [26 27 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf and copd exacerbation bronchitis, score: 0.2961675  
diastolic congestive heart failure copd exacerbation discharge,  
score: 0.11599547  
combination of chf and copd exacerbation bronchitis, score:  
0.010746385

confidence of prediction: 0.716322  
Y\_true: [10 11 22 26 27 33 35 40 42 49]  
Y\_pred: [26 27 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin mild, score: 0.30757564  
fibrillation on coumadin copd a, score: 0.30757564  
fibrillation on coumadin who, score: 0.30757564

confidence of prediction: 0.888723  
Y\_true: [ 1 4 5 35]  
Y\_pred: [ 1 4 5 21 35]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
nephropathy hypothyroidism social history retired, score: 0.34781948  
multiinfarct hypothyroidism hyperlipidemia benign, score: 0.17921177  
driving hypothyroidism tsh was, score: 0.059909075

confidence of prediction: 0.900468  
Y\_true: [ 1 4 5 35]  
Y\_pred: [ 1 4 5 21 35]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia continued home statin full, score: 0.1884425  
complications hypertension hyperlipidemia ckd, score: 0.050630976  
multiinfarct hypothyroidism hyperlipidemia benign hypertension  
discharge condition, score: 0.026110442

confidence of prediction: 0.931917  
Y\_true: [ 1 4 5 35]



Y\_pred: [ 1 4 5 21 35]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
discharge diagnosis hyponatremia acute renal failure ckd, score:  
0.29465735  
the hospital1 hyponatremia the patient presented with, score:  
0.20215431  
has had hyponatremia previously with, score: 0.12199443

confidence of prediction: 0.887364  
Y\_true: [ 1 4 5 35]  
Y\_pred: [ 1 4 5 21 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
partially pre renal in the setting, score: 0.121221356  
acute renal failure ckd stage, score: 0.083745845  
demented with inability to, score: 0.038949974

confidence of prediction: 0.790166  
Y\_true: [ 3 8 21 26 29]  
Y\_pred: [21 26 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
anemia chronic kidney disease discharge condition mr, score:  
0.1372372  
at home ckd and htn being transferred, score: 0.009099131  
asbestosis hypertension colonic polyps hearing, score: 0.005967709

confidence of prediction: 0.895367  
Y\_true: [ 3 8 21 26 29]  
Y\_pred: [21 26 36]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation after an urgent, score: 0.2898  
fib and heparin he, score: 0.18166861  
fib found to be, score: 0.13290685

confidence of prediction: 0.974901  
Y\_true: [18 20 26 38 39 49]  
Y\_pred: [18 20 49]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies no known, score: 0.025751406  
tee was performed in, score: 0.00976936  
washing incisions gently with mild soap, score: 0.0095164385

confidence of prediction: 0.980111  
Y\_true: [18 20 26 38 39 49]  
Y\_pred: [18 20 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
borderline hypertension chronic back pain djd, score: 0.07930864  
social history race caucasian, score: 0.010148723

[UNK] bilateral elbows anxiety, score: 0.0077526425

confidence of prediction: 0.598620

Y\_true: [18 20 26 38 39 49]

Y\_pred: [18 20 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

resumed with coumadin for, score: 0.28642946

thrombosis on coumadin for, score: 0.10446888

started on warfarin and, score: 0.065730855

confidence of prediction: 0.819809

Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]

Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

diabetes hypertension myocardial infarction cardiac, score:

0.040816024

admission metformin mg hospital1 albuterol inhaler, score:

0.039503083

with dm htn le claudication presenting, score: 0.038227532

confidence of prediction: 0.993674

Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]

Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary bypass grafting x5 with the, score: 0.6218326

coronary artery bypass grafting, score: 0.054618895

artery and reverse saphenous vein graft, score: 0.014773607

confidence of prediction: 0.981036

Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]

Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed and weaned from, score: 0.10584805

grafting to five vessels, score: 0.040980283

grafting x5 with the, score: 0.034479972

confidence of prediction: 0.798607

Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]

Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

possible nstemi cardiac review of, score: 0.12025029

diagnosis nstemi acute heart failure discharge, score: 0.06606063

pump on impression severe, score: 0.026689433

confidence of prediction: 0.998262

Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]

Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
coronary bypass grafting x5, score: 0.11902361  
vessel ulcerated stenosis before om2, score: 0.10859959  
mid vessel lesion the lad, score: 0.100894205

confidence of prediction: 0.666432  
Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]  
Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
edema and benadryl solumedrol, score: 0.21522918  
nSTEMI acute heart failure discharge condition alert, score:  
0.039072424  
pump on impression severe, score: 0.021806695

confidence of prediction: 0.949091  
Y\_true: [ 2 8 9 13 18 20 22 24 25 27 38 43 47]  
Y\_pred: [ 2 6 13 14 15 18 22 24 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
catheterization selective coronary angiography in, score:  
0.031876035  
IABP was weaned and, score: 0.020492405  
ulcerated mid vessel lesion the lad, score: 0.019692153

confidence of prediction: 0.786623  
Y\_true: [21 36]  
Y\_pred: [21 30 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
OSA chronic kidney disease with baseline CR bladder CA diagnosed,  
score: 0.014004266  
day chronic kidney disease his creatinine had, score: 0.0069096973

confidence of prediction: 0.663026  
Y\_true: [21 36]  
Y\_pred: [21 30 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease his creatinine had, score: 0.06521239  
OSA chronic kidney disease with baseline CR bladder CA diagnosed,  
score: 0.01682626

confidence of prediction: 0.853896  
Y\_true: [29]  
Y\_pred: [10 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia altered mental, score: 0.11752834  
and RML PNA CT, score: 0.077402584  
consistent with pneumonia patient, score: 0.066206165

confidence of prediction: 0.712317

Y\_true: [ 9 11 41]

Y\_pred: [9]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

alcohol again thrombocytopenia he had thrombocytopenia on admission  
felt to, score: 0.35182524

lateral costophrenic sulcus from the, score: 0.009837203

improved a dobhoff was, score: 0.004018449

confidence of prediction: 0.980857

Y\_true: [ 6 9 20 28 34]

Y\_pred: [20 28 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

inactive issues htn home nadolol was, score: 0.72988725

approximately cups worth of emesis she, score: 0.01139816

withdrawal counseled patient on, score: 0.010079294

confidence of prediction: 0.694338

Y\_true: [ 6 9 20 28 34]

Y\_pred: [20 28 34]

top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)

history of present illness, score: 0.3577096

in the antrum compatible, score: 0.11104782

egd was performed on and, score: 0.036576867

confidence of prediction: 0.827760

Y\_true: [ 6 9 20 28 34]

Y\_pred: [20 28 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

transfusions gerd hypertension social history she, score: 0.0925265

stable gerd pt was maintained on, score: 0.05422076

underneath the clot could, score: 0.04873905

confidence of prediction: 0.992622

Y\_true: [ 5 8 17 18 20 26 27 39 49]

Y\_pred: [ 5 18 20 26 27 49]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

morphine mild hyponatremia likely hypervolemic hyponatremia from  
chf, score: 0.11285306

ra pressure pcw on, score: 0.001263421

drips pod found the, score: 0.00085141516

confidence of prediction: 0.984016

Y\_true: [ 5 8 17 18 20 26 27 39 49]

Y\_pred: [ 5 18 20 26 27 49]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.73176634

diuresed toward the preoperative, score: 0.020646805

tee which was negative, score: 0.010729058

confidence of prediction: 0.942875  
Y\_true: [ 5 8 17 18 20 26 27 39 49]  
Y\_pred: [ 5 18 20 26 27 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
p ppm hypertension aortic root dilation, score: 0.18026707  
htn prior aaa s p, score: 0.069613375  
d 1000u daily kcl, score: 0.065056324

confidence of prediction: 0.974068  
Y\_true: [ 5 8 17 18 20 26 27 39 49]  
Y\_pred: [ 5 18 20 26 27 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
af on coumadin ppm, score: 0.514539  
afib md to dose, score: 0.10901608  
afib and is s, score: 0.08502084

confidence of prediction: 0.847942  
Y\_true: [ 5 8 17 18 20 26 27 39 49]  
Y\_pred: [ 5 18 20 26 27 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cardiac tachycardic irregular rhythm, score: 0.030150844  
hyponatremia from chf or, score: 0.014894986  
with iv lasix boluses, score: 0.014145952

confidence of prediction: 0.799584  
Y\_true: [ 5 8 17 18 20 26 27 39 49]  
Y\_pred: [ 5 18 20 26 27 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
af on coumadin ppm for sinus, score: 0.87000144  
mg hospital1 coumadin mg, score: 0.047120545  
amiodarone and coumadin were, score: 0.022119472

confidence of prediction: 0.516163  
Y\_true: [ 1 4 30]  
Y\_pred: [ 4 39]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
surgery in hyperlipidemia bleeding peptic ulcer in, score:  
0.54709536  
lobectomy metastatic adenocarcinoma morphologically, score:  
0.0077999756  
pyridostigmine bromide mg p, score: 0.0061001326

confidence of prediction: 0.888960  
Y\_true: [13 18 20 24 26]  
Y\_pred: [ 4 10 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending saphenous vein graft ramus saphenous vein graft, score:

0.18849209

coronary artery bypass graft surgery see, score: 0.10779625

diagonal saphenous vein graft, score: 0.07516676

confidence of prediction: 0.977047

Y\_true: [13 18 20 24 26]

Y\_pred: [ 4 10 13 18 20 24 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies patient recorded, score: 0.014508113

washing incisions gently with mild soap, score: 0.009555833

graft surgery x4 left, score: 0.00874479

confidence of prediction: 0.942044

Y\_true: [13 18 20 24 26]

Y\_pred: [ 4 10 13 18 20 24 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hyperlipidemia prostate adenocarcinoma

t1c, score: 0.24388625

urinary catheter attached to, score: 0.104862615

pacing remaing wall motion, score: 0.09858654

confidence of prediction: 0.959333

Y\_true: [13 18 20 24 26]

Y\_pred: [ 4 10 13 18 20 24 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease s p cabg post, score: 0.3430737

s p coronary artery bypass graft surgery x4 left, score: 0.14310403

descending saphenous vein graft, score: 0.068650536

confidence of prediction: 0.913153

Y\_true: [13 18 20 24 26]

Y\_pred: [ 4 10 13 18 20 24 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation post operative urinary, score: 0.51732266

atrial fibrillation with results to, score: 0.041134313

atrial fibrillation with rate controlled, score: 0.030671187

confidence of prediction: 0.826133

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

hypertension and dyslipidemia he was referred, score: 0.08010439

atrial fibrillation dyslipidemia hypertension prostate cancer s,  
score: 0.0637243

fibrillation hypertension dyslipidemia s p radiation, score:  
0.037160065

confidence of prediction: 0.984835

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft x lima lad svg dg svg, score: 0.5773154

coronary artery bypass graft x and, score: 0.088320404

coronary artery bypass graft x mitral, score: 0.014113218

confidence of prediction: 0.978623

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies no known, score: 0.013995761

pacing wires were removed per, score: 0.008167221

washing incisions gently with mild soap, score: 0.0051721367

confidence of prediction: 0.992771

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

timolol combigan prescribed by, score: 0.23951127

atrial fibrillation hypertension dyslipidemia s p radiation, score: 0.18803453

fibrillation dyslipidemia hypertension prostate cancer, score: 0.09630975

confidence of prediction: 0.999160

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass graft, score: 0.6529786

coronary artery disease s p coronary artery bypass graft, score: 0.13823979

coronary artery bypass graft, score: 0.027887838

confidence of prediction: 0.741794

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

mitral valve regurgitation s p, score: 0.26457667

mitral valve repair 28mm, score: 0.18840402

mitral valve repair please, score: 0.060740847

confidence of prediction: 0.950044

Y\_true: [ 4 8 9 13 18 20 23 24 25 26 49]

Y\_pred: [ 4 13 18 20 24 25 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation hypertension dyslipidemia s, score: 0.3942619

atrial fibrillation dyslipidemia hypertension prostate, score: 0.09760951

atrial fibrillation and cardiac risk, score: 0.021561636

confidence of prediction: 0.902947

Y\_true: [10 20 33 37 40 42]

Y\_pred: [ 9 33 40 42]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

acute respiratory failure resolved pt, score: 0.17731535

intubated seizure major surgical, score: 0.08279203

that required intubation for airway protection, score: 0.042757165

confidence of prediction: 0.865153

Y\_true: [10 20 33 37 40 42]

Y\_pred: [ 9 33 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

patient intubated and sedated, score: 0.41122538

that required intubation active, score: 0.108425274

pt required intubated given altered, score: 0.056814816

confidence of prediction: 0.814080

Y\_true: [10 20 33 37 40 42]

Y\_pred: [ 9 33 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

patient intubated and sedated, score: 0.30229008

that required intubation active issues, score: 0.12521447

after intubation was on, score: 0.09087645

confidence of prediction: 0.848752

Y\_true: [2]

Y\_pred: [2]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

admission micronase glucophage discharge medications docusate, score: 0.024240615

of diabetes medications as previously, score: 0.01885685

metformin mg tablet sig, score: 0.013687561

confidence of prediction: 0.881357

Y\_true: [1]

Y\_pred: [ 1 6 9 17]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

diagnoses hypothyroidism stable she, score: 0.52429384

history hypothyroidism acne alopecia, score: 0.14218368

home levothyroxine alopecia stable and, score: 0.046035044

confidence of prediction: 0.774662

Y\_true: [ 4 11 13 17 18 24 30 35 37]

Y\_pred: [ 4 13 18 23 24 35 37]

top three important windows for true positive code 4 (272.4: Other



and unspecified hyperlipidemia)  
with hyperlipidemia s p nstemi after, score: 0.033859372  
lipoma on pathology he, score: 0.0154235875  
wall suspected lipoma aicd history, score: 0.01377756

confidence of prediction: 0.974358  
Y\_true: [ 4 11 13 17 18 24 30 35 37]  
Y\_pred: [ 4 13 18 23 24 35 37]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
wires were discontinued without, score: 0.027211906  
mammary artery to left, score: 0.020023579  
coronary artery bypass graft x acute, score: 0.016702237

confidence of prediction: 0.985493  
Y\_true: [ 4 11 13 17 18 24 30 35 37]  
Y\_pred: [ 4 13 18 23 24 35 37]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7393636  
cardiothoracic allergies avelox attending, score: 0.011154957  
bypass graft x4 left, score: 0.0036634973

confidence of prediction: 0.999638  
Y\_true: [ 4 11 13 17 18 24 30 35 37]  
Y\_pred: [ 4 13 18 23 24 35 37]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease with, score: 0.085766055  
urgent coronary artery bypass graft, score: 0.041969534  
coronary artery disease st, score: 0.035201706

confidence of prediction: 0.612742  
Y\_true: [ 4 11 13 17 18 24 30 35 37]  
Y\_pred: [ 4 13 18 23 24 35 37]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
x acute renal failure past medical, score: 0.01915618  
of yellow white somewhat, score: 0.014248363  
to be lipoma on, score: 0.010064428

confidence of prediction: 0.871240  
Y\_true: [ 4 11 13 17 18 24 30 35 37]  
Y\_pred: [ 4 13 18 23 24 35 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
op klebsiella uti sleep medicine was, score: 0.028974269  
and made recommendations he had a, score: 0.0137740625  
age sex pathology hospital1, score: 0.009365259

confidence of prediction: 0.851439  
Y\_true: [ 0 2 12 15 16 17 19 26 27 29 33 35 36 38 40 41 42 43 46]  
Y\_pred: [ 7 17 26 33 40 43 44]  
top three important windows for true positive code 17 (38.93: Venous

catheterization, not elsewhere classified)  
cnetral line and picc were placed extubated on, score: 0.16383387  
zosyn fluc was started the, score: 0.06644669  
gallops abdomen morbidly obese, score: 0.037670508

confidence of prediction: 0.887959  
Y\_true: [ 0 2 12 15 16 17 19 26 27 29 33 35 36 38 40 41 42 43 46]  
Y\_pred: [ 7 17 26 33 40 43 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib prior to hospitalization, score: 0.27209756  
atrial fibrillation with rapid ventricular, score: 0.21478355  
afib with rvr after tips, score: 0.14239262

confidence of prediction: 0.854270  
Y\_true: [ 0 2 12 15 16 17 19 26 27 29 33 35 36 38 40 41 42 43 46]  
Y\_pred: [ 7 17 26 33 40 43 44]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
requiring repeated paracentesis insulin dependent diabetes, score:  
0.15302014  
by repeated paracentesis electively admitted for, score: 0.074350156  
patient was intubated and started on, score: 0.03405351

confidence of prediction: 0.841651  
Y\_true: [ 0 2 12 15 16 17 19 26 27 29 33 35 36 38 40 41 42 43 46]  
Y\_pred: [ 7 17 26 33 40 43 44]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was intubated for concern, score: 0.18904687  
patient was intubated and started on, score: 0.056400526  
repeated paracentesis electively admitted for, score: 0.05430885

confidence of prediction: 0.698081  
Y\_true: [ 0 2 12 15 16 17 19 26 27 29 33 35 36 38 40 41 42 43 46]  
Y\_pred: [ 7 17 26 33 40 43 44]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
and respiratory support after discussion between, score: 0.15332672  
ventilator support was discontinued, score: 0.053996015  
was intubated for concern, score: 0.045137692

confidence of prediction: 0.918353  
Y\_true: [11 34 39]  
Y\_pred: [18 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
recurrence depression gerd social history lives with, score:  
0.04058792  
recurrence depression gerd discharge condition alert, score:  
0.04058792  
of the ventricle there, score: 0.003888308

confidence of prediction: 0.945360  
Y\_true: [ 8 21 23 24 36]  
Y\_pred: [20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
htn cad aspirin once, score: 0.016646678  
htn cad s p stent in, score: 0.0113172345  
showed a gradual increase to, score: 0.008971048

confidence of prediction: 0.967257  
Y\_true: [ 2 8 10 20 31]  
Y\_pred: [ 2 4 20 31]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily metformin 1000mg hospital1 discharge medications lisinopril,  
score: 0.08387623  
glyburide mg tablet sig, score: 0.02009034  
history cholelithiasis dmii htn h o billroth, score: 0.019991834

confidence of prediction: 0.909387  
Y\_true: [ 2 8 10 20 31]  
Y\_pred: [ 2 4 20 31]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
metformin 1000mg hospital1 discharge medications, score: 0.0470694  
history cholelithiasis dmii htn h o billroth, score: 0.029070001  
broad spectrum atbx with, score: 0.024697425

confidence of prediction: 0.876273  
Y\_true: [ 2 8 10 20 31]  
Y\_pred: [ 2 4 20 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
possible aspiration pna he was started, score: 0.3873305  
until you follow up, score: 0.008416959  
eomi perrl dry mm, score: 0.0049238405

confidence of prediction: 0.855429  
Y\_true: [ 2 4 20]  
Y\_pred: [ 2 4 20]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus type hyperlipidemia nsvt, score: 0.09968248  
hospital1 metformin 200mg daily terazosin, score: 0.050901897  
metformin oral glipizide mg tablet, score: 0.046714187

confidence of prediction: 0.785777  
Y\_true: [ 2 4 20]  
Y\_pred: [ 2 4 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
mellitus type hyperlipidemia nsvt status post unsuccessful, score:

0.11324082

150mg daily hctz 25mg, score: 0.010644086

hydrochlorothiazide mg tablet sig, score: 0.009473883

confidence of prediction: 0.889946

Y\_true: [ 2 4 20]

Y\_pred: [ 2 4 20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

diabetes mellitus hypertension who presented with, score: 0.22041297

htn the patient was, score: 0.07835071

medical history hypertension diabetes mellitus type hyperlipidemia,  
score: 0.065375656

confidence of prediction: 0.705954

Y\_true: [28 35]

Y\_pred: [ 4 28 34]

top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)

history of present illness, score: 0.6119748

otherwise normal egd to, score: 0.10494903

history of endoscopy but, score: 0.05056047

confidence of prediction: 0.946029

Y\_true: [ 2 10 20 23 24 35]

Y\_pred: [ 4 20 23 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

htn and dm who presents, score: 0.26913646

of cad htn hyperlipidemia and bradycardia p, score: 0.086096026

was discontinued htn atenolol was held on, score: 0.033016194

confidence of prediction: 0.685245

Y\_true: [ 2 10 20 23 24 35]

Y\_pred: [ 4 20 23 24]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)

s p mi approximately years ago htn, score: 0.86178106

hypertension prior mi cardiac history cabg negative, score:  
0.040634446

a prior mi while in country years, score: 0.02776087

confidence of prediction: 0.775777

Y\_true: [ 2 10 20 23 24 35]

Y\_pred: [ 4 20 23 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease diabetes, score: 0.18471648

cardiac history cabg negative, score: 0.041393865

of cad htn hyperlipidemia and bradycardia, score: 0.03700755

confidence of prediction: 0.900479

Y\_true: [ 1 15 20 34 38]

Y\_pred: [ 1 15 27 34 38]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
continued levothyroxine 112mcg daily osteopenia continued, score:  
0.42531803  
daily levothyroxine mcg tablet sig one, score: 0.0214577  
lbbb hypothyroidism pneumonia as a child, score: 0.019244645

confidence of prediction: 0.516635  
Y\_true: [ 1 15 20 34 38]  
Y\_pred: [ 1 15 27 34 38]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization temporary transvenous, score: 0.5270973  
selective coronary angiography of this, score: 0.073572464  
heart catheterization she initially, score: 0.06842297

confidence of prediction: 0.609965  
Y\_true: [ 1 15 20 34 38]  
Y\_pred: [ 1 15 27 34 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
expansion gerd bladder cancer s p, score: 0.06740125  
continued to improve until, score: 0.01701517  
drug abuse retired public health nurse, score: 0.01271527

confidence of prediction: 0.778682  
Y\_true: [ 1 15 20 34 38]  
Y\_pred: [ 1 15 27 34 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
selective coronary angiography of this, score: 0.26319382  
cardiac catheterization temporary transvenous, score: 0.20532301  
heart catheterization she initially, score: 0.07636781

confidence of prediction: 0.915639  
Y\_true: [ 4 18 20 26 27]  
Y\_pred: [ 4 18 20 26 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stenosis hypertension hyperlipidemia heart failure, score:  
0.12894472  
nourished elderly gentleman in no, score: 0.017142227  
10mg daily zocor 40mg daily lasix, score: 0.0059628207

confidence of prediction: 0.960919  
Y\_true: [ 4 18 20 26 27]  
Y\_pred: [ 4 18 20 26 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
amiodarone was discontinued he, score: 0.018423283  
cardiothoracic allergies patient recorded, score: 0.014780566  
amiodarone but remained in, score: 0.011746955

confidence of prediction: 0.978822

Y\_true: [ 4 18 20 26 27]  
Y\_pred: [ 4 18 20 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
zocor 40mg daily lasix, score: 0.10207084  
aortic stenosis hypertension hyperlipidemia heart failure arthritis  
sleep apnea, score: 0.0947612  
machine vivid echocardiographic measurements, score: 0.07468926

confidence of prediction: 0.923963  
Y\_true: [ 4 18 20 26 27]  
Y\_pred: [ 4 18 20 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation he was discharged, score: 0.1376802  
atrial fibrillation he was started, score: 0.12953633  
atrial fibrillation with rate not, score: 0.07444277

confidence of prediction: 0.986078  
Y\_true: [ 4 18 20 26 27]  
Y\_pred: [ 4 18 20 26 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
heart failure arthritis sleep apnea, score: 0.00644224  
chronic diastolic heart failure hypertension hyperlipidemia, score:  
0.003127291  
25mm st male first, score: 0.00297132

confidence of prediction: 0.950110  
Y\_true: [26 27 36]  
Y\_pred: [26 27 35]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
af s p av, score: 0.15170628  
af s p av, score: 0.1271703  
amiodarone load admitted for, score: 0.009200055

confidence of prediction: 0.922542  
Y\_true: [26 27 36]  
Y\_pred: [26 27 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
ef s p biv, score: 0.12233945  
systolic heart failure with lvef of, score: 0.06086945  
failure tte on this, score: 0.05039615

confidence of prediction: 0.668192  
Y\_true: [ 4 14 20 22 24 25 30 34 38]  
Y\_pred: [20 22 24 25 27 30 34 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension chronic obstructive pulmonary disease, score:  
0.22825389  
continued flovent osteoporosis started, score: 0.16829076

history of htn carotid disease status post, score: 0.1501642

confidence of prediction: 0.747482

Y\_true: [ 4 14 20 22 24 25 30 34 38]

Y\_pred: [20 22 24 25 27 30 34 38]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

for nstemi mi with elevated troponin, score: 0.11868356

an nstemi and is status, score: 0.057285372

non st elevation myocardial infarction mitral regurgitation, score:

0.011425262

confidence of prediction: 0.990215

Y\_true: [ 4 14 20 22 24 25 30 34 38]

Y\_pred: [20 22 24 25 27 30 34 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

bare metal stent via right, score: 0.1887023

bare metal stent to the, score: 0.10335798

bare metal stent to your, score: 0.10335798

confidence of prediction: 0.626854

Y\_true: [ 4 14 20 22 24 25 30 34 38]

Y\_pred: [20 22 24 25 27 30 34 38]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

mitral valve that could, score: 0.037238773

infarction mitral regurgitation hypertension chronic obstructive, score: 0.034955207

mitral regurgitation most likely, score: 0.025306152

confidence of prediction: 0.671832

Y\_true: [ 4 14 20 22 24 25 30 34 38]

Y\_pred: [20 22 24 25 27 30 34 38]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

clopidogrel interaction copd continued flovent osteoporosis started, score: 0.14716265

records brief hospital course, score: 0.103981204

surgery osteoporosis copd anxiety social history patient, score: 0.10119512

confidence of prediction: 0.845345

Y\_true: [ 4 14 20 22 24 25 30 34 38]

Y\_pred: [20 22 24 25 27 30 34 38]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

than hours gerd switched to ranitidine daily, score: 0.032561116

cea in gerd s p eye surgery, score: 0.022558229

diminished clinical correlation is, score: 0.012710101

confidence of prediction: 0.846921

Y\_true: [ 4 14 20 22 24 25 30 34 38]

Y\_pred: [20 22 24 25 27 30 34 38]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with bare metal stent, score: 0.76814324  
cardiac catheterization of note patient, score: 0.05022857  
catheterization demonstrated rca proximal, score: 0.021810755

confidence of prediction: 0.792537  
Y\_true: [ 4 20 24 26 27 49]  
Y\_pred: [ 4 17 18 22 24 26 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
on exertion dyslipidemia hypertension coronary artery disease,  
score: 0.021883015  
carvedilol mg tablet last, score: 0.021513125  
warfarin mg tablet last, score: 0.011358777

confidence of prediction: 0.918077  
Y\_true: [ 4 20 24 26 27 49]  
Y\_pred: [ 4 17 18 22 24 26 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease p a, score: 0.02231565  
coronary artery disease p, score: 0.02231565  
bare metal stent on she, score: 0.021750407

confidence of prediction: 0.988674  
Y\_true: [ 4 20 24 26 27 49]  
Y\_pred: [ 4 17 18 22 24 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib no malignant arrhythmias, score: 0.10543267  
fib s p pci, score: 0.08632098  
fib insulin ss per, score: 0.031230818

confidence of prediction: 0.984742  
Y\_true: [ 4 20 24 26 27 49]  
Y\_pred: [ 4 17 18 22 24 26 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure and, score: 0.14426157  
lad systolic chf with lvef and paroxysmal, score: 0.036042374  
chf dyspnea on exertion, score: 0.021859867

confidence of prediction: 0.931049  
Y\_true: [26 32 47 49]  
Y\_pred: [ 7 20 26 27 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation dementia orthostatic hypotension, score:  
0.11567607  
atrial fibrillation s p cardioversion, score: 0.07344878  
fibrillation with a rate, score: 0.055602696

confidence of prediction: 0.765491



Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
incontinence dm hyperlipidemia obesity social history lives, score:  
0.22210814  
his creatinine settled out, score: 0.012690904  
daily atorvastatin mg tablet sig, score: 0.0056600557

confidence of prediction: 0.839333  
Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line and a line, score: 0.07400364  
lithium levels accumulated and resulted in, score: 0.073762834  
has anticholinergic properties haldol, score: 0.04354078

confidence of prediction: 0.997785  
Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
emergent dialysis begun because, score: 0.024886562  
line emergent hemodialysis history of, score: 0.021678496  
emergency dialysis to remove, score: 0.0108454265

confidence of prediction: 0.876482  
Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
became pre renal in the, score: 0.20483093  
multiple dialysis courses were required, score: 0.05413957  
renal failure improved but, score: 0.0483862

confidence of prediction: 0.857331  
Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he required intubation for airway protection, score: 0.2748894  
requiring intubation for airway protection, score: 0.06888429  
to be intubated due to, score: 0.016878922

confidence of prediction: 0.680838  
Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
a ventilator associated pneumonia you were, score: 0.28008908  
he required intubation for airway, score: 0.11760856  
an ileus so he, score: 0.025536131

confidence of prediction: 0.510838  
Y\_true: [ 2 4 16 17 19 20 35 40 41 42]  
Y\_pred: [ 4 17 19 33 35 40 41 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he required intubation for airway protection, score: 0.30982706  
a ventilator associated pneumonia you, score: 0.19192648  
be intubated due to, score: 0.083018266

confidence of prediction: 0.931074  
Y\_true: [ 7 16 17 20 40 41 42]  
Y\_pred: [20 31 33 41 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
with h l htn prostate ca early, score: 0.24095732  
history pmh hypertension parkinson s disease dementia, score:  
0.06334338  
the news badly he, score: 0.061538246

confidence of prediction: 0.829532  
Y\_true: [ 7 16 17 20 40 41 42]  
Y\_pred: [20 31 33 41 42]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
a dobhoff feeding tube was placed and, score: 0.048675925  
keep him calm his chest, score: 0.030292243  
sig ten mls po, score: 0.011793496

confidence of prediction: 0.726547  
Y\_true: [ 7 16 17 20 40 41 42]  
Y\_pred: [20 31 33 41 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
eventually required intubation and sedation to, score: 0.0743764  
gen intubated and sedated, score: 0.038065497  
sedated language intubated and sedated cranial nerves, score:  
0.031228175

confidence of prediction: 0.831054  
Y\_true: [11 34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
infection gerd hx esophageal ulcer age, score: 0.03516345  
virus vca igg ab final, score: 0.020300787  
virus ebna igg ab, score: 0.01885131

confidence of prediction: 0.874899  
Y\_true: [21 26 34 36]  
Y\_pred: [21 23 26 34 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic

kidney disease stage I through stage IV, or unspecified)  
chronic renal insufficiency s p, score: 0.059071932  
cv irreg irreg normal, score: 0.03250202  
has chronic renal insufficiency month only, score: 0.01972906

confidence of prediction: 0.959741  
Y\_true: [21 26 34 36]  
Y\_pred: [21 23 26 34 36]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib do consider conversion, score: 0.20775437  
atrial fibrillation discharge condition, score: 0.18533137  
afib given h o, score: 0.07714209

confidence of prediction: 0.955420  
Y\_true: [21 26 34 36]  
Y\_pred: [21 23 26 34 36]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
an outpatient gerd continued omeprazole communication son, score:  
0.0054434594  
pause as a possible, score: 0.00088349613  
cr renally dosed medications and, score: 0.00087802514

confidence of prediction: 0.875130  
Y\_true: [21 26 34 36]  
Y\_pred: [21 23 26 34 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal insufficiency s p, score: 0.08629546  
cv irreg irreg normal, score: 0.025126154  
chronic kidney failure baseline cr based, score: 0.014738744

confidence of prediction: 0.725002  
Y\_true: [ 3 6 20 33 35 40 42 49]  
Y\_pred: [ 3 20 33 35]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
detailed hx hypertension hypercholesterolemia pvd s p fem, score:  
0.012453816  
melanoma secondary hypertension peripheral, score: 0.004623887  
filter placed on he, score: 0.0027488836

confidence of prediction: 0.644653  
Y\_true: [ 3 6 20 33 35 40 42 49]  
Y\_pred: [ 3 20 33 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
melanoma secondary hypertension peripheral vascular disease, score:  
0.19453157  
detailed hx hypertension hypercholesterolemia pvd s p, score:  
0.09716103  
placement who developed b, score: 0.090670615

confidence of prediction: 0.882838  
Y\_true: [ 3 6 20 33 35 40 42 49]  
Y\_pred: [ 3 20 33 35]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxic respiratory failure hypoxic respiratory failure acute onset, score: 0.20919332  
hypoxic respiratory failure and tachycardia, score: 0.13529293  
acute ich in the setting, score: 0.04359824

confidence of prediction: 0.670478  
Y\_true: [ 3 6 20 33 35 40 42 49]  
Y\_pred: [ 3 20 33 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
[UNK] acute renal failure we are, score: 0.016765434  
at approximately 2am he had an, score: 0.004384901  
respiratory infection recently with, score: 0.004141228

confidence of prediction: 0.697440  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
day levothyroxine mcg tablet sig two, score: 0.08510857  
commensal respiratory flora bal, score: 0.00657939  
history hld hypothyroid since iodine treatment remote, score: 0.005928751

confidence of prediction: 0.607591  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
medical history hld hypothyroid since iodine treatment, score: 0.42201877  
simvastatin mg tablet sig, score: 0.014354525  
prn [UNK] simvastatin ibuprofen prn discharge medications, score: 0.011371962

confidence of prediction: 0.817195  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
temporoparietal sah cxr interval, score: 0.028054923  
ucx ngtd bal ngtd cxr multiple r, score: 0.02021913  
growth bal r commensal respiratory flora bal l commensal respiratory flora, score: 0.019586893

confidence of prediction: 0.910635  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 17 (38.93: Venous

catheterization, not elsewhere classified)  
a picc catheter was placed for, score: 0.12619744  
line flush picc heparin, score: 0.047383565  
per lumen nafcillin g, score: 0.043180395

confidence of prediction: 0.800845  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
casts in spite of multiple, score: 0.06910582  
his highest cr was on he, score: 0.053906858  
net positive recently obstruction, score: 0.037725933

confidence of prediction: 0.767098  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
ucx ngtd bal ngtd cxr multiple, score: 0.16562253  
cxr interval development of, score: 0.16149317  
cx gs 25pmns oropharyngeal, score: 0.041688744

confidence of prediction: 0.889888  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
ucx ngtd bal ngtd cxr, score: 0.19621277  
required re intubation he remained, score: 0.12497021  
and scapular fractures were, score: 0.05184915

confidence of prediction: 0.616674  
Y\_true: [ 1 4 12 17 20 32 33 35 40 43]  
Y\_pred: [ 1 4 12 17 20 33 40 41 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
temporoparietal sah cxr interval, score: 0.059494685  
sputum cx gs 25pmns oropharyngeal, score: 0.052323412  
r commensal respiratory flora bal l commensal respiratory flora,  
score: 0.045891806

confidence of prediction: 0.597132  
Y\_true: [ 4 8 13 18 20 24]  
Y\_pred: [ 4 7 13 18 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia bicuspid aortic valve, score:  
0.25596663  
with [UNK] xenograft history of present, score: 0.034551986  
with [UNK] xenograft his bypass time was, score: 0.034551986

confidence of prediction: 0.939821

Y\_true: [ 4 8 13 18 20 24]

Y\_pred: [ 4 7 13 18 20 24]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

descending coronary reverse saphenous vein graft, score: 0.15540513

coronary artery bypass grafting x2, score: 0.0440821

a reverse saphenous vein single, score: 0.038092162

confidence of prediction: 0.975669

Y\_true: [ 4 8 13 18 20 24]

Y\_pred: [ 4 7 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed toward the preoperative, score: 0.07970522

cardiothoracic allergies no known, score: 0.022842377

grafting x2 with left, score: 0.011881974

confidence of prediction: 0.961565

Y\_true: [ 4 8 13 18 20 24]

Y\_pred: [ 4 7 13 18 20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension hyperlipidemia bicuspid aortic valve, score: 0.3110445

at and htn physical, score: 0.16709259

with [UNK] xenograft history of, score: 0.05605702

confidence of prediction: 0.991628

Y\_true: [ 4 8 13 18 20 24]

Y\_pred: [ 4 7 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

descending coronary reverse saphenous vein, score: 0.37082583

vessel coronary disease discharge condition, score: 0.058637533

coronary artery bypass grafting, score: 0.05595825

confidence of prediction: 0.823778

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

history hypertension dm hyperlipidemia gerd social history, score: 0.028284952

on admission glyburide simvastatin omeprazole metformin discharge medications bisacodyl, score: 0.016914863

confidence of prediction: 0.721762

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

hypertension dm hyperlipidemia gerd social history lives, score: 0.16208997

diabetes m hyperlipidemia gerd discharge condition mental, score: 0.1350715

glyburide simvastatin omeprazole metformin, score: 0.023771431

confidence of prediction: 0.947761

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

hypertension diabetes m hyperlipidemia gerd, score: 0.42521313

ruptured aaa major surgical, score: 0.08504587

medical history hypertension dm hyperlipidemia gerd social, score: 0.07210347

confidence of prediction: 0.973655

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib rate controlled tube, score: 0.57798105

afib on telemetry lungs cta, score: 0.22333513

afib with a goal, score: 0.10612926

confidence of prediction: 0.941159

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

dm hyperlipidemia gerd social history lives with, score: 0.020835752

metformin discharge medications bisacodyl, score: 0.017176205

m hyperlipidemia gerd discharge condition mental, score: 0.008834149

confidence of prediction: 0.589365

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)

tee was done which showed, score: 0.63132876

vegetation is seen on, score: 0.04396116

descending thoracic aorta the, score: 0.031556204

confidence of prediction: 0.713002

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

neo and intubated and requiring, score: 0.075295284

tube with incomplete visualization, score: 0.056476768

and intubated for several, score: 0.021871738

confidence of prediction: 0.501833

Y\_true: [ 2 4 7 9 20 26 34 39 40 41 43]

Y\_pred: [ 2 4 20 26 34 39 40 43]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
sputum source endotracheal final report, score: 0.13084924  
support while intubated on continued, score: 0.10093179  
induced pneumonia oob to, score: 0.03885745

confidence of prediction: 0.912161  
Y\_true: [ 2 21 23 27 36 48]  
Y\_pred: [26 27 48]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chf who presents with, score: 0.14941354  
numeric identifier 56am calcium, score: 0.10592491  
heart failure diastolic and systolic acute, score: 0.1005969

confidence of prediction: 0.917724  
Y\_true: [ 2 21 23 27 36 48]  
Y\_pred: [26 27 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg and, score: 0.27081552  
s p cabg years ago he, score: 0.27081552  
sl nitro x3 aspirin and, score: 0.003536111

confidence of prediction: 0.984960  
Y\_true: [ 3 8 11 13 14 18 20 24 27 38 47]  
Y\_pred: [ 2 4 13 18 20 24 27]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting times four, score: 0.5704076  
coronary artery bypass grafting but, score: 0.034850746  
coronary artery bypass grafting times four, score: 0.032217383

confidence of prediction: 0.968912  
Y\_true: [ 3 8 11 13 14 18 20 24 27 38 47]  
Y\_pred: [ 2 4 13 18 20 24 27]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.11649876  
cardiothoracic allergies no known, score: 0.02034715  
bypass grafting times four with, score: 0.010471108

confidence of prediction: 0.955843  
Y\_true: [ 3 8 11 13 14 18 20 24 27 38 47]  
Y\_pred: [ 2 4 13 18 20 24 27]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
diabetes type hypertension hyperlipidemia depression chf, score: 0.18538387  
om1 in dm type htn and hld presenting, score: 0.0269258  
continued to make steady, score: 0.019715391

confidence of prediction: 0.996127  
Y\_true: [ 3 8 11 13 14 18 20 24 27 38 47]



Y\_pred: [ 2 4 13 18 20 24 27]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting, score: 0.3508921

s p pci des to ostial cx, score: 0.18421516

coronary artery disease s p pci des x2, score: 0.07428612

confidence of prediction: 0.887685

Y\_true: [ 3 8 11 13 14 18 20 24 27 38 47]

Y\_pred: [ 2 4 13 18 20 24 27]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

chf with ef social history, score: 0.27488777

chf with ef discharge condition, score: 0.27488777

80mg daily lasix 40mg daily, score: 0.0075254105

confidence of prediction: 0.966253

Y\_true: [ 1 34 35]

Y\_pred: [ 1 34 35]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

lyrica hypothyroidism continued home levothyroxine chronic

interstitial cystitis, score: 0.7077656

daily levothyroxine 50mcg m tu, score: 0.026118658

levothyroxine mcg tablet sig, score: 0.005053734

confidence of prediction: 0.918301

Y\_true: [ 1 34 35]

Y\_pred: [ 1 34 35]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

[UNK] hernia gerd ibs chronic abdominal pain, score: 0.10178307

8mg qpm gerd continued home protonix code, score: 0.022881066

kidney stones osteoporosis chronic interstitial, score: 0.015150358

confidence of prediction: 0.914932

Y\_true: [ 1 34 35]

Y\_pred: [ 1 34 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

acute renal failure transaminitis pituitary, score: 0.093934216

has sons owned name2, score: 0.040283296

ibuprofen acute kidney injury cr elevated to on, score: 0.01502814

confidence of prediction: 0.554105

Y\_true: [34 40]

Y\_pred: [ 4 33 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

neuro intubated and sedated, score: 0.48100495

was emergently intubated no epinephrine, score: 0.16249026

pip gen intubated sedated heent, score: 0.076828204

confidence of prediction: 0.925172

Y\_true: [11 14 20 24 26 27 34 37 40 42]  
Y\_pred: [24 26 30 34 37 40 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease severe, score: 0.11352368  
coronary artery disease not, score: 0.11352368  
cad s p angioplasty in, score: 0.0596037

confidence of prediction: 0.912735  
Y\_true: [11 14 20 24 26 27 34 37 40 42]  
Y\_pred: [24 26 30 34 37 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with rvr that progressed, score: 0.3996632  
afib vt s p icd, score: 0.20721713  
atrial fibrillation coronary artery disease, score: 0.16332795

confidence of prediction: 0.635351  
Y\_true: [11 14 20 24 26 27 34 37 40 42]  
Y\_pred: [24 26 30 34 37 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
flutter gastroesophageal reflux disease chronic obstructive  
pulmonary, score: 0.035851516  
in detail potential amiodarone, score: 0.013404935  
albuterol mcg aerosol fluticasone salmeterol puff, score:  
0.011307414

confidence of prediction: 0.948570  
Y\_true: [11 14 20 24 26 27 34 37 40 42]  
Y\_pred: [24 26 30 34 37 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
the uti and the, score: 0.14505456  
leuks lg 07am urine, score: 0.10470939  
uti for days last, score: 0.08659747

confidence of prediction: 0.913962  
Y\_true: [11 14 20 24 26 27 34 37 40 42]  
Y\_pred: [24 26 30 34 37 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was initially intubated due to multiple icd, score: 0.0998438  
sedated and intubated because of, score: 0.021923248  
ext warm dps no, score: 0.0015562034

confidence of prediction: 0.852869  
Y\_true: [11 14 20 24 26 27 34 37 40 42]  
Y\_pred: [24 26 30 34 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
sedated and intubated because of multiple icd, score: 0.02075655  
was initially intubated due to multiple icd, score: 0.0206748

to transition to once, score: 0.002078675

confidence of prediction: 0.869634

Y\_true: [ 7 9 10 11 17 20 28 40 42]

Y\_pred: [ 7 17 20 28 33 40 42]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

to have melanic stools her hct, score: 0.1631017

hypovolemic shock patient presented, score: 0.1161092

of consciousness and was, score: 0.10226651

confidence of prediction: 0.750022

Y\_true: [ 7 9 10 11 17 20 28 40 42]

Y\_pred: [ 7 17 20 28 33 40 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous access line brief hospital, score: 0.56010395

course of ceftriaxone in, score: 0.06445819

she was transferred to, score: 0.023531446

confidence of prediction: 0.746084

Y\_true: [ 7 9 10 11 17 20 28 40 42]

Y\_pred: [ 7 17 20 28 33 40 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

cirrhosis migraines hypertension chronic low back, score: 0.24407311

liver bx hypertension alcoholic cirrhosis low grade, score:

0.07596307

liver bx hypertension social history lives, score: 0.07596307

confidence of prediction: 0.695887

Y\_true: [ 7 9 10 11 17 20 28 40 42]

Y\_pred: [ 7 17 20 28 33 40 42]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

otherwise normal egd to, score: 0.16821726

had an egd after, score: 0.08275224

had an egd performed by gi which, score: 0.05135886

confidence of prediction: 0.752128

Y\_true: [ 7 9 10 11 17 20 28 40 42]

Y\_pred: [ 7 17 20 28 33 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

she was intubated and sedated review, score: 0.54573494

intoxicated to bal social work, score: 0.115664765

sclera anicteric intubated with blood, score: 0.06968513

confidence of prediction: 0.791187

Y\_true: [ 7 9 10 11 17 20 28 40 42]

Y\_pred: [ 7 17 20 28 33 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96

consecutive hours)

she was intubated and sedated review, score: 0.39145038  
intoxicated to bal social work, score: 0.07168191  
[UNK] and intubated in nad, score: 0.016704312

confidence of prediction: 0.758513  
Y\_true: [ 2 4 20 23 24 35 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
ii diabetes patient was monitored, score: 0.1947947  
ii diabetes coronary artery disease, score: 0.08654145  
type ii diabetes hyperlipidemia social, score: 0.058168553

confidence of prediction: 0.949152  
Y\_true: [ 2 4 20 23 24 35 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
ii diabetes hyperlipidemia social history patient lives, score:  
0.06375976  
hypertension and hyperlipidemia who presents with one, score:  
0.046264533  
mg daily glimepiride mg daily lisinopril, score: 0.004946322

confidence of prediction: 0.978921  
Y\_true: [ 2 4 20 23 24 35 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
blades which reminded her, score: 0.10015368  
diabetes hypertension and hyperlipidemia, score: 0.0718544  
hctz for now as, score: 0.0707771

confidence of prediction: 0.979177  
Y\_true: [ 2 4 20 23 24 35 47]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p lad stents in type, score: 0.12698671  
and lad stents in ekg, score: 0.11410063  
coronary artery stent is, score: 0.08530808

confidence of prediction: 0.885205  
Y\_true: [19 39 48]  
Y\_pred: [ 0 19 39 46 48]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
to dialysis tomorrow for, score: 0.11158966  
esrd hd mwf htn, score: 0.10789201  
esrd on hd chronic, score: 0.090185665

confidence of prediction: 0.848419  
Y\_true: [19 39 48]

Y\_pred: [ 0 19 39 46 48]  
 top three important windows for true positive code 39 (88.72:  
 Diagnostic ultrasound of heart)  
 transesophageal echocardiogram history of, score: 0.21583608  
 tee the left atrium, score: 0.067566074  
 a tee that was negative for, score: 0.034111917  
  
 confidence of prediction: 0.873498  
 Y\_true: [19 39 48]  
 Y\_pred: [ 0 19 39 46 48]  
 top three important windows for true positive code 48 (V45.81:  
 Aortocoronary bypass status)  
 s p cabg pvd, score: 0.29494172  
 s p cabg he, score: 0.29494172  
 status post cabg cardiac mediastinal and, score: 0.10410726  
  
 confidence of prediction: 0.895847  
 Y\_true: [ 2 4 13 14 18 20 24 26 37 38]  
 Y\_pred: [ 2 4 13 18 20 24 26 34 37]  
 top three important windows for true positive code 2 (250.00:  
 Diabetes mellitus without mention of complication, type II or  
 unspecified type, not stated as uncontrolled)  
 daily metformin mg tablet sig, score: 0.032979578  
 dyslipidemia diabetes mellitus gerd turp in, score: 0.028237367  
 hypertension dyslipidemia diabetes mellitus discharge condition  
 alert, score: 0.003951902  
  
 confidence of prediction: 0.815279  
 Y\_true: [ 2 4 13 14 18 20 24 26 37 38]  
 Y\_pred: [ 2 4 13 18 20 24 26 34 37]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 history hypertension dyslipidemia diabetes mellitus gerd turp in,  
 score: 0.11731363  
 disease hypertension dyslipidemia diabetes mellitus discharge,  
 score: 0.093193136  
 htn pmibi in demonstrating mild, score: 0.016226115  
  
 confidence of prediction: 0.810897  
 Y\_true: [ 2 4 13 14 18 20 24 26 37 38]  
 Y\_pred: [ 2 4 13 18 20 24 26 34 37]  
 top three important windows for true positive code 13 (36.15: Single  
 internal mammary-coronary artery bypass)  
 cardiac catheterization cabg history of present, score: 0.33299482  
 intraop tee conclusions pre, score: 0.016165985  
 and pacing wires were discontinued without, score: 0.014174201  
  
 confidence of prediction: 0.985868  
 Y\_true: [ 2 4 13 14 18 20 24 26 37 38]  
 Y\_pred: [ 2 4 13 18 20 24 26 34 37]  
 top three important windows for true positive code 18 (39.61:  
 Extracorporeal circulation auxiliary to open heart surgery)  
 wires were discontinued without, score: 0.72744924  
 cabg x please see, score: 0.024675468

diuresed toward the preoperative, score: 0.020525

confidence of prediction: 0.957233

Y\_true: [ 2 4 13 14 18 20 24 26 37 38]

Y\_pred: [ 2 4 13 18 20 24 26 34 37]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension dyslipidemia diabetes mellitus gerd,  
score: 0.18529534

artery disease hypertension dyslipidemia diabetes mellitus

discharge, score: 0.1137327

pmibi in demostrating mild, score: 0.050220124

confidence of prediction: 0.998062

Y\_true: [ 2 4 13 14 18 20 24 26 37 38]

Y\_pred: [ 2 4 13 18 20 24 26 34 37]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

cardiac catheterization cabg history of present, score: 0.7273153

coronary artery disease hypertension dyslipidemia, score:

0.113949105

showed vessel coronary disease cardiac surgery was, score:

0.007905028

confidence of prediction: 0.863782

Y\_true: [ 2 4 13 14 18 20 24 26 37 38]

Y\_pred: [ 2 4 13 18 20 24 26 34 37]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation he was started, score: 0.24695766

atrial fibrillation hours there was, score: 0.23713236

amiodarone mg tablet sig, score: 0.0060386164

confidence of prediction: 0.745203

Y\_true: [ 2 4 13 14 18 20 24 26 37 38]

Y\_pred: [ 2 4 13 18 20 24 26 34 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

treatment of uti the patient was brought, score: 0.045146614

a reversible medium sized moderate severity perfusion, score:

0.032598536

[UNK] [UNK] acid flomax, score: 0.02017176

confidence of prediction: 0.967901

Y\_true: [ 1 2 4 11 20 24 35]

Y\_pred: [ 1 2 4 11 20 24 35]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

continued hypothyroidism home levothyroxine continued depression

home bupropion, score: 0.089038484

daily levothyroxine mcg daily divalproex, score: 0.0056014075

daily levothyroxine mcg tablet sig, score: 0.004000008

confidence of prediction: 0.895942

Y\_true: [ 1 2 4 11 20 24 35]  
Y\_pred: [ 1 2 4 11 20 24 35]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
issues dm2 glipizide and metformin were held, score: 0.16319638  
admission glipizide mg daily metformin mg hospital1 asa mg, score:  
0.0072576874  
history dm2 htn hl, score: 0.0054623503

confidence of prediction: 0.830411  
Y\_true: [ 1 2 4 11 20 24 35]  
Y\_pred: [ 1 2 4 11 20 24 35]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
mirtazapine divalproex continued bph, score: 0.02517929  
dm2 htn hl cad last cardiac cath, score: 0.02515102  
hypotension hl home atorvastatin continued cad, score: 0.021643387

confidence of prediction: 0.813118  
Y\_true: [ 1 2 4 11 20 24 35]  
Y\_pred: [ 1 2 4 11 20 24 35]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
depression home bupropion mirtazapine divalproex continued, score:  
0.07981703  
obesity bph depression gerd arthritis, score: 0.06604554  
mg tid prn nausea, score: 0.026950894

confidence of prediction: 0.991192  
Y\_true: [ 1 2 4 11 20 24 35]  
Y\_pred: [ 1 2 4 11 20 24 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
chronic issues dm2 glipizide and, score: 0.092978254  
insulin ss htn lisinopril was held, score: 0.041739553  
history dm2 htn hl cad, score: 0.024185237

confidence of prediction: 0.685462  
Y\_true: [ 1 2 4 11 20 24 35]  
Y\_pred: [ 1 2 4 11 20 24 35]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
ntg mg sl prn chest, score: 0.033187803  
hl cad last cardiac cath unknown, score: 0.028081872  
continued cad home asa sl ntg prn chest, score: 0.027945112

confidence of prediction: 0.960400  
Y\_true: [ 1 2 4 11 20 24 35]  
Y\_pred: [ 1 2 4 11 20 24 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
syndrome prerenal arf high spec, score: 0.2138389  
renal failure hyperkalemia discharge, score: 0.17608228

acute renal failure hyperkalemia major, score: 0.037667595

confidence of prediction: 0.836083

Y\_true: [ 5 16 26 33 40 42]

Y\_pred: [ 5 26 33 40 42]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

that she wasn't, score: 0.2123595

recorded as having no, score: 0.02784192

hyponatremia the patient's hyponatremia was likely related to,  
score: 0.02758771

confidence of prediction: 0.944257

Y\_true: [ 5 16 26 33 40 42]

Y\_pred: [ 5 26 33 40 42]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

fibrillation was noted this, score: 0.19628248

atrial fibrillation on the second, score: 0.14579062

atrial arrhythmia mat vs, score: 0.03467641

confidence of prediction: 0.959554

Y\_true: [ 5 16 26 33 40 42]

Y\_pred: [ 5 26 33 40 42]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

to respiratory failure and intubation respiratory failure on  
admission, score: 0.3866027

s respiratory failure was, score: 0.078901745

was intubated in the, score: 0.020956226

confidence of prediction: 0.830291

Y\_true: [ 5 16 26 33 40 42]

Y\_pred: [ 5 26 33 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

patient was intubated in the, score: 0.038996175

is intubated and appears, score: 0.037392687

she was intubated without difficulty, score: 0.0348189

confidence of prediction: 0.770365

Y\_true: [ 5 16 26 33 40 42]

Y\_pred: [ 5 26 33 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

is intubated and appears, score: 0.025604367

she was intubated without difficulty, score: 0.022225209

to respiratory failure and intubation respiratory failure on  
admission, score: 0.01635744

confidence of prediction: 0.972625

Y\_true: [ 8 18 20 32 48]

Y\_pred: [18 20 48]



top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires according to protocol, score: 0.091475286  
diuresed towards her preoperative, score: 0.033654187  
cardiothoracic allergies bactrim ds, score: 0.021679947

confidence of prediction: 0.989255

Y\_true: [ 8 18 20 32 48]

Y\_pred: [18 20 48]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
gouty arthritis hypertension s p cholecystectomy, score: 0.17818558  
medical history hypertension aortic insufficiency aortic, score:  
0.087044224  
50mg qpm hctz mg daily lisinopril, score: 0.059288926

confidence of prediction: 0.533245

Y\_true: [ 8 18 20 32 48]

Y\_pred: [18 20 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
years post cabg pre, score: 0.5584659  
ointments to incisions each, score: 0.009680228  
coronary artery disease s, score: 0.006968139

confidence of prediction: 0.823514

Y\_true: [ 2 3 12 20 26 30 37 41 43]

Y\_pred: [ 2 17 20 26 30 33 40 41 43]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
type ii dm basal cell and, score: 0.06544922  
qd metformin glipizide insulin simvastatin 20mg, score: 0.012563084  
lantus hospital1 with sliding, score: 0.007455343

confidence of prediction: 0.861259

Y\_true: [ 2 3 12 20 26 30 37 41 43]

Y\_pred: [ 2 17 20 26 30 33 40 41 43]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
a retired salesman he is married, score: 0.28662533  
p dorzolamide timolol lumigan, score: 0.07752379  
past years hypertension hypercholesterolemia type ii dm, score:  
0.060893405

confidence of prediction: 0.938366

Y\_true: [ 2 3 12 20 26 30 37 41 43]

Y\_pred: [ 2 17 20 26 30 33 40 41 43]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation copd with progressively, score: 0.4422092  
atrial fibrillation hypertension hypercholesterolemia, score:  
0.10020034  
atrial fibrillation past medical history, score: 0.065131254

confidence of prediction: 0.655053  
Y\_true: [ 2 3 12 20 26 30 37 41 43]  
Y\_pred: [ 2 17 20 26 30 33 40 41 43]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd with progressively worsening symptoms, score:  
0.15048783  
atrial fibrillation copd with progressively worsening symptoms,  
score: 0.0879482  
for constipation bisacodyl mg, score: 0.0020087922

confidence of prediction: 0.872710  
Y\_true: [ 2 3 12 20 26 30 37 41 43]  
Y\_pred: [ 2 17 20 26 30 33 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
nutrition tube feeds novasource renal, score: 0.23036698  
percutaneous tracheostomy tube placement percutaneous tracheostomy  
portex nonfenestrated, score: 0.042795997  
percutaneous tracheostomy tube placement portex, score: 0.042795997

confidence of prediction: 0.860606  
Y\_true: [ 2 3 12 20 26 30 37 41 43]  
Y\_pred: [ 2 17 20 26 30 33 40 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
for percutaneous tracheostomy tube placement percutaneous  
tracheostomy portex nonfenestrated flexible bronchoscopy history,  
score: 0.028304452  
for percutaneous tracheostomy tube, score: 0.028304452  
on flexible bronchoscopy with, score: 0.028073788

confidence of prediction: 0.814778  
Y\_true: [ 1 3 11 20 26 49]  
Y\_pred: [ 1 20]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
htn hypothyroid social history not, score: 0.19519973  
synthroid mcg tab oral tablet, score: 0.03632451  
s synthroid and put her, score: 0.030067537

confidence of prediction: 0.998129  
Y\_true: [ 1 3 11 20 26 49]  
Y\_pred: [ 1 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
daily rosuvastatin mg tablet sig, score: 0.014460458  
was on coumadin on, score: 0.0063348156  
complaint l sided weakness, score: 0.0044544227

confidence of prediction: 0.552885  
Y\_true: [ 5 7 20 26 49]

Y\_pred: [20 26]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
afib thyroid htn social history nc family, score: 0.10876279  
t7 compression fx old, score: 0.05025633  
branch block non specific, score: 0.030153232

confidence of prediction: 0.974590

Y\_true: [ 5 7 20 26 49]

Y\_pred: [20 26]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

history afib thyroid htn social history, score: 0.0004983129  
pleural effusions small to, score: 0.0004924285  
ekg atrial fibrillation right bundle branch, score: 0.0003969685

confidence of prediction: 0.784888

Y\_true: [ 4 8 19]

Y\_pred: [19 37]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)

esrd on hd sevelamer stopped, score: 0.11029194  
esrd on hd hypertension, score: 0.10097112  
esrd on hd htn, score: 0.10097112

confidence of prediction: 0.569383

Y\_true: [ 2 35 37 46]

Y\_pred: [ 0 2 17 20 37 46]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

metformin mg tablet sig, score: 0.0503661  
hypertension diabetes bph epididymitis orchitis, score: 0.022153534  
qd metformin 100mg tab in, score: 0.021047488

confidence of prediction: 0.972836

Y\_true: [ 2 35 37 46]

Y\_pred: [ 0 2 17 20 37 46]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

leuks lg 20pm urine rbc, score: 0.6388671  
below urinary tract infection although, score: 0.039086137  
urinary tract infection right nephrolithiasis, score: 0.035788305

confidence of prediction: 0.986799

Y\_true: [ 2 35 37 46]

Y\_pred: [ 0 2 17 20 37 46]

top three important windows for true positive code 46 (995.92:  
Severe sepsis)

from a urinary source, score: 0.08896145  
urosepsis major surgical or, score: 0.07012924  
septic shock sepsis due to uti his, score: 0.063931115

confidence of prediction: 0.822019

Y\_true: [ 1 24 26 27]  
Y\_pred: [20 26 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib she was given, score: 0.24116829  
rhythm f e n, score: 0.12781239  
atrial fibrillation bp was stable, score: 0.089015536  
  
confidence of prediction: 0.587767  
Y\_true: [ 6 15 20 24 27 38 42]  
Y\_pred: [ 0 6 15 17 20 24 38 42 46]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
with metabolic acidosis patient s blood pressure, score: 0.039645065  
on comfort and withdraw supportive, score: 0.039162975  
was intubated and unresponsive with, score: 0.008920128  
  
confidence of prediction: 0.574299  
Y\_true: [ 6 15 20 24 27 38 42]  
Y\_pred: [ 0 6 15 17 20 24 38 42 46]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization aortic balloon, score: 0.5412659  
cath lab cardiogenic shock remained, score: 0.07889373  
cath lab to evaluate, score: 0.025889765  
  
confidence of prediction: 0.978419  
Y\_true: [ 6 15 20 24 27 38 42]  
Y\_pred: [ 0 6 15 17 20 24 38 42 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
p appendectomy hypertension social history patient is, score:  
0.18661611  
history of htn amyloid, score: 0.18226515  
mg daily hctz mg daily oxcarbazepine, score: 0.023373628  
  
confidence of prediction: 0.955873  
Y\_true: [ 6 15 20 24 27 38 42]  
Y\_pred: [ 0 6 15 17 20 24 38 42 46]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
a 40cc iabp was placed the, score: 0.03227938  
the lad had a, score: 0.029443178  
vessel coronary disease the lmca, score: 0.027892742  
  
confidence of prediction: 0.815339  
Y\_true: [ 6 15 20 24 27 38 42]  
Y\_pred: [ 0 6 15 17 20 24 38 42 46]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization aortic balloon, score: 0.33183938  
cath lab cardiogenic shock remained, score: 0.09915471  
vessel stenosis these latter, score: 0.036989834

confidence of prediction: 0.627362  
Y\_true: [ 6 15 20 24 27 38 42]  
Y\_pred: [ 0 6 15 17 20 24 38 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
general intubated and sedated not, score: 0.15686941  
patient was intubated and unresponsive, score: 0.08782859  
to intubation however patient, score: 0.0708851

confidence of prediction: 0.841226  
Y\_true: [15 16 19 25 27 38 39 40 43]  
Y\_pred: [ 4 7 19 24 25 33 42]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
on mwf hd given the, score: 0.09683632  
and amyloidosis esrd on hd with recent, score: 0.06826249  
medical history esrd amyloidosis hyperlipidemia, score: 0.015335708

confidence of prediction: 0.831446  
Y\_true: [15 16 19 25 27 38 39 40 43]  
Y\_pred: [ 4 7 19 24 25 33 42]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral regurgitation hypertension discharge, score: 0.18543415  
severe mitral regurgitation not, score: 0.10200664  
mitral regurgitation thanks to, score: 0.058213048

confidence of prediction: 0.790728  
Y\_true: [19 29 49]  
Y\_pred: [29 49]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
hospital acquired pneumonia for week and, score: 0.19424818  
community acquired pneumonia was made and he, score: 0.09970749  
sputum culture sent but, score: 0.034516506

confidence of prediction: 0.962657  
Y\_true: [19 29 49]  
Y\_pred: [29 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
embolism on warfarin presents, score: 0.4560969  
s on warfarin discharge, score: 0.028612169  
ago his warfarin was, score: 0.012013177

confidence of prediction: 0.811981  
Y\_true: [ 2 7 18 20 27 34]  
Y\_pred: [ 2 18 20 25 34]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus obstructive sleep apnea,  
score: 0.09121413

noninsulin dependent diabetes mellitus s p femoral, score:  
0.09121413  
smokes 10cig per day, score: 0.0022270237

confidence of prediction: 0.985237  
Y\_true: [ 2 7 18 20 27 34]  
Y\_pred: [ 2 18 20 25 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued and, score: 0.7241327  
wires were cut without, score: 0.043199316  
cardiothoracic allergies motrin naproxen, score: 0.00621119

confidence of prediction: 0.997978  
Y\_true: [ 2 7 18 20 27 34]  
Y\_pred: [ 2 18 20 25 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension noninsulin dependent diabetes mellitus,  
score: 0.08840097  
away from mi physical, score: 0.054550745  
sleep apnea hypertension noninsulin dependent diabetes mellitus,  
score: 0.01702515

confidence of prediction: 0.805479  
Y\_true: [ 2 7 18 20 27 34]  
Y\_pred: [ 2 18 20 25 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
x congested l conjunctiva, score: 0.02486832  
rodding bipolar disorder s, score: 0.024454653  
gastroesophageal reflux bipolar disorder h o, score: 0.020121846

confidence of prediction: 0.631450  
Y\_true: [ 0 2 5 6 22 23 27 35 37 47]  
Y\_pred: [ 0 2 4 20 27 30 31 37 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
urosepsis from multi drug resistant, score: 0.13108097  
outpatient sepsis resolved likely secondary to, score: 0.0069617806  
a few months ago, score: 0.006726906

confidence of prediction: 0.500719  
Y\_true: [ 0 2 5 6 22 23 27 35 37 47]  
Y\_pred: [ 0 2 4 20 27 30 31 37 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
nh records januvia nf, score: 0.0015313417  
anemia dm chf ef in hx, score: 0.0015267048  
the past diabetes mellitus type ii started on, score: 0.0012645142

confidence of prediction: 0.966516  
Y\_true: [ 0 2 5 6 22 23 27 35 37 47]

Y\_pred: [ 0 2 4 20 27 30 31 37 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
of copd chf alzheimer s and expressive, score: 0.015596889  
cover manor discharge diagnosis, score: 0.014083515  
dementia nstemi discharge condition, score: 0.008440127  
  
confidence of prediction: 0.774996  
Y\_true: [ 0 2 5 6 22 23 27 35 37 47]  
Y\_pred: [ 0 2 4 20 27 30 31 37 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection copd, score: 0.12260784  
a uti grossly positive, score: 0.096960396  
treat uti since pna was, score: 0.0708194  
  
confidence of prediction: 0.692879  
Y\_true: [ 2 14 20 24 27]  
Y\_pred: [ 2 15 20 24 27 38]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm on oral medications as, score: 0.101698376  
and diabetes mellitus presents with inferior, score: 0.07093302  
hypertension diabetes history of, score: 0.032517534  
  
confidence of prediction: 0.946844  
Y\_true: [ 2 14 20 24 27]  
Y\_pred: [ 2 15 20 24 27 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension and diabetes mellitus, score: 0.10228962  
dm2 htn presented with, score: 0.098736644  
diabetes mellitus hypertension discharge, score: 0.07040327  
  
confidence of prediction: 0.974154  
Y\_true: [ 2 14 20 24 27]  
Y\_pred: [ 2 15 20 24 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
vessel cad with distal rca occlusion normal cardiac, score:  
0.033048555  
disease the rca was extremely tortuous with, score: 0.023588246  
cardiac catheterization with balloon, score: 0.023331106  
  
confidence of prediction: 0.916276  
Y\_true: [ 2 14 20 24 27]  
Y\_pred: [ 2 15 20 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
heart function it is, score: 0.021345407  
optimal heart failure regimen continue aspirin, score: 0.016584225  
pump systolic heart failure acute euvoletic, score: 0.011899087

confidence of prediction: 0.924020  
Y\_true: [ 4 39]  
Y\_pred: [ 4 33 39]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
h o hyperlipidemia psh s p retrograde, score: 0.0733738  
m2 indication hypertension left, score: 0.058863364  
pmh osteoporosis psh retrograde nailing, score: 0.008750052

confidence of prediction: 0.849453  
Y\_true: [ 4 39]  
Y\_pred: [ 4 33 39]  
top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)  
tee complete son name, score: 0.5738778  
tee complete done at, score: 0.10865353  
tee related complications regional left, score: 0.022246521

confidence of prediction: 0.602691  
Y\_true: [ 2 4 14 26 27 35 38]  
Y\_pred: [ 2 4 26 27 35 38]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
pain glyburide lantus units daily albuterol nebulizer, score: 0.08370434  
of type dm paroxysmal afib chronic, score: 0.009755325  
dm and htn also rising, score: 0.007265942

confidence of prediction: 0.698063  
Y\_true: [ 2 4 14 26 27 35 38]  
Y\_pred: [ 2 4 26 27 35 38]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
risk factors hyperlipidemia cardiac history cabg none, score: 0.07414215  
amiodarone mg tablet sig, score: 0.03632344  
simvastatin mg tablet sig, score: 0.034347773

confidence of prediction: 0.990948  
Y\_true: [ 2 4 14 26 27 35 38]  
Y\_pred: [ 2 4 26 27 35 38]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib chronic systolic chf severe lv dysfunction, score: 0.658799  
atrial fibrillation chronic back pain, score: 0.08373589  
atrial fibrillation coumadin was stopped patient, score: 0.025079928

confidence of prediction: 0.973275  
Y\_true: [ 2 4 14 26 27 35 38]  
Y\_pred: [ 2 4 26 27 35 38]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
congestive heart failure ef ventricular, score: 0.17822255



systolic heart failure with ef s, score: 0.069206975  
chronic systolic chf severe lv dysfunction, score: 0.025439389

confidence of prediction: 0.867012  
Y\_true: [ 2 4 14 26 27 35 38]  
Y\_pred: [ 2 4 26 27 35 38]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
with pre renal failure patient was, score: 0.2912352  
renal failure cr up to apparent, score: 0.039479487  
bun cr checked in, score: 0.010388208

confidence of prediction: 0.615803  
Y\_true: [ 2 4 14 26 27 35 38]  
Y\_pred: [ 2 4 26 27 35 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
cath comments selective coronary angiography of this, score: 0.0783546  
heart pcwp 26mmhg filling, score: 0.04421946  
vessel without angiographically apparent, score: 0.022583507

confidence of prediction: 0.878893  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
2nd htn hl atrial fibrillation never on, score: 0.15996057  
continued simvastatin transitional issues, score: 0.08986231  
in htn hl and recent bout, score: 0.065578386

confidence of prediction: 0.866753  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
stent 2nd htn hl atrial fibrillation never, score: 0.18910562  
stents in htn hl and recent, score: 0.10461393  
brown casts consistent with, score: 0.082418635

confidence of prediction: 0.672496  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi with stents in htn, score: 0.26462469  
s p mi and, score: 0.26462469  
transfusions cad mi s p stenting hypertension, score: 0.047567144

confidence of prediction: 0.877020  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

s p mi with stents in htn, score: 0.09657801  
cad mi s p stenting hypertension, score: 0.030188361  
cad s p mi and, score: 0.019885924

confidence of prediction: 0.882240  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
irregularly irregular normal s1 s2, score: 0.13484907  
atrial fibrillation patient was initially, score: 0.09182377  
atrial fibrillation with slower rate, score: 0.07628851

confidence of prediction: 0.646801  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
tee demonstrated that patient s, score: 0.329642  
mitral valve chordae and, score: 0.042044424  
atn a tee demonstrated severe lvot, score: 0.025558911

confidence of prediction: 0.507582  
Y\_true: [ 4 20 23 24 26 27 33 39 41 43]  
Y\_pred: [ 4 17 20 21 23 24 25 26 36 39 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
she was intubated on due, score: 0.1523308  
are adopted physical exam, score: 0.030450823  
several granular casts and, score: 0.028467195

confidence of prediction: 0.903338  
Y\_true: [ 1 10 31 32 42]  
Y\_pred: [ 1 31 40 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
history hypothyroidism social history patient, score: 0.22933581  
of hypothyroidism who presents, score: 0.14130336  
levothyroxine 50mcg daily ativan, score: 0.08369305

confidence of prediction: 0.892260  
Y\_true: [ 1 10 31 32 42]  
Y\_pred: [ 1 31 40 42]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
and aspiration pneumonia was the, score: 0.14286056  
hospital acquired pneumonia the, score: 0.11668088  
effusion aspiration pneumonia secondary diagnosis hypothyroidism,  
score: 0.056479283

confidence of prediction: 0.639900  
Y\_true: [ 1 10 31 32 42]  
Y\_pred: [ 1 31 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
after intubation she was transferred to, score: 0.24105968  
post intubation on was, score: 0.20577832  
leading to intubation which was, score: 0.04430239

confidence of prediction: 0.984618  
Y\_true: [12 41 43]  
Y\_pred: [17 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tolerated tube feeds throughout the hospitalization, score:  
0.01827346  
a peg tube placed concurrently, score: 0.005629164  
plastics trach peg dr last, score: 0.0050127404

confidence of prediction: 0.705529  
Y\_true: [12 41 43]  
Y\_pred: [17 40 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
tube feeds throughout the, score: 0.046282  
orbital wall orbital roof, score: 0.03162885  
a peg tube placed, score: 0.03142118

confidence of prediction: 0.616612  
Y\_true: [ 7 28 34]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
and her hematocrits then, score: 0.40798205  
illness 53f pmhx sig, score: 0.24584283  
course 53f pmhx sig, score: 0.06385609

confidence of prediction: 0.817780  
Y\_true: [ 7 28 34]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
otherwise normal egd to, score: 0.48439085  
illness 53f pmhx sig, score: 0.12012366  
study called endoscopy which showed stomach, score: 0.045817114

confidence of prediction: 0.882142  
Y\_true: [ 7 28 34]  
Y\_pred: [ 7 20 28 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
deficiency anemia gerd hypertension social history she, score:  
0.11412555  
illness 53f pmhx sig, score: 0.020989299  
course 53f pmhx sig, score: 0.009776058

confidence of prediction: 0.934984  
Y\_true: [ 1 7 17 20 24 34 35 37]  
Y\_pred: [ 1 20 34 35 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
prn hypothyroidism continue home levothyroxine sciatica her right,  
score: 0.5301604  
gerd hypothyroidism who was, score: 0.13058959  
ago hypothyroidism social history, score: 0.062594116

confidence of prediction: 0.645316  
Y\_true: [ 1 7 17 20 24 34 35 37]  
Y\_pred: [ 1 20 34 35 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn gerd, score: 0.09150769  
htn pt on isosorbide mn, score: 0.089651465  
significant for htn gerd, score: 0.07162163

confidence of prediction: 0.647734  
Y\_true: [ 1 7 17 20 24 34 35 37]  
Y\_pred: [ 1 20 34 35 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
history htn gerd vaginal spotting right, score: 0.07898861  
for htn gerd hypothyroidism who was admitted, score: 0.05678935  
picc line with be, score: 0.018738853

confidence of prediction: 0.968710  
Y\_true: [ 1 7 17 20 24 34 35 37]  
Y\_pred: [ 1 20 34 35 37]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure cr as [UNK] stabilized, score: 0.08302857  
nahco3 vancomycin grams q24hours discharge, score: 0.003406756  
had worsening renal function during this, score: 0.0016080717

confidence of prediction: 0.875461  
Y\_true: [ 1 7 17 20 24 34 35 37]  
Y\_pred: [ 1 20 34 35 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
pcp uti patient only received, score: 0.061589226  
uti however her antibiotics, score: 0.028760633  
to discharge uti on further consideration, score: 0.019283347

confidence of prediction: 0.956339  
Y\_true: [ 1 4 11 27 29]  
Y\_pred: [ 1 4 8 30 31]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
history dementia hypothyroidism osteoporosis chronic constipation  
rectal, score: 0.0010360794

dementia osteoporosis hypothyroidism not on replacement who, score: 0.0006805108

encephalopathy metabolic while in, score: 0.0004492552

confidence of prediction: 0.506025

Y\_true: [ 1 4 11 27 29]

Y\_pred: [ 1 4 8 30 31]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

prolapse cataracts hyperlipidemia anxiety ventral hernia social, score: 0.6645513

mirtazapine mg po hs guaifenesin, score: 0.009315675

constipation mirtazapine mg po hs sertraline, score: 0.0072725746

confidence of prediction: 0.603184

Y\_true: [ 6 8 10 35 37 42]

Y\_pred: [10 17 35 37 40 42]

top three important windows for true positive code 10 (305.1: Tobacco use disorder)

social history smokes about pop unclear alcohol history, score: 0.08488625

and vodka bottles she was discovered, score: 0.0030443163

abuse since on methadone, score: 0.0011745926

confidence of prediction: 0.818671

Y\_true: [ 6 8 10 35 37 42]

Y\_pred: [10 17 35 37 40 42]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

kidney injury urinary tract, score: 0.17818436

kidney injury with creatinine, score: 0.13675715

to a peak of, score: 0.032218702

confidence of prediction: 0.914182

Y\_true: [ 6 8 10 35 37 42]

Y\_pred: [10 17 35 37 40 42]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)

urinary tract infection the, score: 0.1865177

coli organisms ml presumptive, score: 0.17692831

urinary tract infection discharge condition, score: 0.0637509

confidence of prediction: 0.657341

Y\_true: [ 6 8 10 35 37 42]

Y\_pred: [10 17 35 37 40 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

she was intubated in the field then, score: 0.19999367

of ivdu this was decreased, score: 0.026383206

ivdu clean since on, score: 0.0070804646

confidence of prediction: 0.932775

Y\_true: [11 20 33 40 42]

Y\_pred: [20 33 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension substance abuse prior, score:  
0.10785984  
history of hypertension and, score: 0.051026408  
taking benzos hypertension home medications the, score: 0.038503584

confidence of prediction: 0.683746  
Y\_true: [11 20 33 40 42]  
Y\_pred: [20 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
rapid sequence intubation and put, score: 0.10135185  
he was intubated via, score: 0.07851669  
you required intubation in the micu, score: 0.0620396

confidence of prediction: 0.690820  
Y\_true: [11 20 33 40 42]  
Y\_pred: [20 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
thus reintubated he was, score: 0.20634903  
he was intubated via rapid, score: 0.1175312  
intubated intubated 16am glucose, score: 0.11013723

confidence of prediction: 0.766002  
Y\_true: [11 20 33 40 42]  
Y\_pred: [20 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
intubated intubated 16am glucose, score: 0.21917365  
sequence intubation and put, score: 0.07298821  
was thus reintubated he was given, score: 0.04310216

confidence of prediction: 0.993469  
Y\_true: [20 26 27 31 37]  
Y\_pred: [17 26 27 31 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib off coumadin chf anxiety, score: 0.7174145  
atrial fibrillation marked left axis, score: 0.1552576  
af not on coumadin, score: 0.07916846

confidence of prediction: 0.929935  
Y\_true: [20 26 27 31 37]  
Y\_pred: [17 26 27 31 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
pulmonary edema in the, score: 0.024011996  
flash pulmonary edema with continued, score: 0.02209296  
off coumadin chf anxiety dementia psh open, score: 0.021607768

confidence of prediction: 0.846511  
Y\_true: [20 26 27 31 37]  
Y\_pred: [17 26 27 31 37]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
death aspiration pneumonia immediate cause respiratory failure,  
score: 0.053050295  
to transition goals of, score: 0.039462734  
spot films and technical, score: 0.0041067787

confidence of prediction: 0.978987  
Y\_true: [20 26 27 31 37]  
Y\_pred: [17 26 27 31 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
hcap uti ua and pan sensitive, score: 0.041319333  
final escherichia coli swab, score: 0.018694015  
final escherichia coli organisms ml presumptive, score: 0.018694015

confidence of prediction: 0.795744  
Y\_true: [17 40 42]  
Y\_pred: [31 33 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was transiently intubated for airway protection and, score:  
0.4663356  
eeg monitoring intubation history of, score: 0.07644432  
reports confusion following the, score: 0.021819742

confidence of prediction: 0.684822  
Y\_true: [ 9 17 23 24 35 37 40 42]  
Y\_pred: [17 23 24 27 30 35 37 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
picc placement endotracheal intubation done, score: 0.45281744  
bacteri rare yeast none, score: 0.063728936  
bacteri mod yeast none, score: 0.06272892

confidence of prediction: 0.877593  
Y\_true: [ 9 17 23 24 35 37 40 42]  
Y\_pred: [17 23 24 27 30 35 37 42]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
lad lesion occlusion unknown medically managed prior mi about years  
ago copd chf chronic, score: 0.015563985  
cad known circ lesions with, score: 0.001183379

confidence of prediction: 0.996099  
Y\_true: [ 9 17 23 24 35 37 40 42]  
Y\_pred: [17 23 24 27 30 35 37 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad lesion occlusion unknown medically managed prior mi about years  
ago copd chf chronic back, score: 0.50556624

ef cad known circ lesions with, score: 0.024039876

confidence of prediction: 0.707508

Y\_true: [ 9 17 23 24 35 37 40 42]

Y\_pred: [17 23 24 27 30 35 37 42]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

atenolol with arf and recent out, score: 0.27429974

was having agonal breaths, score: 0.021030055

coronary arterial calcification diverticulosis, score: 0.017718486

confidence of prediction: 0.967421

Y\_true: [ 9 17 23 24 35 37 40 42]

Y\_pred: [17 23 24 27 30 35 37 42]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

leuks sm 20am urine rbc, score: 0.22770232

citrobacter urinary tract infection pulseless electrical, score: 0.11573157

citrobacter uti though it was not, score: 0.044365864

confidence of prediction: 0.748117

Y\_true: [ 9 17 23 24 35 37 40 42]

Y\_pred: [17 23 24 27 30 35 37 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

lightly sedated intubated able to, score: 0.14385277

was intubated in the, score: 0.13692717

was intubated in the, score: 0.12210315

confidence of prediction: 0.982076

Y\_true: [ 4 16 20 42]

Y\_pred: [20 33 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension not on medications, score: 0.808562

catheter with decompression of, score: 0.024719445

articular derangement mri could, score: 0.012810748

confidence of prediction: 0.759286

Y\_true: [ 4 16 20 42]

Y\_pred: [20 33 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

status intubated opens eyes, score: 0.09695145

r o2sats intubated gen wd wn intubated heent normocephalic

atraumatic, score: 0.05949413

his neurological exam declined, score: 0.038274147

confidence of prediction: 0.789929

Y\_true: [ 6 7 17 20 34 35]

Y\_pred: [ 7 49]



top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
of crystalloid u prbc and u, score: 0.051355172  
allergies latex morphine attending, score: 0.0497693  
with creation of hartmann, score: 0.043150596

confidence of prediction: 0.579524

Y\_true: [ 2 5 14 35 37 38]

Y\_pred: [ 2 15 24 35 38 39]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
metformin and glyburide at d c, score: 0.3208745  
ef diabetes mellitus type new diagnosis, score: 0.07947265  
diabetes center last name, score: 0.031473923

confidence of prediction: 0.597514

Y\_true: [ 2 5 14 35 37 38]

Y\_pred: [ 2 15 24 35 38 39]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
to 1st degree conduction, score: 0.1950021  
renal failure suspect acute renal failure in setting, score: 0.07496382  
hyperglycemia likely represents longstanding undiagnosed diabetes, score: 0.039639343

confidence of prediction: 0.876586

Y\_true: [ 2 5 14 35 37 38]

Y\_pred: [ 2 15 24 35 38 39]

top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
cardiac catheterization with pacer, score: 0.8311297  
cardiac catheterization was done which, score: 0.016412234  
bare metal stent to, score: 0.007854144

confidence of prediction: 0.577845

Y\_true: [ 5 9 17 20 39 40 43 47]

Y\_pred: [17 39 40 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
emboli on ct and, score: 0.15174091  
emboli to the brain, score: 0.12991592  
strep pneumo meningitis right, score: 0.050352965

confidence of prediction: 0.704350

Y\_true: [ 5 9 17 20 39 40 43 47]

Y\_pred: [17 39 40 42]

top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)  
tee was negative for vegetations, score: 0.47157997  
vegetation however this was, score: 0.16429622  
tee as such it, score: 0.03501246

confidence of prediction: 0.859866  
 Y\_true: [ 5 9 17 20 39 40 43 47]  
 Y\_pred: [17 39 40 42]  
 top three important windows for true positive code 40 (96.04:  
 Insertion of endotracheal tube)  
 was eventually intubated in order to, score: 0.5124176  
 husband called oncologist who told, score: 0.017655013  
 noted continuous eeg while at, score: 0.016989999

confidence of prediction: 0.797758  
 Y\_true: [ 6 7 9 10 11 42]  
 Y\_pred: [ 7 11 28 40 42]  
 top three important windows for true positive code 7 (285.1: Acute  
 posthemorrhagic anemia)  
 cc bright red blood, score: 0.0792472  
 cc bright red blood, score: 0.07260164  
 the endoscopy showed no, score: 0.06811681

confidence of prediction: 0.959609  
 Y\_true: [ 6 7 9 10 11 42]  
 Y\_pred: [ 7 11 28 40 42]  
 top three important windows for true positive code 11 (311:  
 Depressive disorder, not elsewhere classified)  
 asthma alcohol abuse presented, score: 0.010012401  
 of writhing ngt was, score: 0.002506354  
 history alcohol abuse back pain depression bilateral hip  
 replacements social history lives, score: 0.002497983

confidence of prediction: 0.602113  
 Y\_true: [ 6 7 9 10 11 42]  
 Y\_pred: [ 7 11 28 40 42]  
 top three important windows for true positive code 42 (96.71:  
 Continuous invasive mechanical ventilation for less than 96  
 consecutive hours)  
 elective intubation family history, score: 0.023296675  
 sedation when intubated once extubated he, score: 0.0069567375  
 to sedation required liters, score: 0.00442418

confidence of prediction: 0.960467  
 Y\_true: [ 4 8 13 14 18 20 24 38 39 44]  
 Y\_pred: [ 4 13 18 20 24]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 cabg hypertension dyslipidemia hernia discharge condition, score:  
 0.46806607  
 medical history dyslipidemia hypertension prior cholecystectomy  
 left, score: 0.03869209  
 m2 indication coronary artery, score: 0.023937147

confidence of prediction: 0.962462  
 Y\_true: [ 4 8 13 14 18 20 24 38 39 44]  
 Y\_pred: [ 4 13 18 20 24]  
 top three important windows for true positive code 13 (36.15: Single  
 internal mammary-coronary artery bypass)

descending saphenous vein graft ramus saphenous vein graft, score: 0.1647804

coronary artery bypass graft surgery see, score: 0.09423584

obtuse marginal saphenous vein graft distal, score: 0.0723715

confidence of prediction: 0.963271

Y\_true: [ 4 8 13 14 18 20 24 38 39 44]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

lotions powders or ointments to, score: 0.35345057

incisions no baths or, score: 0.30743042

pleural drains postoperative enlargement, score: 0.015740594

confidence of prediction: 0.927267

Y\_true: [ 4 8 13 14 18 20 24 38 39 44]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

pressors and inotropes for, score: 0.07265589

history dyslipidemia hypertension prior cholecystectomy, score: 0.06549255

s p cabg hypertension dyslipidemia hernia discharge condition, score: 0.02482664

confidence of prediction: 0.968414

Y\_true: [ 4 8 13 14 18 20 24 38 39 44]

Y\_pred: [ 4 13 18 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease s p cabg hypertension, score: 0.2739693

s p coronary artery bypass graft, score: 0.11427897

descending saphenous vein graft, score: 0.05482245

confidence of prediction: 0.985178

Y\_true: [ 6 13 15 18 23 24 35 38 42]

Y\_pred: [13 14 15 18 20 24 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft x5 lima lad svg om1, score: 0.39271036

coronary artery bypass x overall, score: 0.07692889

wires were discontinued without, score: 0.020028055

confidence of prediction: 0.646342

Y\_true: [ 6 13 15 18 23 24 35 38 42]

Y\_pred: [13 14 15 18 20 24 38]

top three important windows for true positive code 15 (37.23:

Combined right and left heart cardiac catheterization)

cardiac cath selective coronary angiography of this, score: 0.06415492

heart catheterization coronary angiogram history of, score: 0.058896575

cardiac catheterization lab and was found, score: 0.038060084

confidence of prediction: 0.985535  
Y\_true: [ 6 13 15 18 23 24 35 38 42]  
Y\_pred: [13 14 15 18 20 24 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.73546404  
diuresed toward the preoperative, score: 0.020751135  
cardiothoracic allergies tetanus attending, score: 0.0069804606

confidence of prediction: 0.980838  
Y\_true: [ 6 13 15 18 23 24 35 38 42]  
Y\_pred: [13 14 15 18 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p coronary artery bypass grafts, score:  
0.20510688  
coronary artery bypass graft, score: 0.18489546  
coronary artery disease myocardial infarction asthma, score:  
0.080137916

confidence of prediction: 0.923760  
Y\_true: [ 6 13 15 18 23 24 35 38 42]  
Y\_pred: [13 14 15 18 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath selective coronary angiography of this, score:  
0.06410229  
heart catheterization coronary angiogram history of, score:  
0.03883639  
cardiac catheterization lab and was found, score: 0.015474486

confidence of prediction: 0.629531  
Y\_true: [ 8 16 17 21 24 27 33 35 40 42 46]  
Y\_pred: [ 0 24 27 29 33 36 40 42 46]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
o cad dchf symptomatic bradycardia s, score: 0.36727273  
std thought demand from increased, score: 0.011615622  
s p pacemaker implantation htn renal, score: 0.0048057837

confidence of prediction: 0.971993  
Y\_true: [ 8 16 17 21 24 27 33 35 40 42 46]  
Y\_pred: [ 0 24 27 29 33 36 40 42 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
o cad dchf symptomatic bradycardia s p, score: 0.0050528147  
component chf admitted to the micu, score: 0.0047280733  
an echo was done, score: 0.004560156

confidence of prediction: 0.941515  
Y\_true: [ 8 16 17 21 24 27 33 35 40 42 46]  
Y\_pred: [ 0 24 27 29 33 36 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

hypoxic respiratory failure likely multifactorial, score: 0.32907924  
hypoxia requiring intubation and hypotension, score: 0.07051207  
peep general intubated sedated heent sclera, score: 0.063010916

confidence of prediction: 0.610865  
Y\_true: [ 8 16 17 21 24 27 33 35 40 42 46]  
Y\_pred: [ 0 24 27 29 33 36 40 42 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
peep general intubated sedated heent sclera, score: 0.23868234  
and then intubated and a cvl, score: 0.1289546  
as intubated sedated past, score: 0.04516153

confidence of prediction: 0.712100  
Y\_true: [ 8 16 17 21 24 27 33 35 40 42 46]  
Y\_pred: [ 0 24 27 29 33 36 40 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and then intubated and a cvl, score: 0.05439722  
hypoxia requiring intubation and hypotension requiring, score:  
0.04902892  
peep general intubated sedated heent sclera, score: 0.0393533

confidence of prediction: 0.654808  
Y\_true: [ 8 16 17 21 24 27 33 35 40 42 46]  
Y\_pred: [ 0 24 27 29 33 36 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
was thought sepsis vs, score: 0.14203641  
and thoguht sepsis vs, score: 0.087367594  
vanc and levoquin as, score: 0.046641145

confidence of prediction: 0.925977  
Y\_true: [ 1 16 34]  
Y\_pred: [1]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
q24h levothyroxine sodium mcg po daily, score: 0.033737753  
rll bronchoscopy showed metastatic disease, score: 0.0022228798  
past medical hypothyroidism social history she is, score:  
0.0015808184

confidence of prediction: 0.879053  
Y\_true: [ 1 17 19 26 29]  
Y\_pred: [ 1 19 26 29 33 40]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
discharge hypothyroidism stable the, score: 0.7439364  
klebsiella hypothyroidism biliary stricture, score: 0.023790156  
daily levothyroxine mcg daily omeprazole, score: 0.02207621

confidence of prediction: 0.929268  
Y\_true: [ 1 17 19 26 29]

Y\_pred: [ 1 19 26 29 33 40]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on dialysis who was, score: 0.11525833  
vancomycin with hemodialysis and levofloxacin, score: 0.06518701  
on dialysis esophageal varices, score: 0.059379656

confidence of prediction: 0.965918  
Y\_true: [ 1 17 19 26 29]  
Y\_pred: [ 1 19 26 29 33 40]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
irregularly irregular s1 s2 no, score: 0.7285211  
atrial fibrillation with rvr requiring, score: 0.07751647  
afib status post ablation x2, score: 0.051345948

confidence of prediction: 0.669012  
Y\_true: [ 1 17 19 26 29]  
Y\_pred: [ 1 19 26 29 33 40]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
primary diagnosis pneumonia secondary diagnoses atrial, score:  
0.17309219  
of pneumonia and quickly, score: 0.15593481  
your pneumonia required use, score: 0.060042996

confidence of prediction: 0.912108  
Y\_true: [ 4 20 26 41]  
Y\_pred: [ 4 20 26 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
gerd chronic stable continue, score: 0.040874843  
this time hyperlipidemia chronic stable no medications, score:  
0.020692386  
pmh cholangiocarcinoma recurrent pancreatitis, score: 0.016549643

confidence of prediction: 0.596132  
Y\_true: [ 4 20 26 41]  
Y\_pred: [ 4 20 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
intermittent afib htn hld anxiety r pulmonary, score: 0.115057416  
aspirin hypertension chronic stable no, score: 0.08447107  
with intermittent hyperglycemia was, score: 0.04692468

confidence of prediction: 0.976914  
Y\_true: [ 4 20 26 41]  
Y\_pred: [ 4 20 26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib htn hld anxiety r, score: 0.53920907  
afib currently in regular, score: 0.41520676  
was a pleasure taking care, score: 0.00796943

confidence of prediction: 0.928353  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 11 20 23 24 40 42]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
aura htn hld depression no other, score: 0.3057472  
stenting htn hld and migraines presents as, score: 0.16459532  
clopidogrel htn hld and migraines presented, score: 0.04363865

confidence of prediction: 0.986132  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 11 20 23 24 40 42]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
p stenting htn hld and migraines presents, score: 0.19013737  
htn hld and migraines presented, score: 0.0252202  
54am blood lactate 18am, score: 0.018724848

confidence of prediction: 0.961172  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 11 20 23 24 40 42]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
5a motor arm left, score: 0.00778981  
s p stents on, score: 0.004503128  
of cad s p stenting htn, score: 0.004432242

confidence of prediction: 0.671077  
Y\_true: [ 4 20 24 42]  
Y\_pred: [ 4 11 20 23 24 40 42]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
was intubated with succinylcholine, score: 0.11068166  
general intubated off sedation heent nc, score: 0.06992571  
she was intubated [UNK] was, score: 0.053014003

confidence of prediction: 0.872947  
Y\_true: [ 8 20 23 24 26 27 29 32 42 49]  
Y\_pred: [20 26 27 29 33 40 42 49]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
surgery and radiotherapy hypertension retinal hemorrhage of, score: 0.006619717  
surgery and radiotherapy hypertension history of retinal hemorrhage, score: 0.006619717  
mg hospital11 irbesartan mg, score: 0.0029145116

confidence of prediction: 0.976322  
Y\_true: [ 8 20 23 24 26 27 29 32 42 49]  
Y\_pred: [20 26 27 29 33 40 42 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
fibrillation on coumadin coronary, score: 0.47845402

atrial fibrillation with rapid, score: 0.105424844  
fibrillation was better controlled, score: 0.06462906

confidence of prediction: 0.894529  
Y\_true: [ 8 20 23 24 26 27 29 32 42 49]  
Y\_pred: [20 26 27 29 33 40 42 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure social history retired, score: 0.42015567  
daughter and her husband, score: 0.006031236  
statin congestive heart failure she had cardiomegaly, score:  
0.005513648

confidence of prediction: 0.745112  
Y\_true: [ 8 20 23 24 26 27 29 32 42 49]  
Y\_pred: [20 26 27 29 33 40 42 49]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
of lll pneumonia and left pleural, score: 0.046164177  
of lll pna she was also, score: 0.039176937  
healthcare associated pneumonia please complete, score: 0.031929743

confidence of prediction: 0.647646  
Y\_true: [ 8 20 23 24 26 27 29 32 42 49]  
Y\_pred: [20 26 27 29 33 40 42 49]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was intubated and transfered to hospital1, score: 0.060789634  
became dyspneic she was given, score: 0.010130175  
with unsteadiness vomiting and hypertension, score: 0.009562397

confidence of prediction: 0.648961  
Y\_true: [ 8 20 23 24 26 27 29 32 42 49]  
Y\_pred: [20 26 27 29 33 40 42 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin coronary, score: 0.6153004  
on admission coumadin mg, score: 0.0712566  
and her coumadin induced, score: 0.047466133

confidence of prediction: 0.891067  
Y\_true: [ 1 21 24 29 36]  
Y\_pred: [ 1 20 41]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
admission levothyroxine mcg daily hctz mg, score: 0.09034757  
agitation levothyroxine mcg tablet sig one, score: 0.011828282  
medical history hypothyroidism htn memory loss social, score:  
0.0036989343

confidence of prediction: 0.987460  
Y\_true: [ 8 16 26 48 49]  
Y\_pred: [24 26 49]



top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation otherwise normal rate, score: 0.06340365  
atrial fibrillation a ct scan, score: 0.02251007  
atrial fibrillation on pod he, score: 0.01588587

confidence of prediction: 0.822041  
Y\_true: [ 8 16 26 48 49]  
Y\_pred: [24 26 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
with meals warfarin mg, score: 0.02889057  
his home coumadin was, score: 0.025816286  
continued on coumadin in, score: 0.015751258

confidence of prediction: 0.839249  
Y\_true: [ 0 1 2 4 8 17 29 46 47]  
Y\_pred: [ 1 2 4 6 7 17 20 29 30 33 35 46]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
o2 hypothyroidism anxiety irritable bowel syndrome, score:  
0.31963378  
cessation hypothyroidism continue levothyroxine pending labs none,  
score: 0.08218532  
levothyroxine mcg tablet sig, score: 0.030874781

confidence of prediction: 0.732502  
Y\_true: [ 0 1 2 4 8 17 29 46 47]  
Y\_pred: [ 1 2 4 6 7 17 20 29 30 33 35 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
for diabetes metoprolol succinate, score: 0.050811112  
secondary diabetes mellitus managed by oral, score: 0.019167002  
diabetes mellitus ii oral hypoglycemics, score: 0.009545201

confidence of prediction: 0.897849  
Y\_true: [ 0 1 2 4 8 17 29 46 47]  
Y\_pred: [ 1 2 4 6 7 17 20 29 30 33 35 46]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypoglycemics hypertension hyperlipidemia breast ca lumpectomy in,  
score: 0.08661033  
to discharge hyperlipidemia continued statin gout, score:  
0.058585674

confidence of prediction: 0.763379  
Y\_true: [ 0 1 2 4 8 17 29 46 47]  
Y\_pred: [ 1 2 4 6 7 17 20 29 30 33 35 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous line placement and removal, score: 0.55045766  
in place lungs increased, score: 0.045810092  
5f bp115 hr103 r16 [UNK], score: 0.027937489

confidence of prediction: 0.795660  
Y\_true: [ 0 1 2 4 8 17 29 46 47]  
Y\_pred: [ 1 2 4 6 7 17 20 29 30 33 35 46]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia complicated by, score: 0.08899878  
lobe pna empirically started on, score: 0.076085284  
community acquired pneumonia complicated by, score: 0.047262378

confidence of prediction: 0.722807  
Y\_true: [ 0 1 2 4 8 17 29 46 47]  
Y\_pred: [ 1 2 4 6 7 17 20 29 30 33 35 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
was elevated lactate to, score: 0.15215252  
septic shock presented with shortness, score: 0.08536731  
from sepsis creatinine intially but was, score: 0.07186582

confidence of prediction: 0.814488  
Y\_true: [20]  
Y\_pred: [ 4 20 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
remarkable for htn and migraines who, score: 0.30340734  
cad af dm hld osa seizures migraine, score: 0.19720963  
medical history htn migraines cns, score: 0.15818332

confidence of prediction: 0.711124  
Y\_true: [ 1 8 20 25 32 33]  
Y\_pred: [ 1 6 33]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
down hypothyroidism continued on levothyroxine mcg daily  
hypertension, score: 0.28224522  
prn levothyroxine mcg dialy acetaminophen, score: 0.16102232  
hypertension hypothyroidism mitral regurgitation, score: 0.16036588

confidence of prediction: 0.725410  
Y\_true: [ 1 8 20 25 32 33]  
Y\_pred: [ 1 6 33]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure requiring intubation who, score:  
0.3285468  
respiratory acidosis hypoxia hypercarbia she initially, score:  
0.11697959  
bed cachetic frail elderly, score: 0.027470661

confidence of prediction: 0.909068  
Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]  
Y\_pred: [ 2 4 18 25 26 27 40 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or

unspecified type, not stated as uncontrolled)  
noninsulin dependent diabetes mellitus hypertension dyslipidemia  
restless, score: 0.26106954  
daily glipizide mg twice a, score: 0.005992137

confidence of prediction: 0.974611  
Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]  
Y\_pred: [ 2 4 18 25 26 27 40 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed per, score: 0.4271711  
lotions powders or ointments to, score: 0.20202492  
csru sched chest portable, score: 0.054705806

confidence of prediction: 0.739999  
Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]  
Y\_pred: [ 2 4 18 25 26 27 40 42]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve replacement mm, score: 0.06345766  
revealed mitral regurgitation and she, score: 0.026285505  
failure tricuspid regurgitation mitral regurgitation mitral valve  
replacement tricuspid, score: 0.006163727

confidence of prediction: 0.688734  
Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]  
Y\_pred: [ 2 4 18 25 26 27 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
mitral valve bioprosthetic mitral, score: 0.020098697  
amiodarone mg tablet sig, score: 0.01898601  
csru sched chest portable, score: 0.008430867

confidence of prediction: 0.983844  
Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]  
Y\_pred: [ 2 4 18 25 26 27 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure tricuspid regurgitation mitral, score:  
0.012636591  
systolic heart failure and was admitted, score: 0.0084872255  
systolic heart failure heart failure service was, score:  
0.0084872255

confidence of prediction: 0.845199  
Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]  
Y\_pred: [ 2 4 18 25 26 27 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
however required reintubation on the next, score: 0.10842923  
was shut off on she, score: 0.025239576  
tricuspid annuloplasty ring well, score: 0.0058107874

confidence of prediction: 0.512186

Y\_true: [ 2 6 11 18 25 26 27 35 39 40 42]

Y\_pred: [ 2 4 18 25 26 27 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

however required reintubation on the next, score: 0.029785706

was shut off on she, score: 0.008729173

annuloplasty ring ligation of, score: 0.004666983

confidence of prediction: 0.912919

Y\_true: [ 5 14 20 24 27]

Y\_pred: [15 20 24 27 38]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

bms was deployed she, score: 0.06472143

fatigue stemi major surgical, score: 0.042619966

a child hypertension social history tobacco, score: 0.025214346

confidence of prediction: 0.996949

Y\_true: [ 5 14 20 24 27]

Y\_pred: [15 20 24 27 38]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

single vessel cad s p bms to, score: 0.08519141

coronary artery disease acute, score: 0.062303293

vessel coronary artery disease the, score: 0.0415303

confidence of prediction: 0.984912

Y\_true: [ 5 14 20 24 27]

Y\_pred: [15 20 24 27 38]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

showed systolic chf with ef pt was, score: 0.023458892

shock was able to, score: 0.01578134

pump better atorvastatin lipitor, score: 0.010081098

confidence of prediction: 0.505484

Y\_true: [17 34]

Y\_pred: [17 34]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

flush per picc line care protocol disp, score: 0.13188483

post ictal examinations serial, score: 0.037498824

migraine headache gerd s p lt craniotomy, score: 0.021195311

confidence of prediction: 0.876336

Y\_true: [17 34]

Y\_pred: [17 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

migraine headache gerd s p lt craniotomy, score: 0.044080522

and has gerd her paternal grandfather, score: 0.033354152

protracted post ictal examinations serial, score: 0.011004698

confidence of prediction: 0.577510  
Y\_true: [ 3 20 34]  
Y\_pred: [ 3 20]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
medical history hyperchol htn reflux social history social, score: 0.12780394  
was surgically drained by plastics and, score: 0.002770767  
fractures l1 compression fractures left, score: 0.0018721541

confidence of prediction: 0.995565  
Y\_true: [ 3 20 34]  
Y\_pred: [ 3 20]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
eventually was talked into it he, score: 0.18171701  
history hyperchol htn reflux social history social, score: 0.14935578  
service has met with, score: 0.018443415

confidence of prediction: 0.952799  
Y\_true: [ 4 21 26 27 36]  
Y\_pred: [ 4 20 26 27]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hyperlipidemia continued home simvastatin bph, score: 0.1537677  
avr htn hyperlipidemia osa not on, score: 0.11241041  
repair hypertension hyperlipidemia obstructive sleep apnea, score: 0.040156517

confidence of prediction: 0.942155  
Y\_true: [ 4 21 26 27 36]  
Y\_pred: [ 4 20 26 27]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation with a mean, score: 0.35576355  
atrial fibrillation status post pacemaker, score: 0.15850696  
af of which he, score: 0.030069066

confidence of prediction: 0.841398  
Y\_true: [ 4 21 26 27 36]  
Y\_pred: [ 4 20 26 27]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chf the patient has three, score: 0.26064718  
cardiac pmi located in, score: 0.063822456  
status post bovine prosthetic, score: 0.018849777

confidence of prediction: 0.993323  
Y\_true: [12 41 43]  
Y\_pred: [12 17 29 33 41 43]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
bronchoscopy with bal bronchus intermedius bal and rll bal with left

bal performed, score: 0.030514278  
pneumonia bal cultures were, score: 0.013564164  
from sputum bal showed, score: 0.012946787

confidence of prediction: 0.933879  
Y\_true: [12 41 43]  
Y\_pred: [12 17 29 33 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tube feeds were held, score: 0.14401694  
tracheostomy tube whose tip, score: 0.056909442  
his tube feedings were resumed, score: 0.04650797

confidence of prediction: 0.967126  
Y\_true: [12 41 43]  
Y\_pred: [12 17 29 33 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
trach and ivc filter, score: 0.04553072  
from sputum bal showed mssa additionally, score: 0.03853666  
bronchus intermedius bal and, score: 0.037453067

confidence of prediction: 0.640411  
Y\_true: [ 4 26 41]  
Y\_pred: [ 2 4 20 26 34 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
type dm hyperlipidemia glaucoma spinal stenosis gerd, score:  
0.08153508  
recent hypotension hyperlipidemia continued simvastatin glaucoma  
continued, score: 0.049168006  
squamous cell carcinoma of, score: 0.034653526

confidence of prediction: 0.970361  
Y\_true: [ 4 26 41]  
Y\_pred: [ 2 4 20 26 34 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib he was given, score: 0.20168355  
fibrillation the diarrhea stopped, score: 0.12529255  
afib resolved with iv, score: 0.09739246

confidence of prediction: 0.886415  
Y\_true: [ 4 26 41]  
Y\_pred: [ 2 4 20 26 34 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
until tube feeds restarted, score: 0.14184263  
tube feeds given timing, score: 0.124327175  
tube feeds so the, score: 0.098559245

confidence of prediction: 0.947643  
Y\_true: [ 0 2 8 16 26 27 28 33 40 43 45 46]

Y\_pred: [17 26 27 44 45]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on he was, score: 0.3695613  
afib recently at lgh, score: 0.14581536  
atrial fibrillation patient was diagnosed, score: 0.13773197

confidence of prediction: 0.931245  
Y\_true: [ 0 2 8 16 26 27 28 33 40 43 45 46]  
Y\_pred: [17 26 27 44 45]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
amiodarone was discontinued acute, score: 0.009766777  
grade diastolic dysfunction nl rv, score: 0.008062634  
amiodarone now resolved chronic diastolic congestive heart failure  
benign hypertension bph, score: 0.0076405364

confidence of prediction: 0.959975  
Y\_true: [ 0 2 8 16 26 27 28 33 40 43 45 46]  
Y\_pred: [17 26 27 44 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
prn tpn per nutrition home medications, score: 0.015969677  
started on tpn in the setting, score: 0.00413121  
started on tpn at the osh, score: 0.00413121

confidence of prediction: 0.702038  
Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]  
Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
disease diabetes mellitus type hypercholesterolemia hyperthyroidism,  
score: 0.023963157  
daily glipizide xl mg daily imdur, score: 0.02312908  
metformin attending first name3, score: 0.008097969

confidence of prediction: 0.581466  
Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]  
Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
full rom x no, score: 0.010956527  
mellitus type hypercholesterolemia hyperthyroidism treated with  
radioactive, score: 0.008195652  
mellitus type hypercholesterolemia hyperthyroidism s p ablative,  
score: 0.008195652

confidence of prediction: 0.781031  
Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]  
Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
continued via dobhoff tube a swallowing, score: 0.024637604

resolved a picc line was placed for, score: 0.023091324  
recommendations she required reintubation, score: 0.011898413

confidence of prediction: 0.854313

Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]

Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]

top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders on, score: 0.85851616  
cardiothoracic allergies metformin attending, score: 0.01982309  
amiodarone was changed to, score: 0.0051925024

confidence of prediction: 0.788839

Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]

Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p pda stent aortic, score: 0.36083534  
coronary artery disease s p pda stent mitral, score: 0.032798737  
this revealed critical aortic, score: 0.020068578

confidence of prediction: 0.812936

Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]

Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation postoperative respiratory failure, score:  
0.18343282  
amiodarone was continued she, score: 0.16547848  
amiodarone mg tablet sig, score: 0.019021587

confidence of prediction: 0.603900

Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]

Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
to multifocal pneumonia moderate partially, score: 0.07781281  
abx for pna ards and, score: 0.045256145  
urinary tract infection was treated, score: 0.024792345

confidence of prediction: 0.922757

Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]

Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a urinary tract infection was treated, score: 0.053887732  
hypothyroidism depression urinary tract infection postoperative,  
score: 0.014264108  
returning home she was, score: 0.0058940076

confidence of prediction: 0.696527

Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]

Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]

top three important windows for true positive code 40 (96.04:



Insertion of endotracheal tube)  
she required reintubation and pressors support, score: 0.28241292  
oral formulation bronchoscopy was performed, score: 0.037578285  
spared lung parenchyma based upon correlation, score: 0.0041393195

confidence of prediction: 0.759523  
Y\_true: [ 2 3 11 12 16 17 18 21 24 26 29 35 36 37 39 40 41 43]  
Y\_pred: [ 1 2 3 17 18 24 25 26 29 37 40 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
weekend tube feeds continued via, score: 0.19169602  
removed tube feedings were instituted she remained, score:  
0.08269216  
she required reintubation and pressors support, score: 0.021709051

confidence of prediction: 0.862610  
Y\_true: [ 5 28]  
Y\_pred: [ 5 7 44]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
infection [UNK] hyponatremia most likely secondary to, score:  
0.74649817  
recorded as having no, score: 0.047995526  
awaiting stem cell protocol at, score: 0.0350699

confidence of prediction: 0.874087  
Y\_true: [28 35]  
Y\_pred: [ 7 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
otherwise normal egd to, score: 0.23951003  
endoscopy paracentesis history of, score: 0.1880004  
was performed which was, score: 0.16962458

confidence of prediction: 0.984909  
Y\_true: [ 4 23 24 26 33 40 41 42 47]  
Y\_pred: [24 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stenting months, score: 0.47290024  
s p bms bladder, score: 0.14381918  
lad lesion with an ostial d1, score: 0.08747725

confidence of prediction: 0.994177  
Y\_true: [ 4 13 14 17 18 20 22 24 26 34 38]  
Y\_pred: [13 18 22 24 26 34 37]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x4 with, score: 0.24813662  
coronary artery reverse saphenous vein single, score: 0.07355674  
coronary artery reverse saphenous vein from, score: 0.07355674

confidence of prediction: 0.985101  
Y\_true: [ 4 13 14 17 18 20 22 24 26 34 38]

Y\_pred: [13 18 22 24 26 34 37]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

bypass grafting x4 with left, score: 0.05348148

wires was attempted and, score: 0.04522064

bypass grafting times x4 left, score: 0.009239321

confidence of prediction: 0.507578

Y\_true: [ 4 13 14 17 18 20 22 24 26 34 38]

Y\_pred: [13 18 22 24 26 34 37]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

to have nstemi was taken for, score: 0.080172464

vessel coronary disease on he, score: 0.023427716

from the anesthesiology staff using, score: 0.009111163

confidence of prediction: 0.999439

Y\_true: [ 4 13 14 17 18 20 22 24 26 34 38]

Y\_pred: [13 18 22 24 26 34 37]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting, score: 0.34109104

coronary artery reverse saphenous, score: 0.088827364

coronary artery reverse saphenous, score: 0.071022555

confidence of prediction: 0.903073

Y\_true: [ 4 13 14 17 18 20 22 24 26 34 38]

Y\_pred: [13 18 22 24 26 34 37]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation it was treated, score: 0.15534866

atrial fibrillation flutter overdrive pacing, score: 0.0746516

afib first draw results, score: 0.037475765

confidence of prediction: 0.846696

Y\_true: [ 4 13 14 17 18 20 22 24 26 34 38]

Y\_pred: [13 18 22 24 26 34 37]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

hyperlipidemia gastroesophageal reflux disease benign positional,

score: 0.041983802

gastro esophageal reflux disease benign positional, score:

0.023958126

his usual gerd but it did not, score: 0.0067638475

confidence of prediction: 0.895498

Y\_true: [ 4 20 41 47]

Y\_pred: [ 4 26 35 45]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

on coumadin hypertension hyperlipidemia anxiety r pulmonary nodule,  
score: 0.0135414535

x3 surgeries social history, score: 0.007107198

with focal chronic inactive duodenitis eight lymph, score:

0.0040202835

confidence of prediction: 0.995414

Y\_true: [20]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn social history lives in, score: 0.19055237

hypertension based on outpatient, score: 0.07559119

hypertension presenting with a, score: 0.07336995

confidence of prediction: 0.870633

Y\_true: [ 2 4 20 48]

Y\_pred: [ 2 4 20 48]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

daily metformin mg tablet sig, score: 0.12368843

medical history dm htn hyperlipidemia s p, score: 0.05478553

day glyburide mg tablet sig, score: 0.017282166

confidence of prediction: 0.727025

Y\_true: [ 2 4 20 48]

Y\_pred: [ 2 4 20 48]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

dm htn hyperlipidemia s p cva s p cabg s p appendectomy, score: 0.05685457

simvastatin mg tablet sig, score: 0.05200825

carvedilol mg tablet sig, score: 0.039452232

confidence of prediction: 0.961090

Y\_true: [ 2 4 20 48]

Y\_pred: [ 2 4 20 48]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

history dm htn hyperlipidemia s p cva, score: 0.22357276

bilateral sdh evacuation via burr holes, score: 0.05623142

metformin mg tablet sig, score: 0.030705677

confidence of prediction: 0.542542

Y\_true: [ 2 4 20 48]

Y\_pred: [ 2 4 20 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg s p appendectomy, score: 0.74207103

dm htn hyperlipidemia s, score: 0.011051449

l however sl increase in hematoma, score: 0.007348662

confidence of prediction: 0.569237

Y\_true: [ 2 4 8 10 11 37]

Y\_pred: [ 2 4 11 20]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or

unspecified type, not stated as uncontrolled)  
on metformin lantus and riss close, score: 0.07047178  
type dm on insulin, score: 0.05519575  
type dm she was continued, score: 0.047828916

confidence of prediction: 0.806391  
Y\_true: [ 2 4 8 10 11 37]  
Y\_pred: [ 2 4 11 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension depression hyperlipidemia mild dementia discharge,  
score: 0.15524244  
on steroids hyperlipidemia continued atorvastatin chronic low,  
score: 0.04558391  
female breathing comfortably on, score: 0.017160071

confidence of prediction: 0.770104  
Y\_true: [ 2 4 8 10 11 37]  
Y\_pred: [ 2 4 11 20]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
insulin htn depression s p aortic, score: 0.11075228  
and morphine depression continued [UNK] dementia continued, score:  
0.075510144  
uncomplicated hypertension depression hyperlipidemia mild dementia  
discharge, score: 0.035965916

confidence of prediction: 0.757072  
Y\_true: [ 0 2 4 17 29 33 35 39 43 45 46]  
Y\_pred: [ 1 20 34 40 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
the tpn please follow up, score: 0.18223877  
care tpn and monitoring, score: 0.145108  
monitoring tpn outpatient lab, score: 0.13170215

confidence of prediction: 0.822389  
Y\_true: [ 2 4 6 12 26 29 30 49]  
Y\_pred: [ 2 4 20 26 30 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
metformin mg hospital1 gemfibrozil, score: 0.103596084  
metformin mg tablet sig, score: 0.052301526  
dm2 htn copd hl lung, score: 0.052068092

confidence of prediction: 0.832103  
Y\_true: [ 2 4 6 12 26 29 30 49]  
Y\_pred: [ 2 4 20 26 30 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
o2 tank hyperlipidemia we continued his home, score: 0.124755844  
htn copd hl lung cancer s, score: 0.095913574  
actual pred chg fvc fev1 mmf, score: 0.009794106

confidence of prediction: 0.844370  
Y\_true: [ 2 4 6 12 26 29 30 49]  
Y\_pred: [ 2 4 20 26 30 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib in the bronchoscopy, score: 0.34358156  
atrial fibrillation patient found to, score: 0.111097336  
atrial fibrillation rate controlled with, score: 0.020024264

confidence of prediction: 0.544417  
Y\_true: [ 2 4 6 12 26 29 30 49]  
Y\_pred: [ 2 4 20 26 30 49]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
in house copd patient found to have, score: 0.099062346  
cancer and copd ipratropium, score: 0.016541235  
dm2 htn copd hl lung cancer s, score: 0.012303332

confidence of prediction: 0.611696  
Y\_true: [ 2 4 6 12 26 29 30 49]  
Y\_pred: [ 2 4 20 26 30 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
ago on coumadin h, score: 0.25705716  
on admission warfarin mg, score: 0.21225104  
pes on coumadin who presented, score: 0.15405656

confidence of prediction: 0.948953  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
myocardial infarction hyperlipidemia hypertension chronic renal insufficiency, score: 0.07269216  
cabg cerebrovascular disease carotid, score: 0.011879695  
left cea hypertension dyslipidemia abdominal aortic aneurysm, score: 0.01136787

confidence of prediction: 0.819885  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 6 (276.2: Acidosis)  
a profound metabolic acidosis which kept, score: 0.015709722  
placement of tunneled french, score: 0.012719865  
and sedated in critical, score: 0.012488016

confidence of prediction: 0.907707  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass grafting along with, score: 0.13297267

coronary artery bypass grafting utilizing the, score: 0.060517825  
coronary artery bypass grafting surgery but, score: 0.056609694

confidence of prediction: 0.970779  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
requiring dialysis discharge condition, score: 0.039261967  
on a tunneled line was placed in, score: 0.008448941  
placement of tunneled french, score: 0.008258688

confidence of prediction: 0.689221  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic renal insufficiency the exact, score: 0.106350556  
hypertension chronic renal insufficiency renal artery stenosis,  
score: 0.034919694  
his renal function improved with, score: 0.017265325

confidence of prediction: 0.964631  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg cerebrovascular, score: 0.1515704  
coronary artery disease he, score: 0.14428589  
coronary artery disease prior silent myocardial infarction  
hyperlipidemia, score: 0.05922051

confidence of prediction: 0.874205  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with a rapid, score: 0.53880495  
af would convert to, score: 0.010507188  
amiodarone and diltiazem was initiated, score: 0.010328601

confidence of prediction: 0.813372  
Y\_true: [ 4 6 13 19 21 23 24 26 35 36 42]  
Y\_pred: [ 4 6 13 18 19 21 24 26 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal insufficiency the exact, score: 0.11702227  
chronic renal insufficiency renal artery stenosis, score:  
0.026265847  
his renal function improved with, score: 0.014648927

confidence of prediction: 0.976205  
Y\_true: [ 0 4 9 20 31 47]

Y\_pred: [ 4 9 20 25 31]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
chronic issues hyperlipidemia held simvastatin in setting, score:  
0.04405862  
hld carotid stenosis s, score: 0.02268526  
hypertension hyperlipidemia social history lives with, score:  
0.022623464

confidence of prediction: 0.760802  
Y\_true: [ 0 4 9 20 31 47]  
Y\_pred: [ 4 9 20 25 31]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
by discharge thrombocytopenia improved to 122k chronic, score:  
0.22554877  
leukopenia and thrombocytopenia as, score: 0.09356093  
his leukopenia thrombocytopenia mildly, score: 0.08889321

confidence of prediction: 0.700897  
Y\_true: [ 0 4 9 20 31 47]  
Y\_pred: [ 4 9 20 25 31]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
elevated ldh malaise and, score: 0.19356425  
carotid endarterectomy htn hld presented with a, score: 0.13160568  
statin virus ebv or, score: 0.046634074

confidence of prediction: 0.951366  
Y\_true: [ 0 4 9 20 31 47]  
Y\_pred: [ 4 9 20 25 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
an aspiration pneumonia and are, score: 0.28693694  
aspiration pneumonia he was transferred, score: 0.15157278  
likely aspiration pna the patient reported, score: 0.11171599

confidence of prediction: 0.919456  
Y\_true: [ 4 8 13 14 18 20 22 24 26 38 44 49]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pmh hypertension hyperlipidemia s p tonsillectomy, score: 0.06587842  
history hypertension hyperlipidemia s p tonsillectomy, score:  
0.062251043  
hypertension and hyperlipidemia who presented to, score: 0.05399966

confidence of prediction: 0.990711  
Y\_true: [ 4 8 13 14 18 20 22 24 26 38 44 49]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting, score: 0.23589186  
marginal artery reverse saphenous vein, score: 0.057393488

descending artery reverse saphenous vein, score: 0.049318302

confidence of prediction: 0.974624

Y\_true: [ 4 8 13 14 18 20 22 24 26 38 44 49]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic doctor first name, score: 0.37605792

bypass grafting x four post, score: 0.06903001

cardiothoracic allergies patient recorded, score: 0.02520087

confidence of prediction: 0.997714

Y\_true: [ 4 8 13 14 18 20 22 24 26 38 44 49]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hctz asa lovaza simvastatin, score: 0.15805043

medical history hypertension hyperlipidemia s p tonsillectomy,  
score: 0.072356164

fibrillation pmh hypertension hyperlipidemia s p tonsillectomy,  
score: 0.055738714

confidence of prediction: 0.999068

Y\_true: [ 4 8 13 14 18 20 22 24 26 38 44 49]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass grafting, score: 0.29786298

descending artery reverse saphenous, score: 0.12554716

coronary artery disease s, score: 0.063059516

confidence of prediction: 0.950755

Y\_true: [ 4 8 13 14 18 20 22 24 26 38 44 49]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation pmh hypertension hyperlipidemia, score:  
0.43139848

irreg irreg sternum stable incision, score: 0.1277816

atrial fibrillation which were treated, score: 0.10422276

confidence of prediction: 0.561650

Y\_true: [ 7 19 23 24]

Y\_pred: [ 7 19 23 24 28]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

bleeding after ampullectomy the pancreatic, score: 0.39396852

showed enlarged ampulla with, score: 0.09995742

of gastroenterology gi east, score: 0.051583968

confidence of prediction: 0.898905

Y\_true: [ 7 19 23 24]

Y\_pred: [ 7 19 23 24 28]

top three important windows for true positive code 19 (39.95:



Hemodialysis)

esrd on hd ampullary, score: 0.08747221

esrd on hd m w, score: 0.0869985

he received hemodialysis twice while, score: 0.08422852

confidence of prediction: 0.692842

Y\_true: [ 7 19 23 24]

Y\_pred: [ 7 19 23 24 28]

top three important windows for true positive code 23 (412: Old myocardial infarction)

s p mi x esrd, score: 0.4306134

prostatectomy in cad s p mi x with des to, score: 0.01523171

patient had mi and des was placed, score: 0.0065696966

confidence of prediction: 0.703116

Y\_true: [ 7 19 23 24]

Y\_pred: [ 7 19 23 24 28]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

s p mi x esrd, score: 0.11240717

coronary artery disease end, score: 0.07893197

in cad s p mi x with des to, score: 0.07089127

confidence of prediction: 0.840814

Y\_true: [25 26 27 30 39 48]

Y\_pred: [ 4 13 20 24 26 27 39 48]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib flutter with bp in, score: 0.5370369

afib prior to initiating, score: 0.09746835

atrial flutter ablation on hospital, score: 0.052034948

confidence of prediction: 0.963932

Y\_true: [25 26 27 30 39 48]

Y\_pred: [ 4 13 20 24 26 27 39 48]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

systolic congestive heart failure secondary diagnosis coronary artery, score: 0.027430566

diuresed lasix 20mg po on, score: 0.018880785

yourself every morning call, score: 0.0070138285

confidence of prediction: 0.664914

Y\_true: [25 26 27 30 39 48]

Y\_pred: [ 4 13 20 24 26 27 39 48]

top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)

tee were done and, score: 0.6188079

descending saphenous vein graft to, score: 0.05698429

obtuse marginal artery and ramus, score: 0.038601615

confidence of prediction: 0.742715

Y\_true: [25 26 27 30 39 48]

Y\_pred: [ 4 13 20 24 26 27 39 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg vessel bypass in, score: 0.18267

s p cabg in, score: 0.18267

coronary artery bypass graft, score: 0.03511876

confidence of prediction: 0.930698

Y\_true: [11 34 49]

Y\_pred: [34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

the rvot by color, score: 0.0024035203

continued he underwent an, score: 0.0011629062

into the rvot cm, score: 0.0009673189

confidence of prediction: 0.767032

Y\_true: [ 2 4 20 23 26 27 30 35 41 43 47 49]

Y\_pred: [ 2 4 20 22 26 27 29 33 34 40 42 49]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

noninsulin dependent diabetes mellitus questionable history of,  
score: 0.21766022

admission glucotrol xl mg tablet extended, score: 0.07918095

2l home dm2 gerd htn hld, score: 0.016937641

confidence of prediction: 0.678473

Y\_true: [ 2 4 20 23 26 27 30 35 41 43 47 49]

Y\_pred: [ 2 4 20 22 26 27 29 33 34 40 42 49]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

factors diabetes dyslipidemia hypertension cardiac history atrial,  
score: 0.27383533

gerd htn hld cad s p nstemi, score: 0.05364972

valve area cabg n, score: 0.019427815

confidence of prediction: 0.916115

Y\_true: [ 2 4 20 23 26 27 30 35 41 43 47 49]

Y\_pred: [ 2 4 20 22 26 27 29 33 34 40 42 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

dm2 gerd htn hld cad s p, score: 0.4350232

hospital1 aaa infrarenal evaluated, score: 0.04954447

end stage copd on, score: 0.04723088

confidence of prediction: 0.988698

Y\_true: [ 2 4 20 23 26 27 30 35 41 43 47 49]

Y\_pred: [ 2 4 20 22 26 27 29 33 34 40 42 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

af on coumadin who is, score: 0.059953004

atrial fibrillation on coumadin congestive, score: 0.050497722

atrial fibrillation on coumadin coumadin was, score: 0.0099704545

confidence of prediction: 0.947564  
Y\_true: [ 2 4 20 23 26 27 30 35 41 43 47 49]  
Y\_pred: [ 2 4 20 22 26 27 29 33 34 40 42 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf exacerbation bnp in, score: 0.35670555  
chf with likely multifactorial, score: 0.11917084  
chf the patient improved on, score: 0.07477004

confidence of prediction: 0.734595  
Y\_true: [ 2 4 20 23 26 27 30 35 41 43 47 49]  
Y\_pred: [ 2 4 20 22 26 27 29 33 34 40 42 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin coumadin was held and, score: 0.3695571  
for insomnia warfarin mg, score: 0.004354933  
atrial fibrillation on coumadin congestive, score: 0.002376042

confidence of prediction: 0.912736  
Y\_true: [ 2 4 8 11 18 20 26 39]  
Y\_pred: [ 2 4 18 20 26]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hyperlipidemia diabetes mellitus diet controlled spinal, score:  
0.021237738  
hypertension hyperlipidemia diabetes type depression s p, score:  
0.0036378247  
pole dry sterile dressing, score: 0.0028992428

confidence of prediction: 0.832615  
Y\_true: [ 2 4 8 11 18 20 26 39]  
Y\_pred: [ 2 4 18 20 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
appendage hypertension hyperlipidemia diabetes type depression s,  
score: 0.08034122  
fibrillation hypertension hyperlipidemia diabetes mellitus diet  
controlled, score: 0.026404992  
sl prn coumadin as, score: 0.0075848117

confidence of prediction: 0.978784  
Y\_true: [ 2 4 8 11 18 20 26 39]  
Y\_pred: [ 2 4 18 20 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.3466927  
lotions powders or ointments to, score: 0.1513706  
avr maze reason for, score: 0.008531954

confidence of prediction: 0.861166  
Y\_true: [ 2 4 8 11 18 20 26 39]  
Y\_pred: [ 2 4 18 20 26]  
top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)  
isosorbide mononitrate 30mg qd lopressor, score: 0.12171859  
atrial fibrillation hypertension hyperlipidemia diabetes mellitus  
diet, score: 0.051128298  
atrial appendage hypertension hyperlipidemia diabetes type  
depression, score: 0.04365911

confidence of prediction: 0.958808  
Y\_true: [ 2 4 8 11 18 20 26 39]  
Y\_pred: [ 2 4 18 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation on post op, score: 0.1660821  
atrial fibrillation s p maze, score: 0.11352233  
atrial fibrillation hypertension hyperlipidemia diabetes, score:  
0.0818393

confidence of prediction: 0.692857  
Y\_true: [ 5 17 20 40 41 42 47]  
Y\_pred: [ 5 20]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
due to hyponatremia keppra was given for, score: 0.17208953  
had transient hyponatremia thought to be due, score: 0.088792205  
tabs hyponatremia resolved mr known lastname, score: 0.0066352733

confidence of prediction: 0.872005  
Y\_true: [ 5 17 20 40 41 42 47]  
Y\_pred: [ 5 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
intracranial bleed hypertension thyroid, score: 0.120298214  
abuse htn copd and aortic regurgitation, score: 0.08964876  
hctz his hctz was changed to, score: 0.035232317

confidence of prediction: 0.762039  
Y\_true: [ 4 15 21 24 27 36 38]  
Y\_pred: [ 4 21 24 27 36 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors diabetes dyslipidemia hypertension cardiac history cabg,  
score: 0.20517422  
in hypertension hyperlipidemia presenting to hospital3, score:  
0.07182259  
of hypertension hyperlipidemia and cad s, score: 0.047646463

confidence of prediction: 0.618643  
Y\_true: [ 4 15 21 24 27 36 38]  
Y\_pred: [ 4 21 24 27 36 38]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic renal failure creatinine on discharge, score: 0.066408314  
renal function checked at, score: 0.02070241

beverage every night illicit, score: 0.009190123

confidence of prediction: 0.965614

Y\_true: [ 4 15 21 24 27 36 38]

Y\_pred: [ 4 21 24 27 36 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease the, score: 0.092519894

three vessel coronary artery disease successful pci of, score:  
0.030853156

and cad s p des to, score: 0.019283997

confidence of prediction: 0.979958

Y\_true: [ 4 15 21 24 27 36 38]

Y\_pred: [ 4 21 24 27 36 38]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic heart failure arrhythmia ventricular tachycardia, score:  
0.6574529

chf exacerbation most likely, score: 0.083860174

diastolic congestive heart failure echo demonstrated, score:  
0.07179942

confidence of prediction: 0.757450

Y\_true: [ 4 15 21 24 27 36 38]

Y\_pred: [ 4 21 24 27 36 38]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic renal failure creatinine on discharge, score: 0.06825556

he does acknowledge dietary indiscretions including salty meals and,  
score: 0.0102093415

kidney function checked because, score: 0.007817248

confidence of prediction: 0.709510

Y\_true: [ 4 15 21 24 27 36 38]

Y\_pred: [ 4 21 24 27 36 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac cath history of present, score: 0.67019457

cardiac catheterization which demonstrated cad, score: 0.056764413

catheterization patient to have, score: 0.015309438

confidence of prediction: 0.897202

Y\_true: [ 8 9 20 34]

Y\_pred: [20 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

htn held lisinopril given, score: 0.28465956

medical history hypertension gerd s p, score: 0.12803021

pt was called on, score: 0.10149204

confidence of prediction: 0.928210

Y\_true: [ 8 9 20 34]

Y\_pred: [20 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
history hypertension gerd s p ccy s, score: 0.044744615  
mild central peribiliary and extrahepatic bile duct, score:  
0.005945075  
recurrent stones even post cholecystectomy, score: 0.0050116214

confidence of prediction: 0.940407  
Y\_true: [10 11 20 34]  
Y\_pred: [34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
aspirin 325mg gerd continued famotidine icu course, score:  
0.06546515  
citalopram and trazodone patient unsure, score: 0.0022616505  
symptom management her primary, score: 0.0021127393

confidence of prediction: 0.563957  
Y\_true: [17 40 42]  
Y\_pred: [17 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
pupillary reflex which resolved after, score: 0.023424365  
fixated with plate and, score: 0.014837318  
subdural and subarachnoid hematomas, score: 0.012574448

confidence of prediction: 0.919145  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
qd hypothyroidism continued levothyroxine 75mg qd medications,  
score: 0.09196303  
hospital1 levothyroxine mcg tablet omeprazole prilosec, score:  
0.05248625  
pill levothyroxine mcg tablet sig, score: 0.0042480906

confidence of prediction: 0.508768  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization history of present, score: 0.18870792  
lab catheterization showed an occluded, score: 0.110837534  
comments selective coronary angiography in, score: 0.08505627

confidence of prediction: 0.995000  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
descending artery occlusion atrial fibrillation, score: 0.15481962  
coronary artery disease the, score: 0.0981157  
coronary artery disease echo, score: 0.0981157

confidence of prediction: 0.946233  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with rapid ventricular, score: 0.03445519  
atrial fibrillation while you were, score: 0.031191453  
atrial fibrillation developed afib with rvr on, score: 0.009553532

confidence of prediction: 0.894685  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chronic diastolic chf no stress available, score: 0.23632263  
chf patient with lvef of, score: 0.08617517  
dysfunction with near akinesis, score: 0.023697665

confidence of prediction: 0.896635  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
continued spiriva albuterol and, score: 0.012111281  
hearing loss gerd s p appy s, score: 0.010272195  
branch and attempted [UNK], score: 0.00959612

confidence of prediction: 0.836949  
Y\_true: [ 1 3 14 24 26 27 34 38]  
Y\_pred: [ 1 14 22 24 26 27 34 38 49]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.43530443  
comments selective coronary angiography in, score: 0.08344472  
lab catheterization showed an, score: 0.08156928

confidence of prediction: 0.918332  
Y\_true: [20 34 41 47]  
Y\_pred: [29 33 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tube feeds isosource cal full strength, score: 0.10240146  
a tracheostomy peg tube placed on, score: 0.07457044  
the tube feed schedule he, score: 0.055110447

confidence of prediction: 0.887780  
Y\_true: [ 4 20 24 27 30]  
Y\_pred: [ 4 20 30]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
with htn hld cad with previous, score: 0.44829264  
50mg hospital1 simvastatin 40mg hs albuterol puffs, score:  
0.08667816

hld diverticulosis bph old left, score: 0.028565371

confidence of prediction: 0.993509

Y\_true: [ 4 20 24 27 30]

Y\_pred: [ 4 20 30]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

rhm with htn hld cad, score: 0.206763

pmh of htn lipids cad was transfered from, score: 0.16371931

medical history htn cad s p acs, score: 0.056622706

confidence of prediction: 0.714327

Y\_true: [ 4 20 24 27 30]

Y\_pred: [ 4 20 30]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)

acs chf copd on home o2 1l, score: 0.017242635

previous mi copd on home o2 due, score: 0.0017765281

mri study secondary to, score: 0.00102967

confidence of prediction: 0.909307

Y\_true: [ 3 20 33 34 37 40 42 46 47]

Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

controlled dm2 htn and le neuropathy, score: 0.08883654

diabetes mellitus hypertension gastroesophageal, score: 0.06894989

htn gerd and le, score: 0.05975157

confidence of prediction: 0.901250

Y\_true: [ 3 20 33 34 37 40 42 46 47]

Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

intubated with presumed sepsis, score: 0.23667726

intubated for airway protection, score: 0.07801794

endotracheal tube ends approximately cm, score: 0.05158119

confidence of prediction: 0.847357

Y\_true: [ 3 20 33 34 37 40 42 46 47]

Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

htn gerd and le neuropathy being, score: 0.21244897

hypertension gastroesophageal reflux discharge condition mental,  
score: 0.039082795

extremity neuropathy gerd social history lives alone, score:  
0.023087822

confidence of prediction: 0.915086

Y\_true: [ 3 20 33 34 37 40 42 46 47]

Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)



from uti and pneumonia patient was, score: 0.10726303  
a urinary tract infection and treated, score: 0.05293654  
diagnosis urinary tract infection community acquired, score:  
0.040665332

confidence of prediction: 0.820646  
Y\_true: [ 3 20 33 34 37 40 42 46 47]  
Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
puncture intubation extubation history of, score: 0.5283351  
dosing intubated for airway protection, score: 0.023373567  
the micu intubated with presumed, score: 0.018251477

confidence of prediction: 0.866590  
Y\_true: [ 3 20 33 34 37 40 42 46 47]  
Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
puncture intubation extubation history of, score: 0.5745544  
sedated intubated heent sclera, score: 0.1248998  
dosing intubated for airway protection, score: 0.017973319

confidence of prediction: 0.605226  
Y\_true: [ 3 20 33 34 37 40 42 46 47]  
Y\_pred: [ 0 2 20 29 33 34 37 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
and underwent a temporal, score: 0.05632126  
with presumed sepsis active diagnoses sepsis with hypotension from  
uti, score: 0.048787452  
patient had central line, score: 0.04086246

confidence of prediction: 0.669510  
Y\_true: [ 5 10 17 49]  
Y\_pred: [33 40 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
was on coumadin at home prior, score: 0.4392951  
was on coumadin as outpatient but, score: 0.4392951  
valium flexeril coumadin on hold, score: 0.024179753

confidence of prediction: 0.991638  
Y\_true: [ 0 20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
colitis itp hypertension admitted to the, score: 0.087276086  
colitis diverticulitis hypertension social history lives, score:  
0.027173076  
idiopathic thrombocytopenia purpura hypertension history of  
collagenous, score: 0.014678832

confidence of prediction: 0.602207  
Y\_true: [ 0 20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
thrombocytopenia at baseline with, score: 0.03792156  
daily prn paroxetine mg, score: 0.021704273  
hypertension physical exam admission, score: 0.02022889

confidence of prediction: 0.704202  
Y\_true: [ 4 20 23 28 32 48]  
Y\_pred: [ 4 20 27 44 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
were continued hyperlipidemia statin was continued bph, score:  
0.13161121  
disease hypertension hyperlipidemia discharge condition stable,  
score: 0.100277066  
angioplasty hypertension hyperlipidemia cardiac cath ef, score:  
0.04674573

confidence of prediction: 0.985217  
Y\_true: [ 4 20 23 28 32 48]  
Y\_pred: [ 4 20 27 44 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
replacement angioplasty hypertension hyperlipidemia, score:  
0.6516019  
artery disease hypertension hyperlipidemia discharge condition  
stable, score: 0.037854515  
improved clinically hypertension labetalol, score: 0.022175718

confidence of prediction: 0.726819  
Y\_true: [ 4 20 23 28 32 48]  
Y\_pred: [ 4 20 27 44 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
x vessel cabg polio left hip, score: 0.37354255  
status post bypass surgery, score: 0.02424334  
asa and plavix were, score: 0.003936807

confidence of prediction: 0.992981  
Y\_true: [ 4 20 37]  
Y\_pred: [20 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn hyperlipidemia discharge condition mental, score: 0.09603257  
medical history hypertension arthritis shoulder pain, score:  
0.06611545  
history of hypertension and elevated bp on, score: 0.0649218

confidence of prediction: 0.672262  
Y\_true: [ 4 20 37]  
Y\_pred: [20 37]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
coli uti the foley was, score: 0.08354081  
inattentive says dow forwards but, score: 0.016832985  
for her uti for dvt prophylaxis, score: 0.015587904

confidence of prediction: 0.972765

Y\_true: [ 2 20 26]

Y\_pred: [ 2 20 26 39 43]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
metformin xr glucophage xr mg po, score: 0.2066472  
metformin and glipizide were, score: 0.043761335  
metformin 1g hospital1 glipizide 5mg hospital1 atenolol, score:  
0.030723566

confidence of prediction: 0.972146

Y\_true: [ 2 20 26]

Y\_pred: [ 2 20 26 39 43]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn dm social history no, score: 0.3690406  
of dm htn presented to the, score: 0.08880002  
of dm htn and a prior, score: 0.08880002

confidence of prediction: 0.932012

Y\_true: [ 2 20 26]

Y\_pred: [ 2 20 26 39 43]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation discharge condition mental, score: 0.17414847  
afib the patient was started, score: 0.1665938  
atrial fibrillation for approximately minutes, score: 0.021126123

confidence of prediction: 0.673474

Y\_true: [ 2 4 18 20 24 26]

Y\_pred: [ 2 4 18 20 24 26]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
lipitor glipizide novolin unit day, score: 0.029637862  
daily glipizide mg tablet sig, score: 0.015662331  
dependent diabetes mellitus s p stent, score: 0.011643817

confidence of prediction: 0.643315

Y\_true: [ 2 4 18 20 24 26]

Y\_pred: [ 2 4 18 20 24 26]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
pacemaker hypertension hyperlipidemia peripheral vascular disease,  
score: 0.03157495  
paroxysmal atrial fibrillation discharge, score: 0.011620251  
tape 2008aw1 machine echocardiographic, score: 0.007007263

confidence of prediction: 0.982484

Y\_true: [ 2 4 18 20 24 26]

Y\_pred: [ 2 4 18 20 24 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.8036456

creams or powders to, score: 0.14793171

diuresed toward her preoperative, score: 0.024319498

confidence of prediction: 0.922734

Y\_true: [ 2 4 18 20 24 26]

Y\_pred: [ 2 4 18 20 24 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

diabetes mellitus hypertension coronary artery disease s, score:

0.23078789

permanent pacemaker hypertension hyperlipidemia peripheral vascular,

score: 0.18858397

s p permanent pacemaker, score: 0.016194941

confidence of prediction: 0.879748

Y\_true: [ 2 4 18 20 24 26]

Y\_pred: [ 2 4 18 20 24 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease aortic, score: 0.15360658

descending coronary artery angioplasty stent to, score: 0.06596429

s p stent to, score: 0.038631264

confidence of prediction: 0.934362

Y\_true: [ 2 4 18 20 24 26]

Y\_pred: [ 2 4 18 20 24 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation discharge condition good, score: 0.1984696

atrial fibrillation heparin drip was, score: 0.15755329

atrial fibrillation insulin dependent diabetes, score: 0.15669812

confidence of prediction: 0.929538

Y\_true: [ 4 17 34]

Y\_pred: [ 4 34]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

htn hyperlipidemia home meds continued, score: 0.13903336

pmhx htn hld asthma gerd lumbar, score: 0.12939267

gerd htn hld lumbar radiculopathy chronic [UNK], score: 0.044767868

confidence of prediction: 0.957542

Y\_true: [ 4 17 34]

Y\_pred: [ 4 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

asthma gerd htn hld lumbar, score: 0.09047639

hld asthma gerd lumbar radiculopathy who presented, score:  
0.034661047

confidence of prediction: 0.718652

Y\_true: [ 4 8 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

since hypertension hyperlipidemia gout pt not aware, score:  
0.12421668

since hypertension hyperlipidemia gout pt not, score: 0.12421668

simvastatin mg hospital1 sig, score: 0.044380195

confidence of prediction: 0.984518

Y\_true: [ 4 8 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass graft x aortic, score: 0.64082336

coronary artery bypass graft x lima lad svg diag svg, score:

0.03619456

coronary artery bypass graft, score: 0.015665751

confidence of prediction: 0.974037

Y\_true: [ 4 8 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires and chest tubes, score: 0.110381015

cardiothoracic allergies no known, score: 0.021300443

tee was performed in, score: 0.008080789

confidence of prediction: 0.917639

Y\_true: [ 4 8 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

pradaxa since hypertension hyperlipidemia gout pt not, score:

0.16526596

occupation retired elevator mechanic cigarettes smoked, score:

0.12019494

mg hospital1 indomethacin mg, score: 0.031033764

confidence of prediction: 0.999113

Y\_true: [ 4 8 13 18 20 24 26]

Y\_pred: [ 4 13 18 20 24 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery bypass graft, score: 0.6467125

coronary artery disease s p coronary artery bypass graft, score:

0.13691321

coronary artery disease and, score: 0.021085717

confidence of prediction: 0.959360

Y\_true: [ 4 8 13 18 20 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation on pradaxa since, score: 0.3668351  
atrial fibrillation on pradaxa since, score: 0.16449936  
afib flutter and went, score: 0.04560578  
  
confidence of prediction: 0.707060  
Y\_true: [ 3 21 47]  
Y\_pred: [21]  
top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
diuretic ckd iii iv cigarette, score: 0.06565144  
hl and ckd iii iv who, score: 0.043217883  
kidney disease other cancers, score: 0.03955296  
  
confidence of prediction: 0.642276  
Y\_true: [16 29 33 35 40 42]  
Y\_pred: [33 35 40 43]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
her respiratory failure in icu, score: 0.098746926  
respiratory failure pneumonia copd, score: 0.09311904  
source endotracheal gram stain, score: 0.039225746  
  
confidence of prediction: 0.799526  
Y\_true: [16 29 33 35 40 42]  
Y\_pred: [33 35 40 43]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
bun cr ldh ca troponin, score: 0.068686664  
treatments acute renal failure dehydration cr, score: 0.023929257  
acute renal failure her icu, score: 0.019473815  
  
confidence of prediction: 0.693015  
Y\_true: [16 29 33 35 40 42]  
Y\_pred: [33 35 40 43]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
the intubation cxr bullous, score: 0.12309134  
was subsequently intubated her labs, score: 0.08273811  
were intubated in the, score: 0.078950234  
  
confidence of prediction: 0.748303  
Y\_true: [17 29 37 40 41 43]  
Y\_pred: [ 7 37 41 43]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
pneumonia urinary tract infection discharge condition, score: 0.066512585  
sensitive klebsiella pneumonia imaging ct, score: 0.045643255  
present pt extubated doing, score: 0.025774276

confidence of prediction: 0.860234

Y\_true: [17 29 37 40 41 43]

Y\_pred: [ 7 37 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

tube feeding followup instructions, score: 0.25377625

tube feeds running new, score: 0.14323741

hr tube feeds restarted and, score: 0.057463996

confidence of prediction: 0.775267

Y\_true: [17 29 37 40 41 43]

Y\_pred: [ 7 37 41 43]

top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)

she was intubated for, score: 0.038354393

and remained intubated facial, score: 0.037645943

percutaneous tracheostomy placement of, score: 0.036126994

confidence of prediction: 0.745643

Y\_true: [ 4 20 27 31 32 33 43 45 46]

Y\_pred: [ 4 17 31 33 35 40 42 44]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

p stent hyperlipidemia surghx cardiac cath tonsillectomy, score: 0.5020811

svd x medhx polymyalgia rheumatica hypertension coronary, score: 0.0073629534

calretinin cea and ck20 p53 shows, score: 0.0064160526

confidence of prediction: 0.786868

Y\_true: [ 4 20 27 31 32 33 43 45 46]

Y\_pred: [ 4 17 31 33 35 40 42 44]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

an aspiration event respiratory failure upon, score: 0.27923334

vanc cefepime flagyl as well, score: 0.016110258

including suctioning and ventalator manipulation and, score:

0.011700561

confidence of prediction: 0.752324

Y\_true: [ 4 20 27 31 32 33 43 45 46]

Y\_pred: [ 4 17 31 33 35 40 42 44]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

event respiratory failure upon transfer, score: 0.14305398

indication respiratory failure post, score: 0.105608925

endotracheal tube ends at, score: 0.036945757

confidence of prediction: 0.625112

Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]

Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
gout borderline dm h o htn, score: 0.080153175  
with gout dm and htn who presented, score: 0.0676579  
possibly dm and htn who presented, score: 0.021833653

confidence of prediction: 0.527361  
Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]  
Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]  
top three important windows for true positive code 6 (276.2: Acidosis)  
settings were tv 1000ml and peep of, score: 0.09856795  
750ml and peep of, score: 0.03306488  
central ve temp po2 pco2, score: 0.02608702

confidence of prediction: 0.700862  
Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]  
Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
and bal intubation history, score: 0.27541563  
fungus isolated respiratory viral panel, score: 0.06288121  
further information bal gram stain final no, score: 0.04984827

confidence of prediction: 0.827469  
Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]  
Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxemic respiratory failure and hypotension, score: 0.21049191  
primary respiratory failure hypotension, score: 0.19510342  
optimize respiratory function he, score: 0.027270816

confidence of prediction: 0.577437  
Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]  
Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
fungus isolated respiratory viral panel, score: 0.08009856  
effect and continuous eeg was, score: 0.04094963  
optimize respiratory function he, score: 0.037458953

confidence of prediction: 0.860699  
Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]  
Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
settings were tv 1000ml, score: 0.07432321  
fungus isolated respiratory viral panel, score: 0.066967405  
effect and continuous eeg, score: 0.0380864

confidence of prediction: 0.610041  
Y\_true: [ 0 2 6 8 12 20 29 33 39 41 43 46]



Y\_pred: [ 2 6 12 31 33 35 40 41 42 43 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
ve temp po2 pco2, score: 0.17071563  
settings were tv 1000ml, score: 0.0316165  
on transfer vasopressors were, score: 0.03089764  
  
confidence of prediction: 0.919020  
Y\_true: [ 0 8 12 16 17 29 32 33 41 43 46]  
Y\_pred: [12 17 29 31 33 40 42]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
empiric tamiflu bal cultures were not revealing, score: 0.018023856  
antigen negative bronchoalveolar lavage polys lymphs, score: 0.016200097  
bronchial cells macrophages and inflammatory, score: 0.009028763  
  
confidence of prediction: 0.737154  
Y\_true: [ 0 8 12 16 17 29 32 33 41 43 46]  
Y\_pred: [12 17 29 31 33 40 42]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
macro other pleural totprot glucose, score: 0.15083821  
access l ij flouro concerning, score: 0.035700705  
placement bronchoscopy history of, score: 0.026550345  
  
confidence of prediction: 0.648962  
Y\_true: [ 0 8 12 16 17 29 32 33 41 43 46]  
Y\_pred: [12 17 29 31 33 40 42]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
of pneumonia major surgical, score: 0.26928663  
multifocal aspiration and infection a, score: 0.087164804  
primary multifocal pneumonia bilateral upper, score: 0.058656573  
  
confidence of prediction: 0.805960  
Y\_true: [ 0 8 12 16 17 29 32 33 41 43 46]  
Y\_pred: [12 17 29 31 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxemic respiratory failure given antibiotics, score: 0.09204792  
multilobar pneumonia intubated for hypoxemic respiratory failure and hypotension, score: 0.062378492  
sputum endotracheal gram stain, score: 0.045212317  
  
confidence of prediction: 0.991778  
Y\_true: [ 2 24 27 29 47]  
Y\_pred: [20 24 29]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p rca stent in, score: 0.21747844  
lesion mid lad lesion of distal, score: 0.09848521  
coronary artery disease s, score: 0.07510874

confidence of prediction: 0.944380  
Y\_true: [ 2 24 27 29 47]  
Y\_pred: [20 24 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
fibrosis atypical pneumonia pulmonary edema diabetes, score:  
0.07398858  
possible atypical pneumonia an echo was, score: 0.008559195  
when patient appropriately ambulatory, score: 0.0006954973

confidence of prediction: 0.545097  
Y\_true: [ 2 3 20 41]  
Y\_pred: [ 2 3 20]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
history hypertension diabetes hypercholesterolemia left parietal  
hemorrhage, score: 0.091097765  
day metformin mg tablet sig one, score: 0.024116404  
the business partner ems, score: 0.02325927

confidence of prediction: 0.655537  
Y\_true: [ 2 3 20 41]  
Y\_pred: [ 2 3 20]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
medical history hypertension diabetes hypercholesterolemia left  
parietal hemorrhage, score: 0.017146248  
day metformin mg tablet, score: 0.0059317304  
scan to attempt to, score: 0.0033874926

confidence of prediction: 0.701786  
Y\_true: [ 2 3 20 41]  
Y\_pred: [ 2 3 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension diabetes hypercholesterolemia left  
parietal, score: 0.35374326  
his business partner when he, score: 0.33458266  
the business partner ems, score: 0.051253505

confidence of prediction: 0.981539  
Y\_true: [ 3 8 20 26 37]  
Y\_pred: [ 4 17 20 26 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hypercholesterolemia depression mental, score:  
0.21250746  
maker initiation patient likely needs, score: 0.10165199  
pmh of htn hyperlipidemia and mr resident, score: 0.077893324

confidence of prediction: 0.922956  
Y\_true: [ 3 8 20 26 37]  
Y\_pred: [ 4 17 20 26 37]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation patient was started, score: 0.27279466  
atrial fibrillation uti secondary hypertension, score: 0.18618688  
atrial fibrillation flutter anemia unclear, score: 0.01289629

confidence of prediction: 0.952161  
Y\_true: [ 3 8 20 26 37]  
Y\_pred: [ 4 17 20 26 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
for uti patient was admitted to, score: 0.08843818  
for uti fen cardiac, score: 0.04800132  
last day coumadin initial, score: 0.042668123

confidence of prediction: 0.675686  
Y\_true: [ 3 21 31 36]  
Y\_pred: [21 31 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
dementia ttp ckd admitted to the, score: 0.28219423  
hospital1 chronic renal insufficiency likely secondary, score:  
0.014395412  
and paroxetine chronic renal failure the patient, score:  
0.0133348955

confidence of prediction: 0.955499  
Y\_true: [ 3 21 31 36]  
Y\_pred: [21 31 36]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
primary diagnosis aspiration pneumonitis secondary diagnosis  
dementia, score: 0.017555298  
transient aspiration pneumonitis hypertension the patient, score:  
0.01433229  
shortness of breath chest, score: 0.002718931

confidence of prediction: 0.688953  
Y\_true: [ 3 21 31 36]  
Y\_pred: [21 31 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
dementia ttp ckd admitted to the, score: 0.13540973  
and paroxetine chronic renal failure the patient, score: 0.018677318  
hospital1 chronic renal insufficiency likely secondary, score:  
0.018099967

confidence of prediction: 0.933440  
Y\_true: [ 3 20 26 34 37 48]  
Y\_pred: [ 4 20 26 34 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh of htn afib hl cad s, score: 0.16468586

with pmh htn afib hl cad s, score: 0.1603294  
medical history hypertension le, score: 0.04822303

confidence of prediction: 0.951083  
Y\_true: [ 3 20 26 34 37 48]  
Y\_pred: [ 4 20 26 34 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib hl cad s, score: 0.2986076  
atrial fibrillation currently her hr, score: 0.116572924  
cabg afib hl gerd, score: 0.015669512

confidence of prediction: 0.626334  
Y\_true: [ 3 20 26 34 37 48]  
Y\_pred: [ 4 20 26 34 48]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hl gerd pernicious anemia physical, score: 0.08429634  
50mg qdaily premarin 625mg qdaily diovan, score: 0.015556969  
continued to chew and, score: 0.015229845

confidence of prediction: 0.883276  
Y\_true: [ 3 20 26 34 37 48]  
Y\_pred: [ 4 20 26 34 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg afib hl gerd, score: 0.328544  
cad s p cabg who presents from, score: 0.00093348196

confidence of prediction: 0.620217  
Y\_true: [ 2 6 35]  
Y\_pred: [ 1 2 6 19 35]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes type ii on insulin, score: 0.1580491  
diabetes mellitus chronic issue, score: 0.08545579  
aspart novolog flexpen unit ml, score: 0.08285038

confidence of prediction: 0.889569  
Y\_true: [ 2 6 35]  
Y\_pred: [ 1 2 6 19 35]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
a hyperchloremic acidosis lithium levels were checked, score:  
0.20465544  
injury and increasing lithium, score: 0.008863316  
consulted recommending dialysis due to her, score: 0.007475521

confidence of prediction: 0.856952  
Y\_true: [ 2 6 35]  
Y\_pred: [ 1 2 6 19 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

acute kidney injury insulin dependent, score: 0.16301584  
and acute kidney injury it is, score: 0.040332537  
acute kidney injury and elevated, score: 0.025177773

confidence of prediction: 0.773433  
Y\_true: [ 0 2 6 7 24 26 27 30 40 42 45 46]  
Y\_pred: [ 0 1 26 27 30 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
discharge diagnosis sepsis cholangitis acute pancreatitis acute,  
score: 0.6698436  
likely initially septic and was initially managed, score:  
0.009162707  
zosyn acetaminophen morphine zofran and, score: 0.0030589595

confidence of prediction: 0.993163  
Y\_true: [ 0 2 6 7 24 26 27 30 40 42 45 46]  
Y\_pred: [ 0 1 26 27 30 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib who presents from hospital, score: 0.8776392  
atrial fibrillation diabetes mellitus hypothyroidism, score:  
0.012825044  
atrial fibrillation unclear cardiac history, score: 0.004238137

confidence of prediction: 0.961686  
Y\_true: [ 0 2 6 7 24 26 27 30 40 42 45 46]  
Y\_pred: [ 0 1 26 27 30 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
ef and dchf noted in had dual, score: 0.33023262  
and osh records pt, score: 0.0045157294  
chronic lower back pain, score: 0.0038825395

confidence of prediction: 0.962113  
Y\_true: [ 0 2 6 7 24 26 27 30 40 42 45 46]  
Y\_pred: [ 0 1 26 27 30 46]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
dementia psoriasis copd chronic lower back pain, score: 0.007924166  
discharge condition mental status, score: 0.0007037626  
that procedure copd history of copd does, score: 0.00035835902

confidence of prediction: 0.733091  
Y\_true: [ 0 2 6 7 24 26 27 30 40 42 45 46]  
Y\_pred: [ 0 1 26 27 30 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
discharge diagnosis sepsis cholangitis acute pancreatitis acute,  
score: 0.38231152  
likely initially septic and was initially managed, score:  
0.012383254  
placed contrast medium was injected, score: 0.008853864

confidence of prediction: 0.942574  
Y\_true: [ 4 17 20]  
Y\_pred: [ 4 17 20 49]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hypertension hyperlipidemia social history works as, score: 0.18761258  
pmh htn dyslipidemia recent left foot, score: 0.028998107  
on discharge hyperlipidemia continued pravastatin mg daily, score: 0.016969265

confidence of prediction: 0.632878  
Y\_true: [ 4 17 20]  
Y\_pred: [ 4 17 20 49]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
femoral line placement impression pulmonary, score: 0.080249906  
lumen central venous catheter via right, score: 0.036329243  
access the patient was, score: 0.025313262

confidence of prediction: 0.992659  
Y\_true: [ 4 17 20]  
Y\_pred: [ 4 17 20 49]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
workup hypertension hctz had initially been, score: 0.11597915  
pmh obesity htn who developed left, score: 0.11503582  
arthrodesis in hypertension hyperlipidemia social history, score: 0.03366624

confidence of prediction: 0.596507  
Y\_true: [ 2 7 10 20 24 44]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
dm2 reportedly off insulin, score: 0.22303557  
ii dm hyperlipidemia hypertension, score: 0.081474654  
type ii dm iv drug use, score: 0.05773062

confidence of prediction: 0.919355  
Y\_true: [ 2 7 10 20 24 44]  
Y\_pred: [ 2 4 20 24]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
dm hyperlipidemia hypertension was transferred from, score: 0.22150472  
pole renal lesion which is, score: 0.08011188  
diabetes hyperlipidemia hypertension discharge condition stable, score: 0.06445351

confidence of prediction: 0.788744  
Y\_true: [ 2 7 10 20 24 44]  
Y\_pred: [ 2 4 20 24]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cancer cad bms in year digits, score: 0.10034091  
lcx in pacing icd other, score: 0.07243818  
coronary artery disease type, score: 0.04186413

confidence of prediction: 0.891751  
Y\_true: [ 2 5 7 17 20 33 35 46 49]  
Y\_pred: [ 2 4 20 44]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily glyburide mg tablet sig, score: 0.0147362575  
medical history t2dm htn hepatitis b carrier hyperlipidemia, score:  
0.007615128  
for dm2 htn hld who recently, score: 0.0066921837

confidence of prediction: 0.954793  
Y\_true: [ 2 5 7 17 20 33 35 46 49]  
Y\_pred: [ 2 4 20 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
for dm2 htn hld who recently underwent, score: 0.19735244  
history t2dm htn hepatitis b carrier, score: 0.1421931  
glyburide mg tablet sig, score: 0.027697952

confidence of prediction: 0.539889  
Y\_true: [ 2 5 17 19 26 29 34 35 41]  
Y\_pred: [ 5 29 41]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
with mild hyponatremia she underwent ir guided, score: 0.63771456  
mg tid discharge medications, score: 0.012088595  
mtx toxicity and other, score: 0.008275906

confidence of prediction: 0.624370  
Y\_true: [ 2 5 17 19 26 29 34 35 41]  
Y\_pred: [ 5 29 41]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
hospital acquired pneumonia discharge condition afebrile, score:  
0.033363927  
with likely pneumonia seen on cxr iv vanco and, score: 0.014330058  
and higher pa pressures, score: 0.007111076

confidence of prediction: 0.858248  
Y\_true: [ 2 5 17 19 26 29 34 35 41]  
Y\_pred: [ 5 29 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
the feeding tube was adjusted on, score: 0.17211601  
a feeding tube was placed on, score: 0.025853338  
stomach tube feeds were started using, score: 0.020735173

confidence of prediction: 0.752065  
Y\_true: [ 1 9 17 18 21 36]  
Y\_pred: [ 1 18]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
prn levothyroxine mcg daily lisinopril mg, score: 0.14613609  
ai mr hypothyroidism renal insufficiency s p, score: 0.02770768  
refills levothyroxine mcg tablet sig, score: 0.024972837

confidence of prediction: 0.977562  
Y\_true: [ 1 9 17 18 21 36]  
Y\_pred: [ 1 18]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires remained in place, score: 0.32754102  
diuresed toward the preoperative, score: 0.055984486  
tee was performed in, score: 0.0060867765

confidence of prediction: 0.997748  
Y\_true: [ 3 7 20 30 37]  
Y\_pred: [20 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history copd htn hypercholesterolemia on plavix and, score:  
0.23601454  
hctz daily simvastatin daily, score: 0.080717824  
in the wide bore, score: 0.06475696

confidence of prediction: 0.732947  
Y\_true: [ 3 7 20 30 37]  
Y\_pred: [20 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd htn hypercholesterolemia on plavix, score:  
0.63274777  
and plavix copd whom according to, score: 0.014909646  
chronic right sdh with associated, score: 0.013685318

confidence of prediction: 0.507369  
Y\_true: [14 24 38]  
Y\_pred: [14 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac cath history of present, score: 0.15329924  
cath comments coronary angiography of this, score: 0.05304842  
comments selective angiography of the, score: 0.014175395

confidence of prediction: 0.979641  
Y\_true: [14 24 38]  
Y\_pred: [14 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
which was intervened upon, score: 0.14876452  
lad with timi iii, score: 0.03943975



one vessel coronary artery disease normal, score: 0.028234733

confidence of prediction: 0.795860

Y\_true: [14 24 38]

Y\_pred: [14 24 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac cath history of present, score: 0.38901237

cath comments coronary angiography of this, score: 0.029848408

vessel without significant disease, score: 0.014951093

confidence of prediction: 0.930920

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

10mg hypothyroidism continued levothyroxine gerd continued, score: 0.35381025

htn hypothyroidism tkr social history daughter, score: 0.10531269

hospital1 levothyroxine mcg daily toprol, score: 0.03993718

confidence of prediction: 0.791084

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous line placement history of, score: 0.39162466

after receiving sedation normal, score: 0.100398645

after picc placed urinary tract infection, score: 0.045824174

confidence of prediction: 0.651581

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 23 (412: Old myocardial infarction)

s p mi in ekgs, score: 0.7316728

h o mi in in setting of, score: 0.031418044

recurrent utis mi ra on, score: 0.025807487

confidence of prediction: 0.794962

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

resistant utis chf cad s p mi, score: 0.007281424

it difficult to determine, score: 0.0066012265

anemia diastolic dysfunction w ef of, score: 0.0065546976

confidence of prediction: 0.545601

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

primary hypercarbic respiratory failure pseudomonas uti, score:

0.05813186

sedation normal lactate ekg, score: 0.03185062  
were ultimately intubated to, score: 0.024517566

confidence of prediction: 0.684888

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

got subclavian cvl which, score: 0.021221885

venous line placement history of, score: 0.01627403

respiratory failure pseudomonas uti, score: 0.013574204

confidence of prediction: 0.936673

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

urinary tract infection has h, score: 0.08843067

plus uti improved with, score: 0.07624978

mod leuk few bact outside, score: 0.071913

confidence of prediction: 0.673089

Y\_true: [ 1 4 16 17 20 23 27 29 33 34 37 40 41 42 48]

Y\_pred: [ 1 17 23 24 27 33 34 35 37 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

was intubated started ctx, score: 0.23122148

subsequent intubation acute on, score: 0.06441624

miconazole nitrate powder sig, score: 0.03747439

confidence of prediction: 0.826512

Y\_true: [ 2 12 21 26 35 36]

Y\_pred: [21 26 27 29 35 36]

top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

chronic kidney disease morbid obesity gout, score: 0.036646403

kidney injury patient was admitted, score: 0.008963404

yellow discharge coughing frequently, score: 0.004557224

confidence of prediction: 0.948279

Y\_true: [ 2 12 21 26 35 36]

Y\_pred: [21 26 27 29 35 36]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation obstructive sleep apnea, score: 0.16798365

atrial fibrillation controlled on metoprolol, score: 0.049150806

was a pleasure taking care, score: 0.009122197

confidence of prediction: 0.729849

Y\_true: [ 2 12 21 26 35 36]

Y\_pred: [21 26 27 29 35 36]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
by renal failure and pulmonary, score: 0.058455743  
hospitalization acute kidney injury patient was, score: 0.036844984  
from renal failure physical exam, score: 0.022402762

confidence of prediction: 0.585907  
Y\_true: [ 2 12 21 26 35 36]  
Y\_pred: [21 26 27 29 35 36]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
chronic kidney disease morbid obesity gout, score: 0.025236385  
yellow discharge coughing frequently, score: 0.0127193965  
acute kidney injury patient was admitted, score: 0.010864271

confidence of prediction: 0.665290  
Y\_true: [ 2 4 8 17 20 39 47]  
Y\_pred: [ 2 11 20 24]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
of dm pvd and aneurysm, score: 0.07668686  
of iddm pvd htn hld smoking, score: 0.044024814  
asthma copd iddm pad past surgical, score: 0.029723855

confidence of prediction: 0.668541  
Y\_true: [ 2 4 8 17 20 39 47]  
Y\_pred: [ 2 11 20 24]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
htn pvd asthma copd iddm, score: 0.10196529  
on cpap htn pvd asthma copd iddm, score: 0.10175057  
januvia mg tablet sig, score: 0.05352519

confidence of prediction: 0.953330  
Y\_true: [ 3 14 24 38]  
Y\_pred: [ 4 15 24 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
lesion was in the, score: 0.07483875  
coronary artery disease bradycardia, score: 0.06957482  
coronary artery disease patent, score: 0.066231035

confidence of prediction: 0.862066  
Y\_true: [ 3 14 24 38]  
Y\_pred: [ 4 15 24 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
cardiac catheterization with drug, score: 0.47704303  
catheterization comments selective coronary angiography of this, score: 0.04216015  
cath lab he was started, score: 0.019604234

confidence of prediction: 0.925776

Y\_true: [ 2 3 14 18 20 24 25 27 38 39]  
Y\_pred: [ 2 13 18 20 24 27]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
meds metformin 1000mg hospital1 asa 81mg, score: 0.035619713  
daily metformin mg hospital1 calcium daily, score: 0.023908556  
dependent diabetes mellitus hypertension ischemic colitis, score:  
0.019240588

confidence of prediction: 0.977096  
Y\_true: [ 2 3 14 18 20 24 25 27 38 39]  
Y\_pred: [ 2 13 18 20 24 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies no known, score: 0.023212269  
bypass grafting times one, score: 0.011945563  
tee was performed in, score: 0.0088060815

confidence of prediction: 0.975063  
Y\_true: [ 2 3 14 18 20 24 25 27 38 39]  
Y\_pred: [ 2 13 18 20 24 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diabetes mellitus hypertension ischemic colitis gi bleed, score:  
0.27241996  
metformin mg hospital1 calcium, score: 0.025296243  
cabg in s mother, score: 0.017628882

confidence of prediction: 0.982907  
Y\_true: [ 2 3 14 18 20 24 25 27 38 39]  
Y\_pred: [ 2 13 18 20 24 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease aortic, score: 0.24925405  
coronary artery lesion she had, score: 0.20872223  
coronary artery disease mitral, score: 0.061202593

confidence of prediction: 0.869156  
Y\_true: [ 2 3 14 18 20 24 25 27 38 39]  
Y\_pred: [ 2 13 18 20 24 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure coronary artery disease, score: 0.124967605  
systolic heart failure and therefore was, score: 0.055222522  
systolic heart failure aortic stenosis coronary, score: 0.055222522

confidence of prediction: 0.595910  
Y\_true: [ 4 13 18 21 24 25 26 27]  
Y\_pred: [ 4 13 18 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
prostatic hypertrophy hyperlipidemia h o stroke social, score:  
0.29552975

prostatic hypertrophy hyperlipidemia h o stroke discharge, score: 0.29552975

atorvastatin mg tablet sig, score: 0.01041019

confidence of prediction: 0.975969

Y\_true: [ 4 13 18 21 24 25 26 27]

Y\_pred: [ 4 13 18 24 26]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass grafts x lima lad, score: 0.2265766

wires were discontinued without, score: 0.027754204

coronary artery bypass grafting x3 with a, score: 0.024741594

confidence of prediction: 0.986061

Y\_true: [ 4 13 18 21 24 25 26 27]

Y\_pred: [ 4 13 18 24 26]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were discontinued without, score: 0.7086576

diuresed toward the preoperative, score: 0.019994793

bypass grafting x3 with a, score: 0.008324679

confidence of prediction: 0.936173

Y\_true: [ 4 13 18 21 24 25 26 27]

Y\_pred: [ 4 13 18 24 26]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease mitral, score: 0.17274718

coronary artery bypass grafts, score: 0.116330996

coronary artery disease aortic, score: 0.0740442

confidence of prediction: 0.884330

Y\_true: [ 4 13 18 21 24 25 26 27]

Y\_pred: [ 4 13 18 24 26]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

irregular murmur x grade, score: 0.01556671

rapid atrial fibrillation was symptomatic and, score: 0.0080987485

amiodarone iv and po, score: 0.005834144

confidence of prediction: 0.763618

Y\_true: [ 0 17 20 29 33 34 40 42 46]

Y\_pred: [ 0 11 17 20 29 33 34 46]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

shock requiring pressors and intubation septic shock pt developed

hypotension, score: 0.1360132

on levophed lactate was, score: 0.03874924

respiratory failure pneumonia pt, score: 0.029976843

confidence of prediction: 0.658257

Y\_true: [ 0 17 20 29 33 34 40 42 46]

Y\_pred: [ 0 11 17 20 29 33 34 46]

top three important windows for true positive code 17 (38.93: Venous

catheterization, not elsewhere classified)  
line arterial line history, score: 0.1616596  
left subclavian central line tip over mid, score: 0.06919808  
continued pramipexole gerd continued pantoprazole, score: 0.05662477

confidence of prediction: 0.958898  
Y\_true: [ 0 17 20 29 33 34 40 42 46]  
Y\_pred: [ 0 11 17 20 29 33 34 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn and depression who, score: 0.4369449  
htn furosemide prn pt not, score: 0.06092539  
diastolic function htn initially held propranolol, score: 0.02407652

confidence of prediction: 0.824071  
Y\_true: [ 0 17 20 29 33 34 40 42 46]  
Y\_pred: [ 0 11 17 20 29 33 34 46]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
acquired pneumonia a total, score: 0.17444184  
lll pneumonia and she was, score: 0.12658986  
have lll pneumonia which was, score: 0.05332004

confidence of prediction: 0.736122  
Y\_true: [ 0 17 20 29 33 34 40 42 46]  
Y\_pred: [ 0 11 17 20 29 33 34 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
sputum culture x2 without, score: 0.1230149  
rhonchorous mechanical ventilation sounds, score: 0.05890936  
intubated this cannot be, score: 0.05452879

confidence of prediction: 0.912690  
Y\_true: [ 0 17 20 29 33 34 40 42 46]  
Y\_pred: [ 0 11 17 20 29 33 34 46]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
continued pramipexole gerd continued pantoprazole medications on,  
score: 0.20674981  
apnea hypertension gerd depression anxiety osteoarthritis remote,  
score: 0.006158474  
osa and hypoxemia requiring oxygen, score: 0.0050938367

confidence of prediction: 0.970258  
Y\_true: [ 0 17 20 29 33 34 40 42 46]  
Y\_pred: [ 0 11 17 20 29 33 34 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
shock requiring pressors and intubation septic shock pt developed  
hypotension, score: 0.055371504  
septic shock which was later, score: 0.03674015  
on levophed lactate was initially which, score: 0.035560086

confidence of prediction: 0.693996

Y\_true: [ 7 28 47]  
Y\_pred: [ 1 5 7 28]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
by a radiologist you, score: 0.13595766  
bleeding he underwent ir, score: 0.13174973  
history of present illness, score: 0.08880649

confidence of prediction: 0.883733  
Y\_true: [ 7 28 47]  
Y\_pred: [ 1 5 7 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
bleeding varix for banding, score: 0.017624216  
prostate nodule protruding into, score: 0.016037285  
micu where endoscopy was difficult, score: 0.013196139

confidence of prediction: 0.661232  
Y\_true: [ 4 8 14 24 47]  
Y\_pred: [ 4 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
bladder cancer dyslipidemia acute systolic dysfunction, score:  
0.2800761  
known cad hld and bladder cancer, score: 0.04599294  
dyslipidemia cardiac history percutaneous, score: 0.045846544

confidence of prediction: 0.993369  
Y\_true: [ 4 8 14 24 47]  
Y\_pred: [ 4 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad lesion with an ostial d1, score: 0.1559736  
bare metal stents x2 to, score: 0.055900924  
metal stents x to, score: 0.031613827

confidence of prediction: 0.961058  
Y\_true: [ 0 2 6 8 16 20 29 32 33 37 40 42 46]  
Y\_pred: [11 33 37]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure with severely, score: 0.09521447  
hypercarbic respiratory failure shock, score: 0.09521447  
hypoxia hypercarbic respiratory failure major surgical, score:  
0.036053717

confidence of prediction: 0.889290  
Y\_true: [ 0 2 6 8 16 20 29 32 33 37 40 42 46]  
Y\_pred: [11 33 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
for uti on arrival, score: 0.05712287  
coli uti that was resistant, score: 0.038620964  
leuk lg 00pm urine, score: 0.03241745

confidence of prediction: 0.981311  
Y\_true: [ 4 14 20 24 27]  
Y\_pred: [ 1 15 24 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.09470978  
coronary artery disease successful, score: 0.09470978  
disease cad who presented, score: 0.0469214

confidence of prediction: 0.667400  
Y\_true: [ 4 14 20 24 27]  
Y\_pred: [ 1 15 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
with heart failure clinic should have, score: 0.031130802  
hypertension pulmonic valve pulmonary, score: 0.012171503  
and ntg in the, score: 0.011151281

confidence of prediction: 0.736152  
Y\_true: [28]  
Y\_pred: [ 7 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness 53f with a, score: 0.3840727  
had an endoscopy endoscopy did not reveal, score: 0.051597003  
an endoscopy liver disease, score: 0.042715594

confidence of prediction: 0.779910  
Y\_true: [ 3 7 13 17 18 20 24 26 35]  
Y\_pred: [ 3 4 13 18 20 24 26 34]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
stenosis hypertension hypercholesterolemia paroxysmal atrial  
fibrillation, score: 0.18428436  
x full rom x chest, score: 0.0029689828  
significant for hypertension hypercholesterolemia known cad s p,  
score: 0.0023020448

confidence of prediction: 0.913820  
Y\_true: [ 3 7 13 17 18 20 24 26 35]  
Y\_pred: [ 3 4 13 18 20 24 26 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting, score: 0.065735005  
left internal mammary artery to left, score: 0.04024584  
coronary artery bypass grafting surgery see, score: 0.038436666

confidence of prediction: 0.979521  
Y\_true: [ 3 7 13 17 18 20 24 26 35]  
Y\_pred: [ 3 4 13 18 20 24 26 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.51822513



cardiothoracic attending first name3, score: 0.10239142  
grafting left internal mammary, score: 0.09137155

confidence of prediction: 0.935738  
Y\_true: [ 3 7 13 17 18 20 24 26 35]  
Y\_pred: [ 3 4 13 18 20 24 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
significant for hypertension hypercholesterolemia, score: 0.19099773  
amiodarone was slowly titrated, score: 0.08604771  
aortic stenosis hypertension hypercholesterolemia paroxysmal atrial  
fibrillation cad s p rca, score: 0.07424635

confidence of prediction: 0.978087  
Y\_true: [ 3 7 13 17 18 20 24 26 35]  
Y\_pred: [ 3 4 13 18 20 24 26 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease including, score: 0.14972472  
coronary artery bypass grafting, score: 0.031589895  
coronary artery disease s, score: 0.02919411

confidence of prediction: 0.963961  
Y\_true: [ 3 7 13 17 18 20 24 26 35]  
Y\_pred: [ 3 4 13 18 20 24 26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation history of deep, score: 0.13097207  
atrial fibrillation cad s p, score: 0.068399236  
atrial fibrillation and was started, score: 0.05156658

confidence of prediction: 0.781749  
Y\_true: [10 11 17 37]  
Y\_pred: [17 37]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
cvl placement r ij cvl placement history of, score: 0.086780295  
had a femoral line placed and started, score: 0.069554776  
had femoral cvl placed patient was, score: 0.043346994

confidence of prediction: 0.893518  
Y\_true: [10 11 17 37]  
Y\_pred: [17 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
repeat uti a urine culture finalized, score: 0.15851164  
urinary tract infection in the, score: 0.116251044  
a urinary tract infection the psychiatry, score: 0.011225122

confidence of prediction: 0.719454  
Y\_true: [ 9 11 17]  
Y\_pred: [17]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

maculopapular fading erythematous rash, score: 0.05333988  
developed a maculopapular rash, score: 0.029268594  
on he continued to, score: 0.020993248

confidence of prediction: 0.689709  
Y\_true: [ 5 32]  
Y\_pred: [ 5 17 29 32 39]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
on ceftriaxone hyponatremia possibly secondary to hypovolemia,  
score: 0.4457183  
neutrophil predominance hyponatremia na and hypokalemia, score:  
0.09629259  
for days ending disp, score: 0.03666431

confidence of prediction: 0.730983  
Y\_true: [ 5 32]  
Y\_pred: [ 5 17 29 32 39]  
top three important windows for true positive code 32 (511.9:  
Unspecified pleural effusion)  
pleural effusion thoracentesis was performed draining 400cc, score:  
0.12106348  
of pleural effusion and fibrosis if, score: 0.02118377  
pleural effusion ct chest, score: 0.012079229

confidence of prediction: 0.777961  
Y\_true: [ 4 13 18 20 23 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
obesity hypertension hyperlipidemia discharge condition good, score:  
0.24091123  
fibrillation anterior myocardial infarction, score: 0.013224185  
mi in inferior wall, score: 0.0063187582

confidence of prediction: 0.992018  
Y\_true: [ 4 13 18 20 23 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting x2, score: 0.34485877  
descending artery saphenous vein graft, score: 0.026049223  
artery bypass grafting x2, score: 0.008648764

confidence of prediction: 0.933207  
Y\_true: [ 4 13 18 20 23 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
creams or powders to, score: 0.3654325  
cardiothoracic allergies iodine iodine, score: 0.060982835  
grafting past medical history, score: 0.034390137

confidence of prediction: 0.974812

Y\_true: [ 4 13 18 20 23 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
obesity hypertension s p l, score: 0.12061343  
to be regulated by, score: 0.038150344  
appendage obesity hypertension hyperlipidemia discharge condition,  
score: 0.02796271

confidence of prediction: 0.999238  
Y\_true: [ 4 13 18 20 23 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.29615143  
coronary artery disease paroxysmal, score: 0.062697165  
disease lad stent after, score: 0.025496515

confidence of prediction: 0.957508  
Y\_true: [ 4 13 18 20 23 24 26]  
Y\_pred: [ 4 13 18 20 24 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation major surgical or, score: 0.09492527  
atrial fibrillation anterior myocardial infarction, score:  
0.07003556  
atrial fibrillation s p cornary, score: 0.062468767

confidence of prediction: 0.814275  
Y\_true: [ 7 11 21 26 30 36 48]  
Y\_pred: [ 4 7 21 26 30 34 36 48 49]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
units of prbc and his hematocrit was, score: 0.29072416  
requiring [UNK] hematocrit monitoring, score: 0.0669992  
bleeding but resumed once, score: 0.038590267

confidence of prediction: 0.706781  
Y\_true: [ 7 11 21 26 30 36 48]  
Y\_pred: [ 4 7 21 26 30 34 36 48 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
years ckd baseline creatinine aortic stenosis, score: 0.17120463  
cabg ckd aortic stenosis discharge, score: 0.06266255  
ppi ckd baseline creatinine currently at, score: 0.033677027

confidence of prediction: 0.988121  
Y\_true: [ 7 11 21 26 30 36 48]  
Y\_pred: [ 4 7 21 26 30 34 36 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib prostate ca cll, score: 0.07232405  
atrial fibrillation needing coumadin restarted, score: 0.041782852

afib medications on admission, score: 0.028831828

confidence of prediction: 0.680656

Y\_true: [ 7 11 21 26 30 36 48]

Y\_pred: [ 4 7 21 26 30 34 36 48 49]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

copd on 3l nc at, score: 0.39394796

coumadin copd on 3l nc at, score: 0.068452016

iii copd p afib prostate ca, score: 0.028730694

confidence of prediction: 0.781707

Y\_true: [ 7 11 21 26 30 36 48]

Y\_pred: [ 4 7 21 26 30 34 36 48 49]

top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)

years ckd baseline creatinine aortic stenosis, score: 0.17395334

ppi ckd baseline creatinine currently at, score: 0.025287122

p cabg ckd aortic stenosis discharge, score: 0.0075789704

confidence of prediction: 0.871856

Y\_true: [ 7 11 21 26 30 36 48]

Y\_pred: [ 4 7 21 26 30 34 36 48 49]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg who presented to, score: 0.21997462

s p cabg and, score: 0.21997462

s p cabg and unstable angina, score: 0.21997462

confidence of prediction: 0.621909

Y\_true: [ 7 9 10 11 17 33 35 40 42]

Y\_pred: [ 7 9 28 31]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

cherry red spots likely bleeding from esophageal, score: 0.19828796

of ffp bags of, score: 0.15399504

cell count consistent with, score: 0.055642664

confidence of prediction: 0.671646

Y\_true: [ 7 9 10 11 17 33 35 40 42]

Y\_pred: [ 7 9 28 31]

top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)

decreased lactulose thrombocytopenia stable from last admission, score: 0.43303376

month only thrombocytopenia and inr, score: 0.056616396

underwent urgent egd which, score: 0.010780489

confidence of prediction: 0.805948

Y\_true: [20 29]

Y\_pred: [ 5 20]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

depression bph htn pna s, score: 0.2136793

hctz was stopped bp was, score: 0.17941031  
prior to returning home, score: 0.09517222

confidence of prediction: 0.566318  
Y\_true: [ 1 5 20 30 47]  
Y\_pred: [ 1 20 30]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
daily levothyroxine sodium mcg po daily, score: 0.13590987  
po bid levothyroxine sodium mcg po daily, score: 0.0018670806  
mg td daily acetaminophen, score: 0.0012777994

confidence of prediction: 0.987420  
Y\_true: [ 1 5 20 30 47]  
Y\_pred: [ 1 20 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hospital1 copd htn social history former smoker, score: 0.11249364  
melatonin nf mg oral qhs, score: 0.011338157  
with liver function tests, score: 0.003933822

confidence of prediction: 0.619530  
Y\_true: [ 1 5 20 30 47]  
Y\_pred: [ 1 20 30]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
at hospital1 copd hospital transferred from hospital3, score:  
0.053458065  
at hospital1 copd htn social history former, score: 0.053458065

confidence of prediction: 0.901123  
Y\_true: [ 4 21 25 27 29 33 35 36]  
Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
insufficiency hypertension hyperlipidemia discharge condition  
mental, score: 0.18404055  
be beneficial hld stable on pravastatin anxiety, score: 0.05936024  
prednisone hypertension hyperlipidemia mitral valve prolapse, score:  
0.052684415

confidence of prediction: 0.557872  
Y\_true: [ 4 21 25 27 29 33 35 36]  
Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic renal failure cr on, score: 0.26029745  
and adrenalectomy recurrent rcc, score: 0.10576166  
and adrenalectomy adrenal insufficiency bilateral adrenalectomy,  
score: 0.021423439

confidence of prediction: 0.915867  
Y\_true: [ 4 21 25 27 29 33 35 36]

Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf patient was initially on, score: 0.07293397  
failure we gave you, score: 0.054086074  
pneumonia chf copd secondary diagnosis renal, score: 0.022193577

confidence of prediction: 0.574775  
Y\_true: [ 4 21 25 27 29 33 35 36]  
Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
primary diagnosis pneumonia chf, score: 0.4023884  
cxr reveals rll pna and worsening bl pleural, score: 0.019086525  
pneumonia and a new, score: 0.010215248

confidence of prediction: 0.953688  
Y\_true: [ 4 21 25 27 29 33 35 36]  
Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
for hypoxic respiratory failure hypoxic respiratory failure likely  
multifactorial, score: 0.065083854  
became acutely dyspneic in, score: 0.02831424  
cxr reveals rll pna and, score: 0.01135863

confidence of prediction: 0.679018  
Y\_true: [ 4 21 25 27 29 33 35 36]  
Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure cr on admission, score: 0.25817513  
to renal failure see above, score: 0.12222895  
to renal failure and decreased, score: 0.05461218

confidence of prediction: 0.653109  
Y\_true: [ 4 21 25 27 29 33 35 36]  
Y\_pred: [ 4 8 21 27 29 33 35 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal failure cr on admission, score: 0.27074838  
and adrenalectomy recurrent rcc, score: 0.109400414  
and adrenalectomy adrenal insufficiency bilateral adrenalectomy,  
score: 0.028557157

confidence of prediction: 0.682705  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
neuropathy hypothyroidism obstructive sleep apnea, score: 0.15891896  
daily levothyroxine mcg tablet sig, score: 0.06478894  
with meals synthroid mcg daily lisinopril mg, score: 0.004225812

confidence of prediction: 0.833623  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia congestive heart, score:  
0.11754815  
for hypertension hyperlipidemia diabetes who was transferred, score:  
0.09231256  
disease hypertension hyperlipidemia congestive heart, score:  
0.082852885

confidence of prediction: 0.726156  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
did develop hyponatremia which improved with free, score: 0.19342735  
penicillins bactrim attending first, score: 0.016427437  
history of present illness, score: 0.010107224

confidence of prediction: 0.985435  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft x lima lad svg to om history, score:  
0.66618586  
incisions gently with mild, score: 0.009556774  
and pacing wires were discontinued without, score: 0.0037081302

confidence of prediction: 0.515761  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization today revealed lm, score: 0.036841627  
nSTEMI with troponin on POD, score: 0.022414707  
plaquing to abdominal aortography, score: 0.017750077

confidence of prediction: 0.986092  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7427208  
diuresed toward the preoperative, score: 0.020955885  
cardiothoracic allergies penicillins bactrim, score: 0.0039903685

confidence of prediction: 0.937068  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

systemic arterial hypertension sbp, score: 0.24343349  
medical history hypertension hyperlipidemia congestive heart, score:  
0.09035364  
significant for hypertension hyperlipidemia diabetes who was, score:  
0.07323129

confidence of prediction: 0.839281  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
for nstemi with trop on pod, score: 0.07281539  
presents with nstemi on pod from, score: 0.011796431  
cath comments coronary angiography of this, score: 0.0037593788

confidence of prediction: 0.998485  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery bypass graft, score: 0.43583527  
coronary artery disease hypertension, score: 0.092269145  
coronary artery disease the, score: 0.08783467

confidence of prediction: 0.779154  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf presents with nstemi on, score: 0.18982096  
congestive heart failure insulin dependent diabetes, score:  
0.1361291  
diastolic dysfunction moderate left, score: 0.034459487

confidence of prediction: 0.827103  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
for uti discharge disposition extended, score: 0.73428917  
penicillins bactrim attending first, score: 0.03813864  
did develop hyponatremia which improved with free, score:  
0.010687308

confidence of prediction: 0.675743  
Y\_true: [ 1 3 4 5 13 14 18 20 22 24 27 37 38]  
Y\_pred: [ 1 4 5 13 14 18 20 22 24 27 37 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization today revealed lm, score: 0.04724339  
plaquing to abdominal aortography, score: 0.04143553  
nstemi with trop on, score: 0.019080449

confidence of prediction: 0.631313



Y\_true: [10 30 31 33 34 41 42]

Y\_pred: [10 17 34]

top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)

history tobacco ppd x45 yrs currently at, score: 0.12894674

cardiac decompensation neck soft, score: 0.0046633827

aerosol inhaler hospital1 two, score: 0.0026524593

confidence of prediction: 0.594849

Y\_true: [10 30 31 33 34 41 42]

Y\_pred: [10 17 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

secondary copd gerd discharge condition mental, score: 0.04457641

copd gerd frequent uri s social, score: 0.044574734

hd6 with moderate but, score: 0.0103530735

confidence of prediction: 0.722723

Y\_true: [ 2 24 29 33 36 40 42]

Y\_pred: [ 2 17 20 24 29 44]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

gym [UNK] dm s p right mastectomy, score: 0.124374725

antiarth agents misc classf, score: 0.012399004

female with nonunion from multiple previous, score: 0.0070553147

confidence of prediction: 0.782724

Y\_true: [ 2 24 29 33 36 40 42]

Y\_pred: [ 2 17 20 24 29 44]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

atenolol digoxin diovan glipizide hydrochlorothiazide methotrexate,  
score: 0.061787114

for atherectomy of innominate, score: 0.029821532

hypertension ischemic heart disease stent s p median, score:  
0.015109057

confidence of prediction: 0.796517

Y\_true: [ 2 24 29 33 36 40 42]

Y\_pred: [ 2 17 20 24 29 44]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

have lll pneumonia and started on, score: 0.13321176

respiratory distress pneumonia discharge condition neurologically,  
score: 0.017947448

svc cavoatrial junction the, score: 0.005921187

confidence of prediction: 0.537395

Y\_true: [10 17 20 27 33 40 41 42 48]

Y\_pred: [17 20 29 30 33 40 41 42]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

placement of central venous access via the, score: 0.084811725

right ij catheter terminates in superior vena cava, score:  
0.08064141  
on versed fent drips, score: 0.02699941

confidence of prediction: 0.900044  
Y\_true: [10 17 20 27 33 40 41 42 48]  
Y\_pred: [17 20 29 30 33 40 41 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension lower extremity edema hypertension social history  
smoked 3pks, score: 0.24389286  
secondary diagnosis hypertension discharge, score: 0.07880744  
up pursued hypertension with diastolic dysfunction, score:  
0.05527391

confidence of prediction: 0.805815  
Y\_true: [10 17 20 27 33 40 41 42 48]  
Y\_pred: [17 20 29 30 33 40 41 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure his respiratory, score: 0.25647607  
cxr showed fluffy bilateral, score: 0.1821633  
ventilation normal lactate and, score: 0.054625712

confidence of prediction: 0.544657  
Y\_true: [10 17 20 27 33 40 41 42 48]  
Y\_pred: [17 20 29 30 33 40 41 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
requiring intubation he did, score: 0.2758519  
you were intubated for three, score: 0.08237455  
sedation surrounding intubation or, score: 0.06291282

confidence of prediction: 0.526449  
Y\_true: [10 17 20 27 33 40 41 42 48]  
Y\_pred: [17 20 29 30 33 40 41 42]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
sedation surrounding intubation or from, score: 0.15030545  
distress requiring intubation he did, score: 0.047826435  
effusions endotracheal tube ends approximately, score: 0.03280286

confidence of prediction: 0.565091  
Y\_true: [10 17 20 27 33 40 41 42 48]  
Y\_pred: [17 20 29 30 33 40 41 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
endotracheal tube ends approximately cm, score: 0.15730335  
sedation surrounding intubation or, score: 0.09455675  
distress requiring intubation he did, score: 0.045015246

confidence of prediction: 0.845743  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]

Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stent hypertension hyperlipidemia tia chf, score: 0.18216024  
sickness hypertension hyperlipidemia cholecystectomy gun shot wound,  
score: 0.091074035  
400mg hospital1 pravastatin 10mg daily quinapril, score: 0.010816066

confidence of prediction: 0.924282  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cad s p stent years, score: 0.0374723  
coronary interventions stent years ago at, score: 0.00753174  
icd copd cad s p stent hypertension, score: 0.005089714

confidence of prediction: 0.973647  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation cabg none percutaneous, score: 0.3873826  
afib s p pulmonary, score: 0.21772367  
atrial fibrillation subsequently the, score: 0.02088283

confidence of prediction: 0.878859  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure who presents now, score: 0.3265396  
congestive heart failure the patient had, score: 0.091088556  
pulmonary edema atrial fibrillation, score: 0.036373798

confidence of prediction: 0.673933  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
fibrillation icd copd cad s p stent, score: 0.39502472  
hospital1 dx copd initiation of amiodarone, score: 0.079419814  
copd initiation of amiodarone, score: 0.032119676

confidence of prediction: 0.539046  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
renal function improved and has, score: 0.2041395  
acute kidney injury he had, score: 0.05691934  
an elevated cr that was, score: 0.045856997

confidence of prediction: 0.606552

Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
admission gen intubated male in, score: 0.022952601  
isolation ablation intubation history of, score: 0.021128196  
were briefly intubated upon discharge, score: 0.014951505  
  
confidence of prediction: 0.704277  
Y\_true: [ 4 16 20 24 26 27 30 33 35 40 42 49]  
Y\_pred: [ 4 24 26 27 30 35 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
isolation ablation intubation history of, score: 0.008836248  
were briefly intubated upon discharge from, score: 0.007108065  
he was intubated and diuresed, score: 0.0070251464  
  
confidence of prediction: 0.603997  
Y\_true: [ 1 4 14 21 24 27 38 47]  
Y\_pred: [ 1 2 4 14 21 24 36 38]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
qid levothyroxine sodium mcg po daily, score: 0.17766543  
min hypothyroidism mrsa cellulitis history obesity, score:  
0.022487264  
metoprolol and atrovastatin and, score: 0.0026366706  
  
confidence of prediction: 0.683700  
Y\_true: [ 1 4 14 21 24 27 38 47]  
Y\_pred: [ 1 2 4 14 21 24 36 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
[UNK] htn hld smoking history and, score: 0.38132605  
factors diabetes dyslipidemia hypertension diabetes mellitus type,  
score: 0.23390712  
sl mg sl prn, score: 0.02600678  
  
confidence of prediction: 0.626060  
Y\_true: [ 1 4 14 21 24 27 38 47]  
Y\_pred: [ 1 2 4 14 21 24 36 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac cath coronary angiography in this, score: 0.3178449  
circumflex artery that was, score: 0.0066984603  
cardiac cath coronary angiography in this, score: 0.0059595946  
  
confidence of prediction: 0.716639  
Y\_true: [ 1 4 14 21 24 27 38 47]  
Y\_pred: [ 1 2 4 14 21 24 36 38]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
neuropathy ckd stage egfr ml min, score: 0.025815375

diabetes mellitus type now, score: 0.0077636284  
metoprolol and atorvastatin and, score: 0.005642133

confidence of prediction: 0.962189  
Y\_true: [ 1 4 14 21 24 27 38 47]  
Y\_pred: [ 1 2 4 14 21 24 36 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cardiac cath coronary angiography in this, score: 0.25156826  
lxc stemi she had, score: 0.02271694  
who presented found to, score: 0.021241836

confidence of prediction: 0.835137  
Y\_true: [ 1 4 14 21 24 27 38 47]  
Y\_pred: [ 1 2 4 14 21 24 36 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath coronary angiography in this, score: 0.61995786  
cath coronary angiography in this, score: 0.11842522  
120s without this medication, score: 0.011801927

confidence of prediction: 0.916743  
Y\_true: [ 3 17 20 45 48 49]  
Y\_pred: [17 24 45 48 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
antibiotics tpn cvl discontinued picc placed diet advanced, score:  
0.065375514  
line flush picc heparin, score: 0.054219518  
picc line placed flexiseal placed ng, score: 0.04430533

confidence of prediction: 0.904109  
Y\_true: [ 3 17 20 45 48 49]  
Y\_pred: [17 24 45 48 49]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
control tpn pt made, score: 0.31346902  
on tpn diet advanced, score: 0.24952729  
diet tpn continues as, score: 0.1464459

confidence of prediction: 0.797161  
Y\_true: [ 3 17 20 45 48 49]  
Y\_pred: [17 24 45 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
htn hypercholesterolemia cad s p vessel cabg echo showed no, score:  
0.0042698914  
sigmoid colectomy hartmann s, score: 0.0031577288  
midline scar sl distended, score: 0.0010538092

confidence of prediction: 0.551669  
Y\_true: [ 3 17 20 45 48 49]  
Y\_pred: [17 24 45 48 49]  
top three important windows for true positive code 49 (V58.61: Long-

term (current) use of anticoagulants)  
dvt on coumadin reactive, score: 0.55256623  
of approximately warfarin dose decreased to, score: 0.087785296  
as needed warfarin mg tablet sig, score: 0.032028925

confidence of prediction: 0.735180  
Y\_true: [ 9 20 35]  
Y\_pred: [ 9 35 37]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
of fluids thrombocytopenia patients platelets were noted, score:  
0.60206914  
though certainly missing his insulin the, score: 0.028652841  
at length about the, score: 0.005715796

confidence of prediction: 0.818107  
Y\_true: [ 9 20 35]  
Y\_pred: [ 9 35 37]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
was likely pre renal his cr was, score: 0.03475044  
acute kidney injury likely prerenal resolving baseline creatinine,  
score: 0.01810896  
leukocytosis bandemia resolved no, score: 0.0137511315

confidence of prediction: 0.537949  
Y\_true: [ 7 9 26 27 35 49]  
Y\_pred: [ 6 9 26 27 35 44]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
bleeding resume thrombocytopenia stable pt, score: 0.509337  
unsuccessfull she wsa transfered to hospital1 for, score:  
0.096812285  
cautery and epinepherine injection, score: 0.03618241

confidence of prediction: 0.978559  
Y\_true: [ 7 9 26 27 35 49]  
Y\_pred: [ 6 9 26 27 35 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with episode of, score: 0.26244938  
fib last name stitle, score: 0.22411971  
atrial fibrillation who is admitted, score: 0.19988921

confidence of prediction: 0.986224  
Y\_true: [ 7 9 26 27 35 49]  
Y\_pred: [ 6 9 26 27 35 44]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure atrial, score: 0.17141238  
diastolic heart failure pt, score: 0.17141238  
diastolic heart failure gi, score: 0.17141238

confidence of prediction: 0.867709

Y\_true: [ 7 9 26 27 35 49]  
Y\_pred: [ 6 9 26 27 35 44]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
renal failure improved foley, score: 0.25121278  
acute renal failure after patient, score: 0.057172142  
acute renal failure atrial fibrillation, score: 0.057172142

confidence of prediction: 0.733971  
Y\_true: [ 9 19]  
Y\_pred: [ 9 19]  
top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)  
has new thrombocytopenia since her platelets were, score: 0.18311496  
relatively new thrombocytopenia the work, score: 0.17458905  
polyclonal hypergammaglobulinemia thrombocytopenia the patient, score: 0.12052192

confidence of prediction: 0.853733  
Y\_true: [ 9 19]  
Y\_pred: [ 9 19]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
on hemodialysis discharge condition, score: 0.075853184  
esrd on hd and presenting, score: 0.073186755  
esrd on hd the, score: 0.07313318

confidence of prediction: 0.535183  
Y\_true: [10 17 40 41 43]  
Y\_pred: [41]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
subfalcine herniation and left, score: 0.19421989  
old cantonese speaking man per his, score: 0.025377896  
subfalcine herniation and left, score: 0.02185006

confidence of prediction: 0.555615  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 6 (276.2: Acidosis)  
and respiratory acidosis acute renal failure discharge, score: 0.06284278  
and respiratory acidosis she was extubated on, score: 0.034951735  
intubated for inability to, score: 0.022201337

confidence of prediction: 0.815845  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line flush picc heparin, score: 0.0646792  
left subclavian picc line that extends, score: 0.03811848  
thus a picc line was placed the, score: 0.01935494

confidence of prediction: 0.880365  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history pmhx htn copd not on, score: 0.12712157  
cover bsx4 appropriately tender, score: 0.034213755  
cholecystectomy appendectomy perforated ulcers x3 hysterectomy  
bilateral total, score: 0.023353547

confidence of prediction: 0.662285  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxemic respiratory failure beleived to, score: 0.48605216  
she was intubated for inability to, score: 0.019373644  
also later grew e, score: 0.018048516

confidence of prediction: 0.523720  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
discharge medications citalopram mg, score: 0.075343944  
she was extubated on, score: 0.03515106  
acidosis acute renal failure discharge condition mental, score:  
0.027221007

confidence of prediction: 0.883714  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
re intubation due to possible, score: 0.3143558  
then re intubated on pod, score: 0.016884435  
patient was intubated in the, score: 0.0114388615

confidence of prediction: 0.859770  
Y\_true: [ 0 6 8 10 11 17 20 33 35 37 40 41 42 46]  
Y\_pred: [ 6 17 20 33 35 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
re intubated on pod, score: 0.50836426  
re intubation due to possible, score: 0.21294793  
was intubated in the, score: 0.085018195

confidence of prediction: 0.930188  
Y\_true: [ 8 35]  
Y\_pred: [35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)



to the arf as well, score: 0.25904125  
with keppra arf ck came, score: 0.048589483  
to elevated lactate dehydrogenase, score: 0.02468859

confidence of prediction: 0.896014  
Y\_true: [ 2 4 37 41]  
Y\_pred: [ 2 20 37 40 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm type ii hyperlipidemia tardive, score: 0.11860068  
lisinopril diabetes metformin initially held but, score: 0.04293456  
hospital1 metformin 1000mg ng hospital1 senna, score: 0.023478987

confidence of prediction: 0.940690  
Y\_true: [ 2 4 37 41]  
Y\_pred: [ 2 20 37 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
proteus mirabilis organisms ml sensitivities, score: 0.09543255  
and uti altered mental, score: 0.04468233  
her uti she was, score: 0.031565156

confidence of prediction: 0.737033  
Y\_true: [ 8 21 27 35 44 48]  
Y\_pred: [21 27 36 48]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
turp ckd baseline cr gout partial, score: 0.10764115  
renal failure likely from, score: 0.04403694  
ckd cr reached with baseline, score: 0.04201498

confidence of prediction: 0.941459  
Y\_true: [ 8 21 27 35 44 48]  
Y\_pred: [21 27 36 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
heart failure patient was, score: 0.15335177  
congestive heart failure secondary, score: 0.124263875  
chf chronic renal failure, score: 0.075072855

confidence of prediction: 0.885216  
Y\_true: [ 8 21 27 35 44 48]  
Y\_pred: [21 27 36 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
chf cad s p cabg ckd dm2, score: 0.00090514956  
chf cad s p cabg ckd dm2, score: 0.00068470323  
cad s p cabg in single, score: 0.00059433497

confidence of prediction: 0.893326  
Y\_true: [ 4 10 14 20 24 26 38]  
Y\_pred: [ 4 10 20 24 26 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hld on simvastatin at, score: 0.21565597  
72m with hyperlipidemia and atrial fibrillation, score: 0.079514384  
factors dyslipidemia hypertension cardiac history, score: 0.053901058

confidence of prediction: 0.661644  
Y\_true: [ 4 10 14 20 24 26 38]  
Y\_pred: [ 4 10 20 24 26 38]  
top three important windows for true positive code 10 (305.1: Tobacco use disorder)  
quitting smoking tobacco cessation counseling nicotine, score: 0.033133127  
tobacco abuse secondary hyperlipidemia, score: 0.024512997  
tobacco abuse patient is, score: 0.016976394

confidence of prediction: 0.892434  
Y\_true: [ 4 10 14 20 24 26 38]  
Y\_pred: [ 4 10 20 24 26 38]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
secondary hyperlipidemia hypertension discharge, score: 0.074063174  
continued gemfibrozil htn he was somewhat hypotensive, score: 0.051832877  
instead of zocor to, score: 0.045398287

confidence of prediction: 0.730994  
Y\_true: [ 4 10 14 20 24 26 38]  
Y\_pred: [ 4 10 20 24 26 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
cabg none percutaneous coronary, score: 0.037548248  
ii suggesting rca involvement, score: 0.033261843  
rca occlusion s p des stemi he does, score: 0.02669995

confidence of prediction: 0.972772  
Y\_true: [ 4 10 14 20 24 26 38]  
Y\_pred: [ 4 10 20 24 26 38]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation chads2 score is, score: 0.088159494  
atrial fibrillation who presents with, score: 0.08367599  
afib in during routing, score: 0.06230422

confidence of prediction: 0.696142  
Y\_true: [ 4 10 14 20 24 26 38]  
Y\_pred: [ 4 10 20 24 26 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
left heart catheterization with percutaneous, score: 0.33786476  
heart cath was performed, score: 0.07819358  
cath lab he was chest, score: 0.06446804

confidence of prediction: 0.585099

Y\_true: [ 2 9 21 34 36 45]

Y\_pred: [ 2 4 9 21 29 34 36 45]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

type diabetes acid reflux disease gout, score: 0.19488482

levofloxacin type dm used sliding scale, score: 0.05179302

diabetes and coronary artery, score: 0.028870335

confidence of prediction: 0.504370

Y\_true: [ 2 9 21 34 36 45]

Y\_pred: [ 2 4 9 21 29 34 36 45]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

down to thrombocytopenia antiplatelet antibody, score: 0.2722456

the liver branched radiopaque, score: 0.045168195

reflux disease gout diverticulosis, score: 0.039133716

confidence of prediction: 0.732259

Y\_true: [ 2 9 21 34 36 45]

Y\_pred: [ 2 4 9 21 29 34 36 45]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

kidney disease with baseline creatinine, score: 0.17107216

chronic kidney disease with baseline creatinine, score: 0.1530812

chronic renal insufficiency baseline cr cr elevated today, score: 0.013233919

confidence of prediction: 0.748383

Y\_true: [ 2 9 21 34 36 45]

Y\_pred: [ 2 4 9 21 29 34 36 45]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

atenolol gerd continued protonix gout continued, score: 0.13161841

acid reflux disease gout diverticulosis osteoarthritis, score: 0.067330256

diabetes acid reflux disease gout diverticulosis osteoarthritis, score: 0.03086626

confidence of prediction: 0.773180

Y\_true: [ 2 9 21 34 36 45]

Y\_pred: [ 2 4 9 21 29 34 36 45]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

kidney disease with baseline creatinine, score: 0.09911031

chronic kidney disease with baseline creatinine, score: 0.0985163

chronic renal insufficiency baseline cr cr elevated today, score: 0.029167635

confidence of prediction: 0.950117

Y\_true: [ 2 9 21 34 36 45]

Y\_pred: [ 2 4 9 21 29 34 36 45]

top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
on tpn his ngt was, score: 0.075355195  
following which tpn was discontinued the patient, score: 0.011298973  
was on tpn iv antibiotics and kept, score: 0.0031954031

confidence of prediction: 0.986022  
Y\_true: [21 26 36 37 47 48 49]  
Y\_pred: [26 34 36 37 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib patient is rhythm, score: 0.042517826  
atrial fibrillation discharge disposition home, score: 0.013215868  
atrial fibrillation amiodarone warfarin carpal tunnel, score:  
0.012357596

confidence of prediction: 0.648056  
Y\_true: [21 26 36 37 47 48 49]  
Y\_pred: [26 34 36 37 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
x2 af ckd htn who was transferred, score: 0.3224454  
renal insufficiency social history social, score: 0.014654428  
nf om dha epa, score: 0.014340887

confidence of prediction: 0.875344  
Y\_true: [21 26 36 37 47 48 49]  
Y\_pred: [26 34 36 37 48]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a uti since and he, score: 0.080163755  
urinary incontinence over the, score: 0.043697596  
final escherichia coli organisms ml presumptive, score: 0.02887254

confidence of prediction: 0.863128  
Y\_true: [21 26 36 37 47 48 49]  
Y\_pred: [26 34 36 37 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg x2 af ckd, score: 0.74754596  
lad redo cabg hypertension, score: 0.06770085  
coronary artery disease cabg in svg to lad svg to om svg, score:  
0.0019468706

confidence of prediction: 0.541280  
Y\_true: [ 2 11 16 17 21 27 36 41]  
Y\_pred: [17 21 27 36 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
picc line opacification over the, score: 0.10260093  
for methicillin resistant staph aureus general, score: 0.055166796  
a dobhoff feeding tube was, score: 0.042616677

confidence of prediction: 0.543163

Y\_true: [ 2 11 16 17 21 27 36 41]  
Y\_pred: [17 21 27 36 41]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
hypertension chronic renal failure coronary artery, score:  
0.26437104  
diabetes and depression takes diltiazem, score: 0.06168962  
kidney dipstick urinalysis blood, score: 0.009823926

confidence of prediction: 0.969379  
Y\_true: [ 2 11 16 17 21 27 36 41]  
Y\_pred: [17 21 27 36 41]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
decompensation heart shadow and mediastinal, score: 0.5714383  
htn crf chf dm requires insulin depression, score: 0.021646412  
history of chf and was given, score: 0.006358449

confidence of prediction: 0.586327  
Y\_true: [ 2 11 16 17 21 27 36 41]  
Y\_pred: [17 21 27 36 41]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
hypertension chronic renal failure coronary artery disease, score:  
0.29437828  
diabetes and depression takes diltiazem, score: 0.06072396  
crf chf dm requires insulin depression recent, score: 0.020201284

confidence of prediction: 0.923855  
Y\_true: [ 2 11 16 17 21 27 36 41]  
Y\_pred: [17 21 27 36 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
feeding tube tip is, score: 0.08939893  
npo tube feedings were not, score: 0.04324068  
the feeding tube and would, score: 0.017062962

confidence of prediction: 0.648552  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
inr hypothyroidism constipation past surgical, score: 0.34479225  
20mg levothyroxine 125mg qd metformin 500mg, score: 0.14920132  
daily levothyroxine mcg tablet sig, score: 0.05451308

confidence of prediction: 0.824347  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
qd metformin 500mg hospital1 colace, score: 0.025168795

history dm type pneumonia with pleural, score: 0.01709503  
pm metformin mg tablet sig, score: 0.010976432

confidence of prediction: 0.869507  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
50mg tid simvastatin 10mg qd coumadin 4mg, score: 0.04463231  
weeks ago htn hld uti deaf afib, score: 0.014704452  
warfarin mg tablet sig, score: 0.010194351

confidence of prediction: 0.940943  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
details regarding hyponatremia she had a foley, score: 0.24065623  
her improving hyponatremia her, score: 0.13629118  
to her hyponatremia her sodium upon admission, score: 0.10431466

confidence of prediction: 0.995950  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin last, score: 0.7095575  
atrial fibrillation with rapid, score: 0.07006134  
atrial fibrillation with a rapid, score: 0.07006134

confidence of prediction: 0.942039  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
atrial fibrillation urinary tract infection discharge condition,  
score: 0.06078216  
for uti which was, score: 0.025552519  
she was extubated after, score: 0.016167164

confidence of prediction: 0.590111  
Y\_true: [ 1 2 4 5 20 23 24 26 37 49]  
Y\_pred: [ 1 2 4 5 26 37 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin last, score: 0.6976836  
anticoagulated on coumadin she, score: 0.07384607  
10mg qd coumadin 4mg, score: 0.061874118

confidence of prediction: 0.703968  
Y\_true: [ 1 7 17 19 41 43]  
Y\_pred: [ 1 5 17 19 26 35]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

coagulopathy hypothyroidism h o atrial, score: 0.3334218  
outpatient hypothyroidism tsh hyperthyroid, score: 0.14322567  
hospital1 levoxyl mcg daily potassium, score: 0.099746004

confidence of prediction: 0.786254

Y\_true: [ 1 7 17 19 41 43]

Y\_pred: [ 1 5 17 19 26 35]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

arterial catheter picc line placement dialysis, score: 0.17789654

she underwent liver transplant, score: 0.06686933

l femoral line with large, score: 0.039482966

confidence of prediction: 0.905297

Y\_true: [ 1 7 17 19 41 43]

Y\_pred: [ 1 5 17 19 26 35]

top three important windows for true positive code 19 (39.95: Hemodialysis)

started on cvvh she continued, score: 0.076942936

demonstrated right hemodialysis catheter extended, score: 0.045967877

and cellcept cvvh was, score: 0.03152748

confidence of prediction: 0.563040

Y\_true: [ 4 17 18 24 26 37 38]

Y\_pred: [ 4 13 18 24 26 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

medical history hyperlipidemia coagulopathy has been worked, score: 0.17754334

simvastatin mg tablet sig, score: 0.039836038

warfarin mg tablet sig, score: 0.015955253

confidence of prediction: 0.975666

Y\_true: [ 4 17 18 24 26 37 38]

Y\_pred: [ 4 13 18 24 26 38]

top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)

wires were pulled per, score: 0.2330097

grafting x1 with reverse, score: 0.008980279

cardiothoracic allergies excedrin extra, score: 0.008425811

confidence of prediction: 0.973524

Y\_true: [ 4 17 18 24 26 37 38]

Y\_pred: [ 4 13 18 24 26 38]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

vessel coronary artery disease the, score: 0.12475375

coronary artery disease s p coronary artery, score: 0.0536573

coronary artery bypass grafting, score: 0.039661746

confidence of prediction: 0.775432

Y\_true: [ 4 17 18 24 26 37 38]

Y\_pred: [ 4 13 18 24 26 38]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation on pod and, score: 0.58522534

amiodarone mg tablet sig, score: 0.0174834

irregular murmur x grade, score: 0.012997778

confidence of prediction: 0.730589

Y\_true: [ 4 17 18 24 26 37 38]

Y\_pred: [ 4 13 18 24 26 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac cath selective angiography of this right, score: 0.18999545

cardiac catheterization was performed which, score: 0.024385372

vessel coronary artery disease, score: 0.011441103

confidence of prediction: 0.940853

Y\_true: [ 1 21 27 31 36 37 49]

Y\_pred: [ 1 21 27 31 34 36 37 49]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

dvt hypothyroidism discharge condition mental, score: 0.22596015

qpm levothyroxine 88mcg daily mvi, score: 0.030957514

currently hypothyroid continued home levothyroxine mcg pmr

continued, score: 0.027016519

confidence of prediction: 0.844782

Y\_true: [ 1 21 27 31 36 37 49]

Y\_pred: [ 1 21 27 31 34 36 37 49]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

chronic kidney disease hypertension chronic, score: 0.1254739

chronic kidney disease thiazides and, score: 0.03829337

chronic kidney disease without cp, score: 0.03829337

confidence of prediction: 0.968658

Y\_true: [ 1 21 27 31 36 37 49]

Y\_pred: [ 1 21 27 31 34 36 37 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic chf hyperlipidemia hypothyroidism, score: 0.023889514

chronic diastolic chf ef pt without chest, score: 0.017151022

medical history dchf ef hyperlipidemia hyperparathyroid hypothyroid,  
score: 0.0134004075

confidence of prediction: 0.861117

Y\_true: [ 1 21 27 31 36 37 49]

Y\_pred: [ 1 21 27 31 34 36 37 49]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

of aspiration pna name ni, score: 0.061976355

events this likely represents an aspiration pneumonia given her  
recent, score: 0.0417263

with vanc zosyn this, score: 0.018484237



confidence of prediction: 0.887410  
Y\_true: [ 1 21 27 31 36 37 49]  
Y\_pred: [ 1 21 27 31 34 36 37 49]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease hypertension chronic, score: 0.09423793  
chronic kidney disease thiazides and, score: 0.026535261  
chronic kidney disease without cp, score: 0.026535261

confidence of prediction: 0.664911  
Y\_true: [ 1 21 27 31 36 37 49]  
Y\_pred: [ 1 21 27 31 34 36 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
diphtheroids organisms ml of, score: 0.1896336  
alpha hemolytic colonies consistent with, score: 0.08183911  
change uti patient with history, score: 0.06502282

confidence of prediction: 0.726850  
Y\_true: [ 1 21 27 31 36 37 49]  
Y\_pred: [ 1 21 27 31 34 36 37 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
ago so warfarin held for days, score: 0.42967537  
anticoagulated on warfarin ckd, score: 0.163575  
day so warfarin was, score: 0.09415829

confidence of prediction: 0.623235  
Y\_true: [ 3 9 16 17 20 33 34 35 40 43 46]  
Y\_pred: [ 0 3 6 17 33 35 40 41 42 46]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
of htn hypercholesterolemia and gerd but, score: 0.13603714  
history hypertension hypercholesterolemia hx of malaria, score:  
0.08326735  
a plastic 10fr by 9cm biliary, score: 0.0030685342

confidence of prediction: 0.865724  
Y\_true: [ 3 9 16 17 20 33 34 35 40 43 46]  
Y\_pred: [ 0 3 6 17 33 35 40 41 42 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line was placed zosyn was, score: 0.14303137  
line was placed zosyn, score: 0.14303137  
subclavian central line placement history of, score: 0.036092296

confidence of prediction: 0.643938  
Y\_true: [ 3 9 16 17 20 33 34 35 40 43 46]  
Y\_pred: [ 0 3 6 17 33 35 40 41 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
respiratory failure acute renal, score: 0.05692049  
vanc and cefepime for, score: 0.05150945

was intubated on an arterial line, score: 0.049925704

confidence of prediction: 0.917894

Y\_true: [ 3 9 16 17 20 33 34 35 40 43 46]

Y\_pred: [ 0 3 6 17 33 35 40 41 42 46]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

renal failure improving pt, score: 0.2752168

acute renal failure creatinine was, score: 0.052809212

renal failure with clinical, score: 0.05134042

confidence of prediction: 0.877661

Y\_true: [ 3 9 16 17 20 33 34 35 40 43 46]

Y\_pred: [ 0 3 6 17 33 35 40 41 42 46]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

ercp intubation l subclavian central line, score: 0.1282611

and required intubation due to critical, score: 0.073140025

he was intubated on an arterial line, score: 0.005129074

confidence of prediction: 0.754179

Y\_true: [ 3 9 16 17 20 33 34 35 40 43 46]

Y\_pred: [ 0 3 6 17 33 35 40 41 42 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

sepsis acute renal failure with, score: 0.10422245

patient was admitted for, score: 0.06601013

and sepsis urine lytes, score: 0.02493745

confidence of prediction: 0.928565

Y\_true: [ 2 4 8 11 14 20 24 38]

Y\_pred: [ 2 4 20 24 38]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

dm2 on metformin glyburide as outpatient hba1c, score: 0.120367624

type diabetes hyperlipidemia discharge, score: 0.022181895

hypertension gout diabetes mellitus type hyperlipidemia

nephrolithiasis, score: 0.017572984

confidence of prediction: 0.756910

Y\_true: [ 2 4 8 11 14 20 24 38]

Y\_pred: [ 2 4 20 24 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

factors diabetes dyslipidemia hypertension cardiac history, score: 0.14790669

type diabetes hyperlipidemia discharge condition improved, score: 0.07333911

hyperlipidemia patient had fasting, score: 0.061618064

confidence of prediction: 0.876577

Y\_true: [ 2 4 8 11 14 20 24 38]

Y\_pred: [ 2 4 20 24 38]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension gout diabetes mellitus type, score: 0.15010038  
pmh of htn hyperlipidemia and dm who, score: 0.120125525  
htn patient was normotensive, score: 0.06386796

confidence of prediction: 0.891774  
Y\_true: [ 2 4 8 11 14 20 24 38]  
Y\_pred: [ 2 4 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad with drug eluting, score: 0.18716289  
vessel and stent clear, score: 0.051171027  
lad with name prefix, score: 0.038180828

confidence of prediction: 0.691191  
Y\_true: [ 2 4 8 11 14 20 24 38]  
Y\_pred: [ 2 4 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterizations and left, score: 0.28023544  
lab he received asa, score: 0.05987402  
cath comments coronary angiography of this, score: 0.03336948

confidence of prediction: 0.535271  
Y\_true: [ 5 8 15 17 21 23 24 25 27 35]  
Y\_pred: [15 21 23 26 27 35 36 38]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization to assess your, score: 0.008720775  
lab results on transfer, score: 0.0021245573  
procedure cardiac catheterization and history of present, score:  
0.0013543452

confidence of prediction: 0.727252  
Y\_true: [ 5 8 15 17 21 23 24 25 27 35]  
Y\_pred: [15 21 23 26 27 35 36 38]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
comfort ckd patient told he had, score: 0.03844717  
kidney disease in past social, score: 0.02214586  
hypertension chronic kidney disease discharge condition, score:  
0.018987665

confidence of prediction: 0.676220  
Y\_true: [ 5 8 15 17 21 23 24 25 27 35]  
Y\_pred: [15 21 23 26 27 35 36 38]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi in, score: 0.3767177  
s p mi with chf, score: 0.11520697  
s p mi and [UNK] in ny, score: 0.047863644

confidence of prediction: 0.954128  
Y\_true: [ 5 8 15 17 21 23 24 25 27 35]  
Y\_pred: [15 21 23 26 27 35 36 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
implanted in chf pvd and htn, score: 0.24877977  
heart failure coronary artery, score: 0.066472776  
chf and acute renal, score: 0.052300595

confidence of prediction: 0.700863  
Y\_true: [ 5 8 15 17 21 23 24 25 27 35]  
Y\_pred: [15 21 23 26 27 35 36 38]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure he reports, score: 0.08943548  
acute renal failure pump he, score: 0.08943548  
stabilized renal function rhythm, score: 0.06040051

confidence of prediction: 0.655861  
Y\_true: [ 1 2 4 26 27 35 48]  
Y\_pred: [ 1 2 20 26 27 35 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
diltiazem hypothyroidism patient was not, score: 0.08583286  
secondary hypothyroidism hypertension diabetes mellitis, score:  
0.08030195  
daily levothyroxine mcg tablet sig, score: 0.06390447

confidence of prediction: 0.952336  
Y\_true: [ 1 2 4 26 27 35 48]  
Y\_pred: [ 1 2 20 26 27 35 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hypertension diabetes mellitis type hyperlipidemia coronary, score:  
0.20965208  
ii diabetes on oral agents, score: 0.031687222  
type ii diabetes the patient s, score: 0.010507656

confidence of prediction: 0.979864  
Y\_true: [ 1 2 4 26 27 35 48]  
Y\_pred: [ 1 2 20 26 27 35 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf who presents with, score: 0.2943168  
atrial fibrillation chads score of, score: 0.26553527  
paf who presented with dyspnea, score: 0.15005217

confidence of prediction: 0.978882  
Y\_true: [ 1 2 4 26 27 35 48]  
Y\_pred: [ 1 2 20 26 27 35 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
dchf exacerbation in setting, score: 0.21748737

diastolic chf exacerbation respiratory distress, score: 0.045649692  
heart failure diastolic acute, score: 0.017442342

confidence of prediction: 0.589001

Y\_true: [ 1 2 4 26 27 35 48]

Y\_pred: [ 1 2 20 26 27 35 48]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

recorded as having no, score: 0.028820055

and renal failure daily attention, score: 0.028096355

improved with diuresis however, score: 0.014051885

confidence of prediction: 0.877811

Y\_true: [ 1 2 4 26 27 35 48]

Y\_pred: [ 1 2 20 26 27 35 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg dchf and, score: 0.35179952

s p cabg had cabg in, score: 0.07640285

course after cabg and, score: 0.014464993

confidence of prediction: 0.610767

Y\_true: [ 2 4 5 27 33 47]

Y\_pred: [ 2 4 5 27 34]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

dm ii history of rectal, score: 0.0842557

hyponatremia diabetes type ii patient on, score: 0.039235666

prn metformin mg po, score: 0.027993146

confidence of prediction: 0.799573

Y\_true: [ 2 4 5 27 33 47]

Y\_pred: [ 2 4 5 27 34]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

transanal excision hyperlipidemia depression anxiety oa knee, score: 0.1603052

po daily hyperlipidemia she was continued on, score: 0.07118853

female laying in bed, score: 0.0066679656

confidence of prediction: 0.956974

Y\_true: [ 2 4 5 27 33 47]

Y\_pred: [ 2 4 5 27 34]

top three important windows for true positive code 5 (276.1: Hyposmolality and/or hyponatremia)

to hypovolemic hyponatremia diabetes type ii patient, score: 0.575689

with antibiotics hyponatremia na of in the, score: 0.067092404

on discharge tiotropium albuterol nebs, score: 0.01994111

confidence of prediction: 0.965445

Y\_true: [ 2 4 5 27 33 47]

Y\_pred: [ 2 4 5 27 34]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure discharge condition, score: 0.32864815  
dchf and dm ii who, score: 0.10124094  
dchf diabetes and remote history, score: 0.08258106

confidence of prediction: 0.683897

Y\_true: [ 7 17 20 31 33]

Y\_pred: [17 31 33]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
yeast klebsiella pneumoniae inpatient mrsa, score: 0.091381155  
had a picc line while in house, score: 0.086755686  
the picc line is better assessed, score: 0.042935435

confidence of prediction: 0.976805

Y\_true: [ 7 17 20 31 33]

Y\_pred: [17 31 33]

top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
aspiration pneumonia hypoxia discharge condition, score: 0.20959964  
aspiration pneumonia aspiration pneumonitis pt was, score:  
0.06415394  
after aspiration event and desat on, score: 0.05119249

confidence of prediction: 0.624259

Y\_true: [ 7 17 20 31 33]

Y\_pred: [17 31 33]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
acute respiratory failure aspiration pneumonia, score: 0.22684652  
aspiration pneumonia hypoxia discharge condition, score: 0.09569435  
above hypoxic event repeat, score: 0.066654876

confidence of prediction: 0.820826

Y\_true: [ 1 11 37 49]

Y\_pred: [ 1 37 49]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
edema hypothyroidism depression s p cholecystectomy, score:  
0.45863533  
daily levothyroxine mcg daily lexapro, score: 0.049514644  
hs levothyroxine mcg tablet sig, score: 0.044340976

confidence of prediction: 0.943290

Y\_true: [ 1 11 37 49]

Y\_pred: [ 1 37 49]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
his uti was empirically treated, score: 0.113813415  
urinary tract infection and resulting, score: 0.11093064  
urinary tract infection multiple, score: 0.10540245

confidence of prediction: 0.825259

Y\_true: [ 1 11 37 49]

Y\_pred: [ 1 37 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

now on warfarin who presents as, score: 0.35961607

mg qhs warfarin mg daily simvastatin, score: 0.32412952

every hours warfarin mg, score: 0.18594226

confidence of prediction: 0.909619

Y\_true: [ 4 39]

Y\_pred: [ 4 18 20 39]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

issues psoriasis hyperlipidemia s p r, score: 0.124013074

who presents with visual, score: 0.0074659856

showed stable hemorrhage with, score: 0.007417252

confidence of prediction: 0.822626

Y\_true: [ 4 39]

Y\_pred: [ 4 18 20 39]

top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)

tee which were normal, score: 0.017558783

transesophageal echocardiogram history of, score: 0.012984453

vegetation is seen on, score: 0.0022430061

confidence of prediction: 0.865908

Y\_true: [21 26 27 35 36]

Y\_pred: [21 24 26 27 30 35 36]

top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

osa chronic kidney disease metastatic melanoma, score: 0.10420655

pre renal etiology patient was, score: 0.008596872

cr improved continued to, score: 0.0071162307

confidence of prediction: 0.902138

Y\_true: [21 26 27 35 36]

Y\_pred: [21 24 26 27 30 35 36]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

paf moderate as pvd, score: 0.22757134

atrial fibrillation severe pulmonary hypertension, score: 0.181181

paf and prior hospitalizations, score: 0.03726058

confidence of prediction: 0.963432

Y\_true: [21 26 27 35 36]

Y\_pred: [21 24 26 27 30 35 36]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

congestive heart failure severe, score: 0.22459699

systolic heart failure held diuretic last, score: 0.08721499

systolic chf ef paroxysmal atrial, score: 0.06163349

confidence of prediction: 0.805850  
Y\_true: [21 26 27 35 36]  
Y\_pred: [21 24 26 27 30 35 36]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
pre renal etiology patient was, score: 0.11766721  
be in arf with creatinine of, score: 0.068281196  
with pre renal failure on admission, score: 0.06166328

confidence of prediction: 0.797322  
Y\_true: [21 26 27 35 36]  
Y\_pred: [21 24 26 27 30 35 36]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
osa chronic kidney disease metastatic melanoma, score: 0.107659094  
pre renal failure on, score: 0.015341691  
pre renal etiology patient was, score: 0.014565711

confidence of prediction: 0.948658  
Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 6 (276.2: Acidosis)  
support cvvh vasopressors vanco clinda, score: 0.09498067  
support cvvh vanco clinda vasopressors weaned, score: 0.035318647

confidence of prediction: 0.899369  
Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
clinda tpn levothyroxine started ancef, score: 0.16150694  
line was placed and, score: 0.12345608  
clinda flagyl tube feeds, score: 0.07347338

confidence of prediction: 0.875642  
Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
initiated on cvvh she received, score: 0.12152939  
support cvvh vasopressors vanco, score: 0.06744036  
ventilatory support cvvh vanco clinda, score: 0.013088

confidence of prediction: 0.728161  
Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
pmh ibs gerd tbi migraine depression psh, score: 0.077119105  
continued fluc last name, score: 0.011682406  
edges healing well posterior, score: 0.009779184

confidence of prediction: 0.945793



Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
flagyl tube feeds fluconazole added for, score: 0.17052934  
tube placed tube feeds started flagyl started, score: 0.014380786  
and imipenem prophylactically for, score: 0.005005307

confidence of prediction: 0.982654  
Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
vanco clinda tpn levothyroxine started ancef, score: 0.06427367  
cephalexin wellbutrin doxycycline compazine ciprofloxacin, score:  
0.0047391145  
tube feeds fluconazole added, score: 0.004192917

confidence of prediction: 0.998155  
Y\_true: [ 6 9 17 19 34 41 43 45 46]  
Y\_pred: [ 0 6 17 19 34 35 40 41 45 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
vanco clinda vasopressors weaned, score: 0.17570998  
cvvh vasopressors vanco clinda last, score: 0.071923174  
cvvh vasopressors vanco clinda transfused, score: 0.071923174

confidence of prediction: 0.977865  
Y\_true: [ 3 10 26]  
Y\_pred: [26 30]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with rapid ventricular, score: 0.8625843  
atrial fibrillation at a rate, score: 0.013400774  
a fib with hr up, score: 0.0022156301

confidence of prediction: 0.875161  
Y\_true: [ 2 4 10 12 17 20 26 28 31 33 40 41 43 49]  
Y\_pred: [17 20 26 40 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
picc line placement tracheostomy open, score: 0.11275264  
noises with drool coming, score: 0.04155222  
pulmonology consult was obtained, score: 0.024351234

confidence of prediction: 0.928913  
Y\_true: [ 2 4 10 12 17 20 26 28 31 33 40 41 43 49]  
Y\_pred: [17 20 26 40 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh of htn pt last seen, score: 0.28438625  
medical history hypertension cataracts s p, score: 0.14134747  
diner and helping to, score: 0.020672183

confidence of prediction: 0.954890  
Y\_true: [ 2 4 10 12 17 20 26 28 31 33 40 41 43 49]  
Y\_pred: [17 20 26 40 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation emphysema discharge condition, score: 0.17800632  
afib with rvr with, score: 0.16238077  
atrial fibrillation major surgical or, score: 0.15244865

confidence of prediction: 0.546615  
Y\_true: [ 2 4 10 12 17 20 26 28 31 33 40 41 43 49]  
Y\_pred: [17 20 26 40 41]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
rarely sees a doctor, score: 0.06884948  
ed intubated and unable, score: 0.066131  
minimal ventilator requirements but, score: 0.053469803

confidence of prediction: 0.529347  
Y\_true: [ 2 4 10 12 17 20 26 28 31 33 40 41 43 49]  
Y\_pred: [17 20 26 40 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tracheostomy open gastrostomy tube placement history, score:  
0.14728467  
cerebellar arterial territory infarct, score: 0.03497649  
minimal ventilator requirements but, score: 0.0240555

confidence of prediction: 0.677488  
Y\_true: [ 0 6 20 26 35 46]  
Y\_pred: [ 6 9 20 24 26 27 35]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
gap metabolic acidosis secondary to increased, score: 0.2808362  
and elevated lactate resolved and leukocytosis improved, score:  
0.0893923  
hypothermia and elevated lactate the, score: 0.015548437

confidence of prediction: 0.823823  
Y\_true: [ 0 6 20 26 35 46]  
Y\_pred: [ 6 9 20 24 26 27 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
colectomy in hypertension gout spinal stenosis, score: 0.16003391  
secondary diagnoses hypertension atrial, score: 0.127613  
who agreed hypertension was hypotensive on, score: 0.12196277

confidence of prediction: 0.949916  
Y\_true: [ 0 6 20 26 35 46]  
Y\_pred: [ 6 9 20 24 26 27 35]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation noted during hospitalization, score: 0.28018942  
fib remained rate controlled, score: 0.07821243

atrial fibrillation gout history of, score: 0.05953815

confidence of prediction: 0.559876

Y\_true: [ 0 6 20 26 35 46]

Y\_pred: [ 6 9 20 24 26 27 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

and elevated lactate resolved and leukocytosis improved after, score: 0.12774105

acute renal failure secondary to, score: 0.11034718

acute renal failure ekg changes, score: 0.069907375

confidence of prediction: 0.843524

Y\_true: [ 4 10 14 24 27 38]

Y\_pred: [ 4 24 27 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

p cholecystomy dyslipidemia social history lives, score: 0.1982202

factors diabetes dyslipidemia hypertension cardiac history cabg, score: 0.13050234

hld pt continued on, score: 0.084656335

confidence of prediction: 0.951820

Y\_true: [ 4 10 14 24 27 38]

Y\_pred: [ 4 24 27 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

s p stents in, score: 0.66968477

s p pci to, score: 0.11964483

mid lad stent fracture [UNK], score: 0.015142938

confidence of prediction: 0.969849

Y\_true: [ 4 10 14 24 27 38]

Y\_pred: [ 4 24 27 38]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

congestive heart failure lvef hiv dx, score: 0.3893005

systolic heart failure as per, score: 0.15117227

systolic heart failure discharge condition mental, score: 0.15117227

confidence of prediction: 0.772450

Y\_true: [ 4 10 14 24 27 38]

Y\_pred: [ 4 24 27 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization history of present, score: 0.67704296

catheterization he had already, score: 0.049373943

cardiac catheterization which did reveal, score: 0.032668125

confidence of prediction: 0.892387

Y\_true: [ 1 2 4 11 17 20 34]

Y\_pred: [ 1 2 4 20 34]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

formulary hypothyroidism continue levothyroxine gerd continue  
omeprazole, score: 0.1420153  
gerd hypothyroidism chronic osteomyelitis staph infection, score:  
0.07128523  
daily levothyroxine mcg tablet sig, score: 0.023402786

confidence of prediction: 0.928065  
Y\_true: [ 1 2 4 11 17 20 34]  
Y\_pred: [ 1 2 4 20 34]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm2 htn and multiple surgeries, score: 0.055223975  
dm2 hold metformin while inpatient, score: 0.044587865  
diabetes mellitus gerd hypothyroidism, score: 0.029644681

confidence of prediction: 0.875452  
Y\_true: [ 1 2 4 11 17 20 34]  
Y\_pred: [ 1 2 4 20 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia allergic rhinitis diabetes  
mellitus, score: 0.14320855  
hypothyroidism chronic osteomyelitis staph, score: 0.006645547  
restart home atenolol as, score: 0.005340489

confidence of prediction: 0.961576  
Y\_true: [ 1 2 4 11 17 20 34]  
Y\_pred: [ 1 2 4 20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
with dm2 htn and multiple surgeries, score: 0.16512217  
with dm2 htn s p mvc, score: 0.070998795  
medical history hypertension hyperlipidemia allergic rhinitis  
diabetes, score: 0.04616601

confidence of prediction: 0.922613  
Y\_true: [ 1 2 4 11 17 20 34]  
Y\_pred: [ 1 2 4 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
levothyroxine gerd continue omeprazole sjogren s, score: 0.056482628  
diabetes mellitus gerd hypothyroidism chronic osteomyelitis staph,  
score: 0.04845082  
orthopaedics allergies penicillins cipro, score: 0.016585866

confidence of prediction: 0.936755  
Y\_true: [37]  
Y\_pred: [11 20 27 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
and uti on prednisone taper, score: 0.020019732  
vna home pt and social, score: 0.004410315  
4units qhs uti e coli from last, score: 0.0030399614

confidence of prediction: 0.885654  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia spinal stenosis degenerative,  
score: 0.08696055  
hypertension and hyperlipidemia who presented to, score: 0.06071829  
x2 hypertension dyslipidemia spinal stenosis degenerative, score:  
0.040354818

confidence of prediction: 0.982104  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting, score: 0.3793227  
descending artery saphenous vein graft, score: 0.036688633  
off pump coronary artery bypass graft, score: 0.026574356

confidence of prediction: 0.613154  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization coronary angiography in this, score:  
0.18797947  
cardiac catheterization past medical history, score: 0.028724853  
cardiac catheterization which revealed a, score: 0.018802492

confidence of prediction: 0.996792  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension hyperlipidemia spinal stenosis  
degenerative, score: 0.16762683  
significant for hypertension and hyperlipidemia who presented,  
score: 0.13586092  
x2 hypertension dyslipidemia spinal stenosis, score: 0.041865546

confidence of prediction: 0.992164  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s, score: 0.15227388  
coronary artery bypass grafting, score: 0.13726866  
coronary artery disease the, score: 0.08649661

confidence of prediction: 0.626453  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
p trauma gerd hemorrhoids mild depression bph, score: 0.18284005  
bypass palpable liver edge extremities, score: 0.05573348  
trauma hemorrhoids gerd mild depression benign, score: 0.034757692

confidence of prediction: 0.706803  
Y\_true: [ 4 13 14 20 24 34 38 39]  
Y\_pred: [ 4 13 14 18 20 24 34 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization coronary angiography in, score: 0.17907962  
urgent off pump coronary artery, score: 0.11095239  
cardiac catheterization past medical history, score: 0.034368925

confidence of prediction: 0.937602  
Y\_true: [ 5 6 8 17 21 29 33 35 36 37 40 41 43 46 49]  
Y\_pred: [31 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
developed urinary tract infection on the, score: 0.04877666  
he expired peacefully with his, score: 0.017400086  
4grams hospital1 clotrimazole 10mg, score: 0.011013652

confidence of prediction: 0.760400  
Y\_true: [ 2 14 22 24 25 27 32 38]  
Y\_pred: [ 2 15 20 22 24 27 38]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
htn type dm p w chest, score: 0.06821728  
metformin and vitamin c, score: 0.01953706  
failure diabetes mellitus type hypertension discharge, score:  
0.017170168

confidence of prediction: 0.702014  
Y\_true: [ 2 14 22 24 25 27 32 38]  
Y\_pred: [ 2 15 20 22 24 27 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
nSTEMI changes on ekg, score: 0.035947904  
non ST elevation myocardial infarction acute systolic, score:  
0.017958242  
ventricular dysfunction nSTEMI due to ulcerated plaque, score:  
0.014919686

confidence of prediction: 0.974284  
Y\_true: [ 2 14 22 24 25 27 32 38]  
Y\_pred: [ 2 15 20 22 24 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.17260198  
coronary artery disease mild, score: 0.17260198  
pci with des she, score: 0.044336013

confidence of prediction: 0.953143  
Y\_true: [ 2 14 22 24 25 27 32 38]  
Y\_pred: [ 2 15 20 22 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure diabetes mellitus type, score: 0.7243121  
acute heart failure with evidence of, score: 0.009583738  
worsening of chf symptoms, score: 0.008086908

confidence of prediction: 0.868376  
Y\_true: [ 2 14 22 24 25 27 32 38]  
Y\_pred: [ 2 15 20 22 24 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with drug, score: 0.589912  
cath lab pt was found, score: 0.019817173  
cardiac catheterization selective coronary angiography in, score:  
0.01742288

confidence of prediction: 0.683714  
Y\_true: [ 7 9 17]  
Y\_pred: [ 7 20]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
without significant bleeding in, score: 0.06595742  
matched for u more, score: 0.06468045  
prbc was hung she was, score: 0.059997726

confidence of prediction: 0.626678  
Y\_true: [ 6 9 17 20 35 41 43 47]  
Y\_pred: [ 4 6 33 35 40 41 43]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
had respiratory acidosis after intubation his bps, score: 0.07608768  
in standard positions secretions pooling above, score: 0.022683669  
decreased to elevated troponin, score: 0.020708533

confidence of prediction: 0.785812  
Y\_true: [ 6 9 17 20 35 41 43 47]  
Y\_pred: [ 4 6 33 35 40 41 43]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
secondary acute renal failure sinus tachycardia, score: 0.06773721  
normalized on arf he had an, score: 0.0567746  
a virus ventilator associated, score: 0.020307356

confidence of prediction: 0.844508  
Y\_true: [ 6 9 17 20 35 41 43 47]  
Y\_pred: [ 4 6 33 35 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
trach and peg tube, score: 0.078246854  
percutaneous tracheostomy portex percutaneous endoscopic gastrostomy

tube transfusion of, score: 0.061578788  
trach and peg goals, score: 0.053071756

confidence of prediction: 0.827385  
Y\_true: [ 6 9 17 20 35 41 43 47]  
Y\_pred: [ 4 6 33 35 40 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
trach and peg goals of, score: 0.058862902  
tracheostomy and peg tube and, score: 0.040327683  
trach and peg tube, score: 0.03392455

confidence of prediction: 0.519893  
Y\_true: [ 4 15 20 22 27 34 37 38]  
Y\_pred: [15 20 22 23 24 27 37 38]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization w des placed, score: 0.91651213  
cath lab she was found, score: 0.015583618  
calcification and areas with, score: 0.0090060495

confidence of prediction: 0.809692  
Y\_true: [ 4 15 20 22 27 34 37 38]  
Y\_pred: [15 20 22 23 24 27 37 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn gerd chf listed, score: 0.1120366  
history of htn and, score: 0.10210997  
to lmca hypertension acute, score: 0.05566059

confidence of prediction: 0.695231  
Y\_true: [ 4 15 20 22 27 34 37 38]  
Y\_pred: [15 20 22 23 24 27 37 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
disease nstemi s p cath cath, score: 0.040749945  
indx ctropnt 09am blood, score: 0.03310542  
to have nstemi with severe multivessel, score: 0.026007662

confidence of prediction: 0.932611  
Y\_true: [ 4 15 20 22 27 34 37 38]  
Y\_pred: [15 20 22 23 24 27 37 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cad admit to ccu, score: 0.021982346  
cardiology name9 pre on, score: 0.010687791  
with severe multivessel coronary, score: 0.010118379

confidence of prediction: 0.896517  
Y\_true: [ 4 15 20 22 27 34 37 38]  
Y\_pred: [15 20 22 23 24 27 37 38]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)



failure urinary tract infection discharge condition mental, score: 0.0053561456  
disease discussion with cardiothoracic, score: 0.0028662833  
home with service facility steward home care and hospice, score: 0.0026059519

confidence of prediction: 0.861866  
Y\_true: [ 4 15 20 22 27 34 37 38]  
Y\_pred: [15 20 22 23 24 27 37 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization w des placed, score: 0.82132167  
cath lab she was found, score: 0.019707123  
calcification and areas with, score: 0.01386129

confidence of prediction: 0.847550  
Y\_true: [ 5 9 17 20 26 29 30 32 37]  
Y\_pred: [12 26 34 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
diuresed the foley was, score: 0.05148448  
a fib glaucoma malnutrition chronic myelogenous leukemia ileus,  
score: 0.034427565  
mitral valve mildly thickened, score: 0.012450776

confidence of prediction: 0.928304  
Y\_true: [ 5 9 17 20 26 29 30 32 37]  
Y\_pred: [12 26 34 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
ecoli uti and staph oxacillin, score: 0.118953735  
a uti ucx showed e coli, score: 0.02791822  
final escherichia coli organisms ml escherichia coli ampicillin,  
score: 0.026109831

confidence of prediction: 0.952011  
Y\_true: [ 6 19 27]  
Y\_pred: [ 0 19 24 27 30 35]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
antibiotics and hemodialysis to help, score: 0.07887917  
placed tunnelled hemodialysis line history of, score: 0.04920913  
temporary hd catheter which, score: 0.04091583

confidence of prediction: 0.979838  
Y\_true: [ 6 19 27]  
Y\_pred: [ 0 19 24 27 30 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
ef echo recent cdiff, score: 0.045432027  
chf with poor forward flow, score: 0.027258318  
cellulitis copd chf with ef b, score: 0.014837104

confidence of prediction: 0.737179

Y\_true: [ 0 5 7 26 30 32 37 42 46 47]  
Y\_pred: [ 2 5 20 26 33]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
of hypovolemic hyponatremia due to diuretics vs, score: 0.60734  
100s systolic hyponatremia the patient was noted, score: 0.03665213  
cirrhosis sodium improved with, score: 0.033083208

confidence of prediction: 0.861254  
Y\_true: [ 0 5 7 26 30 32 37 42 46 47]  
Y\_pred: [ 2 5 20 26 33]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib and was occasionally hypotensive, score: 0.4475888  
afib with rvr and discharged, score: 0.35631567  
malaise ftt major surgical or, score: 0.00908756

confidence of prediction: 0.903712  
Y\_true: [ 1 4 5 21 23 24 27 35 36]  
Y\_pred: [ 1 4 17 21 23 24 27 35 36]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
daily hypothyroidism continued levothyroxine mcg daily medications  
on, score: 0.41952795  
daily levothyroxine mcg tablet sig one, score: 0.017918555  
htn hld hypothyroidism cad s, score: 0.0012302485

confidence of prediction: 0.919557  
Y\_true: [ 1 4 5 21 23 24 27 35 36]  
Y\_pred: [ 1 4 17 21 23 24 27 35 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
simvastatin mg hs symbicort, score: 0.19472355  
hld continued simvastatin mg daily, score: 0.15501274  
history htn hld hypothyroidism cad s p, score: 0.048743244

confidence of prediction: 0.834533  
Y\_true: [ 1 4 5 21 23 24 27 35 36]  
Y\_pred: [ 1 4 17 21 23 24 27 35 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney injury supraventricular tachycardia, score:  
0.31904542  
of unclear etiology creatinine, score: 0.010758607  
mg hospital1 ciclopirox hospital1, score: 0.010488194

confidence of prediction: 0.701971  
Y\_true: [ 1 4 5 21 23 24 27 35 36]  
Y\_pred: [ 1 4 17 21 23 24 27 35 36]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi years ago details unknown, score: 0.28517392  
s p mi 5yrs, score: 0.28517392

ed suggesting nstemi vs, score: 0.012562931

confidence of prediction: 0.811013

Y\_true: [ 1 4 5 21 23 24 27 35 36]

Y\_pred: [ 1 4 17 21 23 24 27 35 36]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

s p mi years ago details unknown, score: 0.12245896

s p mi 5yrs, score: 0.12245896

htn documented history of, score: 0.103085585

confidence of prediction: 0.993731

Y\_true: [ 1 4 5 21 23 24 27 35 36]

Y\_pred: [ 1 4 17 21 23 24 27 35 36]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

chf exacerbation chf exacerbation svt considering, score: 0.9359922

congestive heart failure acute, score: 0.026909247

heart failure metoprolol was continued, score: 0.003941288

confidence of prediction: 0.773305

Y\_true: [ 1 4 5 21 23 24 27 35 36]

Y\_pred: [ 1 4 17 21 23 24 27 35 36]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

on chronic kidney injury supraventricular tachycardia, score: 0.19875835

his stay arf baseline cr, score: 0.07042956

creatinine trended downward but, score: 0.025573434

confidence of prediction: 0.828125

Y\_true: [ 1 4 5 21 23 24 27 35 36]

Y\_pred: [ 1 4 17 21 23 24 27 35 36]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic kidney injury supraventricular tachycardia, score: 0.31368575

quantitative biplane lvef left ventricular, score: 0.041685563

cr was hld continued simvastatin, score: 0.009527112

confidence of prediction: 0.992132

Y\_true: [ 4 20 23 24 38]

Y\_pred: [15 24 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

w cad pda distribution, score: 0.07553134

vessel coronary artery disease the, score: 0.066148676

non obstructive coronary artery disease the, score: 0.042354252

confidence of prediction: 0.854291

Y\_true: [ 4 20 23 24 38]

Y\_pred: [15 24 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization with drug eluting, score: 0.58572435  
cath lab immediately for late, score: 0.07149799  
segment the lcx had, score: 0.024039328

confidence of prediction: 0.694350  
Y\_true: [11 31 34 35]  
Y\_pred: [10 11 29 31 35]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
depression secondary diagnosis history of, score: 0.118720025  
depression admitted to micu, score: 0.06677635  
hep c depression presenting, score: 0.060662284

confidence of prediction: 0.965412  
Y\_true: [11 31 34 35]  
Y\_pred: [10 11 29 31 35]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
multifocal cap aspiration pneumonia or pneumonitis cxr, score:  
0.014789974  
have aspirated patient given course, score: 0.0027849698  
community acquired pneumonia acute renal, score: 0.0026419552

confidence of prediction: 0.732284  
Y\_true: [11 31 34 35]  
Y\_pred: [10 11 29 31 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
vasoconstriction infarction resolved with, score: 0.06490557  
acute renal failure polysubstance, score: 0.029473817  
discharge acute renal failure resolved upon discharge, score:  
0.0112526445

confidence of prediction: 0.580121  
Y\_true: [ 1 6 26 27 32 33 35 42 48]  
Y\_pred: [ 1 4 26 27 33 34 40 42 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
delirium hypothyroidism he was continued on levothyroxine gerd he  
was, score: 0.19430187  
daily levothyroxine 100mcg po daily mvi, score: 0.18622904  
daily levothyroxine mcg tablet sig, score: 0.08165532

confidence of prediction: 0.958456  
Y\_true: [ 1 6 26 27 32 33 35 42 48]  
Y\_pred: [ 1 4 26 27 33 34 40 42 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib when patient was, score: 0.5164488  
atrial fibrillation patient has a, score: 0.06983718  
atrial fibrillation s p pacemaker, score: 0.058035646

confidence of prediction: 0.889780  
Y\_true: [ 1 6 26 27 32 33 35 42 48]

Y\_pred: [ 1 4 26 27 33 34 40 42 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure patient had, score: 0.17666312  
severe as chf discharge condition the, score: 0.07395463  
congestive heart failure was admitted from, score: 0.061669808  
  
confidence of prediction: 0.570568  
Y\_true: [ 1 6 26 27 32 33 35 42 48]  
Y\_pred: [ 1 4 26 27 33 34 40 42 48]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
he was intubated and then, score: 0.047410604  
being intubated and sedated family, score: 0.034635264  
being intubated and sedated physical, score: 0.034635264  
  
confidence of prediction: 0.626973  
Y\_true: [ 1 6 26 27 32 33 35 42 48]  
Y\_pred: [ 1 4 26 27 33 34 40 42 48]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
after intubation thoracic surgery, score: 0.1561578  
being intubated and sedated family history, score: 0.0592394  
being intubated and sedated, score: 0.0592394  
  
confidence of prediction: 0.862484  
Y\_true: [ 1 6 26 27 32 33 35 42 48]  
Y\_pred: [ 1 4 26 27 33 34 40 42 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg no, score: 0.71883833  
p remote cabg and, score: 0.076865196  
coronary artery disease s, score: 0.004079357  
  
confidence of prediction: 0.917935  
Y\_true: [ 1 2 17 26 27 48]  
Y\_pred: [ 1 2 5 20 26 27 31 35 37 41 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
of levothyroxine skin tears in, score: 0.004095876  
for neutrophilic predominant leukocytosis, score: 0.00093333836  
fluctuating creatinine hypothyroidism we continued on home, score:  
0.00078111026  
  
confidence of prediction: 0.794002  
Y\_true: [ 1 2 17 26 27 48]  
Y\_pred: [ 1 2 5 20 26 27 31 35 37 41 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus dm type ii dm ii will continue to, score:  
0.20683353  
ii diabetes on oral agents, score: 0.018208247

ii cad s p, score: 0.011496352

confidence of prediction: 0.884879

Y\_true: [ 1 2 17 26 27 48]

Y\_pred: [ 1 2 5 20 26 27 31 35 37 41 48]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation t11 vertebral compression, score: 0.07825227

atrial fibrillation amiodarone mg tablet sig, score: 0.030763775

rml otherwise ctab abdomen, score: 0.004070469

confidence of prediction: 0.996589

Y\_true: [ 1 2 17 26 27 48]

Y\_pred: [ 1 2 5 20 26 27 31 35 37 41 48]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

sided heart failure she was continued, score: 0.0057128575

lasix diastolic chf patient has dchf on prior cath with, score:  
0.0032256441

confidence of prediction: 0.853222

Y\_true: [ 1 2 17 26 27 48]

Y\_pred: [ 1 2 5 20 26 27 31 35 37 41 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

s p cabg and, score: 0.35660124

course after cabg and, score: 0.02024013

history coronary artery disease s p cabg x and mitral, score:  
0.0009239062

confidence of prediction: 0.834679

Y\_true: [ 2 5 11 20 29 34]

Y\_pred: [ 5 11 20 34]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)

support hypovolemic hyponatremia clinically she appeared  
hypervolemic, score: 0.2726379

to be hyponatremic on admission with sodium, score: 0.26556355

the floor hyponatremia the patient was found, score: 0.24819323

confidence of prediction: 0.587694

Y\_true: [ 2 5 11 20 29 34]

Y\_pred: [ 5 11 20 34]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)

thoracolumbar spine apex along, score: 0.0113769155

to be hyponatremic on admission with sodium, score: 0.0060845534

day wheat dextrin benefiber clear sf, score: 0.0052976236

confidence of prediction: 0.893881

Y\_true: [ 2 5 11 20 29 34]

Y\_pred: [ 5 11 20 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

hypertension the patient s, score: 0.250088  
medical history htn ra osteoporosis t9 compression fx gerd, score:  
0.09074249  
history of htn who presents with, score: 0.082702555

confidence of prediction: 0.958871  
Y\_true: [ 2 5 11 20 29 34]  
Y\_pred: [ 5 11 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
compression fx gerd hemorrhoids depression sciatica social history  
non, score: 0.1316508  
to be hyponatremic on admission with sodium, score: 0.004455047  
tablespoon powder s by, score: 0.003182051

confidence of prediction: 0.950895  
Y\_true: [ 1 2 20 29 32]  
Y\_pred: [ 1 2 20 29 32]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
medications hypothyroidism continued home levoxyl 88mcg daily  
follow, score: 0.2801565  
hypertension hypothyroidism diabetes social history, score:  
0.21045941  
q12h levoxyl 88mcg daily discharge medications, score: 0.03194402

confidence of prediction: 0.662251  
Y\_true: [ 1 2 20 29 32]  
Y\_pred: [ 1 2 20 29 32]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
daily metformin mg tablet sig, score: 0.11241505  
hypothyroidism diabetes social history tobacco quit, score:  
0.04024196  
held home oral medications, score: 0.03570751

confidence of prediction: 0.846992  
Y\_true: [ 1 2 20 29 32]  
Y\_pred: [ 1 2 20 29 32]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hydrochlorothiazide mg tablet sig, score: 0.33117908  
medical history hypertension hypothyroidism diabetes social history,  
score: 0.13130565  
colonoscopy and mammography elevated lft s have, score: 0.057215873

confidence of prediction: 0.797462  
Y\_true: [ 1 2 20 29 32]  
Y\_pred: [ 1 2 20 29 32]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
multifocal pneumonia pulmonary embolism discharge, score: 0.21707356  
multifocal pneumonia loculated left pleural, score: 0.07773584

hospital for pneumonia and pulmonary embolism at, score: 0.065396495

confidence of prediction: 0.732864

Y\_true: [ 1 2 20 29 32]

Y\_pred: [ 1 2 20 29 32]

top three important windows for true positive code 32 (511.9:

Unspecified pleural effusion)

thoracentesis the thoracentesis fluid was reportedly, score:

0.18737787

the pleural effusion please discuss with, score: 0.019620642

bedside thoracentesis on they, score: 0.018854633

confidence of prediction: 0.958788

Y\_true: [ 6 9 12 18 20 26 41 43]

Y\_pred: [18 20 26 35 40 41]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies codeine attending, score: 0.14748152

washing incisions gently with mild soap, score: 0.007962582

milrinone mr known lastname, score: 0.007404462

confidence of prediction: 0.613360

Y\_true: [ 6 9 12 18 20 26 41 43]

Y\_pred: [18 20 26 35 40 41]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

gi bleed hypertension cataracts s p, score: 0.20689623

dissection pmh htn cataracts past surgical, score: 0.06936993

[UNK] double lumen heparin, score: 0.0492003

confidence of prediction: 0.965194

Y\_true: [ 6 9 12 18 20 26 41 43]

Y\_pred: [18 20 26 35 40 41]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib occur he remains on, score: 0.62005216

atrial fibrillation which was treated, score: 0.12554692

thru vancomycin mg iv, score: 0.007350931

confidence of prediction: 0.839536

Y\_true: [ 6 9 12 18 20 26 41 43]

Y\_pred: [18 20 26 35 40 41]

top three important windows for true positive code 41 (96.6: Enteral

infusion of concentrated nutritional substances)

with tube feeds was initiated his, score: 0.36079332

drip tube feeds held and, score: 0.051098447

closure percutaneous tracheostomy cuffed [UNK], score: 0.040112525

confidence of prediction: 0.980969

Y\_true: [ 4 20 24 26 27 34 37 41]

Y\_pred: [26 27 37]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

a fib tach brady syndrome, score: 0.017360978



to her sdh continued, score: 0.0011712174  
developed afib requiring cardioversions to control, score:  
0.0009005352

confidence of prediction: 0.822806  
Y\_true: [ 4 20 24 26 27 34 37 41]  
Y\_pred: [26 27 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
brady syndrome chf who presented to osh, score: 0.023996983  
independently with daughter in law s, score: 0.0040548528

confidence of prediction: 0.918129  
Y\_true: [ 4 20 24 26 27 34 37 41]  
Y\_pred: [26 27 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
was urinary tract infection patient was, score: 0.058822405  
a urinary tract infection growing pseudomonas, score: 0.057340987  
a urinary tract infection which may, score: 0.057340987

confidence of prediction: 0.622035  
Y\_true: [ 4 5 20 24]  
Y\_pred: [ 4 5 9 20]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
gold htn hyperlipidemia social history born in, score: 0.062586285  
gold htn hyperlipidemia discharge condition mental status, score:  
0.03149698  
the inferior pole of, score: 0.012326703

confidence of prediction: 0.983743  
Y\_true: [ 4 5 20 24]  
Y\_pred: [ 4 5 9 20]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
to hypovolemic hyponatremia which is consistent with, score:  
0.25971353  
hypotension and hyponatremia hyponatremia thought to be secondary,  
score: 0.1922317  
discharge diagnosis hyponatremia hypovolemia anemia of chronic,  
score: 0.119437404

confidence of prediction: 0.974871  
Y\_true: [ 4 5 20 24]  
Y\_pred: [ 4 5 9 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
name gold htn hyperlipidemia social history born, score: 0.045215935  
liver disease thrombocytopenia the, score: 0.041477397  
gold htn hyperlipidemia discharge condition mental, score:  
0.033143565

confidence of prediction: 0.874016

Y\_true: [21 24 27 36 37 49]

Y\_pred: [21 27 36 37 49]

top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
kidney failure ckd looks like baseline cr, score: 0.06727592  
chronic kidney disease urinary tract, score: 0.059985522  
chronic kidney disease ck, score: 0.010221947

confidence of prediction: 0.965847

Y\_true: [21 24 27 36 37 49]

Y\_pred: [21 27 36 37 49]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic congestive heart failure chronic kidney, score:  
0.081763305  
chf exacerbation major surgical, score: 0.040778503  
heart failure with associated, score: 0.010847575

confidence of prediction: 0.797665

Y\_true: [21 24 27 36 37 49]

Y\_pred: [21 27 36 37 49]

top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
kidney failure ckd looks like baseline cr, score: 0.078899674  
chronic kidney disease urinary tract, score: 0.055536006  
chronic kidney disease baseline creatinine tophaceous gout on,  
score: 0.0194868

confidence of prediction: 0.917455

Y\_true: [21 24 27 36 37 49]

Y\_pred: [21 27 36 37 49]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
weight urinary tract infection pt had, score: 0.021468965  
final escherichia coli organisms ml sensitivities, score:  
0.019728338  
disease urinary tract infection discharge condition, score:  
0.0093916

confidence of prediction: 0.901530

Y\_true: [21 24 27 36 37 49]

Y\_pred: [21 27 36 37 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
pe on coumadin diagnosed, score: 0.46358937  
murmur at rusb abd, score: 0.0036272153  
significant consequences ent recommended, score: 0.0023820992

confidence of prediction: 0.800492

Y\_true: [20]

Y\_pred: [20 43]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

history of htn poliomyelitis, score: 0.23658474  
medical history hypertension poliomyelitis with right, score:  
0.1502608  
scc in remission presenting, score: 0.13348146

confidence of prediction: 0.688444  
Y\_true: [ 2 10 14 38]  
Y\_pred: [ 2 10 11 20 24 29 30 38]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
ii dm htn and schizophrenia who, score: 0.060343135  
type ii dm htn schizophrenia depression social, score: 0.045567386  
secondary diabetes mellitus type ii schizophrenia, score: 0.02042682

confidence of prediction: 0.676729  
Y\_true: [ 2 10 14 38]  
Y\_pred: [ 2 10 11 20 24 29 30 38]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
tobacco history smokes cigarettes for many years, score: 0.28432015  
also smokes a pipe he denies, score: 0.005443784  
smoking cessation apical hypokinesis, score: 0.005265785

confidence of prediction: 0.781287  
Y\_true: [ 2 10 14 38]  
Y\_pred: [ 2 10 11 20 24 29 30 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.6421393  
catheterization revealed stenosis at, score: 0.034766417  
cath lab he had an, score: 0.032575462

confidence of prediction: 0.991968  
Y\_true: [ 7 26 28]  
Y\_pred: [26 28]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
contract normally lvef the, score: 0.0029688107  
it has been a pleasure taking care, score: 0.0011110327  
paroxysmal afib social history divorced daughters, score:  
0.00060629816

confidence of prediction: 0.771591  
Y\_true: [ 7 26 28]  
Y\_pred: [26 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
the endoscopy appt will definitely be, score: 0.11827435  
did the endoscopy vs booking it separately, score: 0.022346752  
you underwent endoscopy by gastroenterology which demonstrated,  
score: 0.021369876

confidence of prediction: 0.977225

Y\_true: [ 5 7 10 35]

Y\_pred: [ 5 35]

top three important windows for true positive code 5 (276.1: Hyposmolality and/or hyponatremia)

in weeks hyponatremia likely hypervolemic hyponatremia in the setting, score: 0.10731557

er for hyponatremia na, score: 0.06690161

sheath hematoma hyponatremia hyperkalemia discharge condition mental, score: 0.061425783

confidence of prediction: 0.953818

Y\_true: [ 5 7 10 35]

Y\_pred: [ 5 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

patient in pre contemplative state, score: 0.051144328

acute renal failure cr he, score: 0.038593285

acute renal failure cr hospital, score: 0.038593285

confidence of prediction: 0.932758

Y\_true: [ 2 4 20 30 37 48]

Y\_pred: [ 4 18 20 24 37 48]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

cea htn hl and rcc s p, score: 0.23201999

disease hypertension dyslipidemia left nephrectomy secondary to, score: 0.048157945

cabg x4 significant pulmonary, score: 0.033925228

confidence of prediction: 0.954722

Y\_true: [ 2 4 20 30 37 48]

Y\_pred: [ 4 18 20 24 37 48]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

htn hl and rcc s, score: 0.08928166

including pulmonary htn in, score: 0.060912915

disease hypertension dyslipidemia left nephrectomy, score: 0.04824189

confidence of prediction: 0.962548

Y\_true: [ 2 4 20 30 37 48]

Y\_pred: [ 4 18 20 24 37 48]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)

hypotension uti discharge condition alert, score: 0.07970492

and uti gram neg rods, score: 0.026198095

a uti past medical history aortic, score: 0.006181067

confidence of prediction: 0.792469

Y\_true: [ 2 4 20 30 37 48]

Y\_pred: [ 4 18 20 24 37 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg x4 significant pulmonary, score: 0.8422008

replacement pmh cabg x hospital3, score: 0.029977515  
live independently yes x no, score: 0.0061011324

confidence of prediction: 0.755704  
Y\_true: [ 2 10 21 26 27 35 36 49]  
Y\_pred: [ 2 9 20 27 35]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
including htn dm cad she reports having, score: 0.060882647  
etiology vs cardiorenal prerenal would also explain, score:  
0.010355495  
left renal pole exophytic nodule concerning, score: 0.00703599

confidence of prediction: 0.802247  
Y\_true: [ 2 10 21 26 27 35 36 49]  
Y\_pred: [ 2 9 20 27 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
pump better and control, score: 0.053970125  
systolic heart failure with an ef, score: 0.041203283  
for heart failure and found to, score: 0.032971665

confidence of prediction: 0.575919  
Y\_true: [ 2 10 21 26 27 35 36 49]  
Y\_pred: [ 2 9 20 27 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
renal failure discharge condition stable, score: 0.43874446  
systolic hf diuresis at, score: 0.103716865  
secondary to prerenal etiology vs, score: 0.06643229

confidence of prediction: 0.945817  
Y\_true: [ 1 4 21 24 36]  
Y\_pred: [ 1 2 4 15 21 24 36]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
cr hypothyroidism macular degeneration remote, score: 0.73820543  
supply levothyroxine mcg tablet tablet s, score: 0.05076287  
home synthroid dosing vitamin d, score: 0.035261918

confidence of prediction: 0.798697  
Y\_true: [ 1 4 21 24 36]  
Y\_pred: [ 1 2 4 15 21 24 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
in htn hld who is presenting, score: 0.10070939  
s p cabg and, score: 0.018180395  
metoprolol atorvastatin lisinopril for, score: 0.017732292

confidence of prediction: 0.647128  
Y\_true: [ 1 4 21 24 36]  
Y\_pred: [ 1 2 4 15 21 24 36]  
top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
ckd the patient s baseline creatinine is, score: 0.16060385  
with htn t2dm pancreatic, score: 0.015657615  
in chronic kidney disease with baseline cr hypothyroidism, score: 0.01010008

confidence of prediction: 0.554137  
Y\_true: [ 1 4 21 24 36]  
Y\_pred: [ 1 2 4 15 21 24 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the patient, score: 0.053813756  
with stemi medically managed without intervention, score: 0.05351684  
history none cabg none, score: 0.023471266

confidence of prediction: 0.509323  
Y\_true: [ 1 4 21 24 36]  
Y\_pred: [ 1 2 4 15 21 24 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
ckd the patient s baseline creatinine is, score: 0.26051098  
with htn t2dm pancreatic, score: 0.0115462635  
in chronic kidney disease with baseline cr hypothyroidism, score: 0.0066867927

confidence of prediction: 0.915056  
Y\_true: [10 29 37 40 42]  
Y\_pred: [33 37 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
have uti e coli for, score: 0.33780244  
uti peritonitis given persistant fevers, score: 0.06511025  
ecoli uti on admission also, score: 0.031181326

confidence of prediction: 0.853948  
Y\_true: [10 29 37 40 42]  
Y\_pred: [33 37 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
then intubated for airway protection on, score: 0.05034815  
and mechanical ventilation history, score: 0.021821165  
eventually was intubated for airway protection she, score: 0.015051803

confidence of prediction: 0.880251  
Y\_true: [10 29 37 40 42]  
Y\_pred: [33 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated so history obtained, score: 0.45440233  
then intubated for airway protection, score: 0.046699505  
and mechanical ventilation history, score: 0.04467544

confidence of prediction: 0.703963  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
glyburide mg hospital1 colchicine, score: 0.07301939  
type ii diabetes history of tias, score: 0.06587734  
diabetes hypertension gout discharge condition, score: 0.047273006

confidence of prediction: 0.840862  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
mg hospital1 colchicine daily coumadin, score: 0.054427084  
ii chronic kidney disease creatinine social history, score:  
0.014882985  
her renal failure began, score: 0.0049392506

confidence of prediction: 0.986621  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
elevator in the building she, score: 0.0014309341  
distended bs ext cool pulses, score: 0.00072950224  
ef atrial fibrillation on coumadin sinus, score: 0.0007184242

confidence of prediction: 0.966093  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure ef and, score: 0.23509914  
heart failure ef atrial, score: 0.14808524  
congestive heart failure diabetes hypertension, score: 0.08108854

confidence of prediction: 0.621366  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
disease gout copd stage ii chronic kidney, score: 0.11985447  
ef and copd who initially presented, score: 0.07398689

confidence of prediction: 0.920095  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
developed respiratory failure in the, score: 0.2627372

s respiratory status rapidly, score: 0.10215232  
for respiratory distress micu, score: 0.024654038

confidence of prediction: 0.688817  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
her renal failure began, score: 0.27744976  
acute renal failure overnight on, score: 0.11210104  
her acute renal failure was thought, score: 0.02547158

confidence of prediction: 0.836602  
Y\_true: [ 2 6 21 26 27 30 33 35 48]  
Y\_pred: [ 2 4 21 26 27 30 33 35 36 48 49]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
coronary artery disease s p cabg and, score: 0.013444513  
coronary artery disease s p cabg congestive, score: 0.005931392  
coronary artery disease s p cabg reportedly the pt, score: 0.005753611

confidence of prediction: 0.760941  
Y\_true: [21 27 35]  
Y\_pred: [ 2 21 27 30 35 36 48]  
top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
his stage ckd is, score: 0.21428418  
chronic renal failure he would, score: 0.073672615  
chronic renal failure secondary diabetes, score: 0.073672615

confidence of prediction: 0.977858  
Y\_true: [21 27 35]  
Y\_pred: [ 2 21 27 30 35 36 48]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chf pt had mild, score: 0.06888593  
chf exacerbation his carvedilol, score: 0.0647319  
systolic chf ef ckd and, score: 0.06019975

confidence of prediction: 0.692784  
Y\_true: [21 27 35]  
Y\_pred: [ 2 21 27 30 35 36 48]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
a pre renal state likely from, score: 0.17035197  
on chronic renal failure he would, score: 0.13899025  
on chronic renal failure secondary diabetes, score: 0.13899025

confidence of prediction: 0.702471  
Y\_true: [ 6 8 20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 20 (401.9:



Unspecified essential hypertension)  
hand clinic hypertension her home anti, score: 0.07591832  
ace inhibitors bactrim attending, score: 0.07129665  
of anti htn meds, score: 0.06394002

confidence of prediction: 0.819543  
Y\_true: [ 6 8 20 34]  
Y\_pred: [20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
disease hypertension gerd lupus anticoagulant tarlov s, score:  
0.046194762  
alcohol intake gerd she was continued on, score: 0.0050711  
msir connective tissue disease, score: 0.0030469382

confidence of prediction: 0.716357  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
osteoporosis hypertension hypercholesterolemia copd per records,  
score: 0.709521  
partially calcified pseudoaneurysm arising off the, score:  
0.015042807  
d were discontinued once, score: 0.009744607

confidence of prediction: 0.886295  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
insufficiency in hyponatremia thought to be siadh, score: 0.6003905  
recorded as having no, score: 0.017690612  
hyponatremia thought siadh who was, score: 0.0066147493

confidence of prediction: 0.774784  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line was placed to, score: 0.1973234  
central venous line history of, score: 0.04099459  
from femoral line coagulopathy was reversed, score: 0.031265922

confidence of prediction: 0.812913  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
with pneumonia and treated with, score: 0.14931577  
focal pneumonia opacification at the, score: 0.11170052  
hospital aquired pneumonia from previous, score: 0.060577177

confidence of prediction: 0.701073

Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
hypertension hypercholesterolemia copd per records s p, score:  
0.018365357  
systolic function lvef tissue, score: 0.009748726  
patient repeatedly failed pressure, score: 0.004022487

confidence of prediction: 0.696928  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
in respiratory failure you, score: 0.13101363  
diagnosis respiratory failure cardiac, score: 0.06288647  
pressure support ventilation and, score: 0.048461724

confidence of prediction: 0.842037  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was intubated for respiratory, score: 0.18236491  
be reintubated for hypoventilation, score: 0.07566645  
pressure support ventilation and, score: 0.06300717

confidence of prediction: 0.704519  
Y\_true: [ 1 3 5 6 8 9 17 20 24 29 30 32 33 35 40 42 43]  
Y\_pred: [ 3 5 17 29 30 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for respiratory, score: 0.062226873  
be reintubated for hypoventilation, score: 0.041215993  
was intubated in the, score: 0.040944733

confidence of prediction: 0.690593  
Y\_true: [ 4 21 41]  
Y\_pred: [21 35 41]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
improve renal function the patient, score: 0.041896414  
stage chronic renal disease respiratory patient, score: 0.009320389  
effect renal cr elevated to at, score: 0.0085393395

confidence of prediction: 0.779703  
Y\_true: [ 4 21 41]  
Y\_pred: [21 35 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
the dobbhoff tube extends, score: 0.0705636  
a peg feeding tube in your stomach, score: 0.058017306

swallow evaluations peg placed on, score: 0.01701002

confidence of prediction: 0.960140

Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]

Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

admission metformin 1000mg hospital1 vitamin b12, score: 0.10562384

medical history diabetes dyslipidemia hypertension cad s, score: 0.0066010426

disease secondary diabetes mellitus dyslipidemia hypertension myocardial, score: 0.005281382

confidence of prediction: 0.658904

Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]

Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history diabetes dyslipidemia hypertension cad s p, score: 0.24175672

diabetes mellitus dyslipidemia hypertension myocardial infarction lung, score: 0.043263264

s p imi in, score: 0.009055127

confidence of prediction: 0.972025

Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]

Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft x5 left internal mammary artery to left, score: 0.4838304

coronary artery bypass graft surgery see, score: 0.0947786

artery obtuse marginal diagonal, score: 0.021218771

confidence of prediction: 0.977272

Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]

Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

csru am chest portable, score: 0.17088048

washing incisions gently with mild soap, score: 0.0077467766

cardiothoracic allergies sulfa sulfonamide, score: 0.004824184

confidence of prediction: 0.629249

Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]

Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

myocardial infarction lung cancer, score: 0.16908179

systolic arterial hypertension final, score: 0.06880245

systolic arterial hypertension cabg evaluation discontinue, score: 0.06880245

confidence of prediction: 0.726084  
Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]  
Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
for nstemi an echo done, score: 0.076642215  
nstemi r i outside, score: 0.041272435  
non st elevation myocardial infarction cardiac catheterization  
revealed significant, score: 0.01320318

confidence of prediction: 0.626605  
Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]  
Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi and, score: 0.36518258  
s p mi s p angioplasty of, score: 0.36518258  
p cabg nstemi r, score: 0.11810659

confidence of prediction: 0.986542  
Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]  
Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s, score: 0.08827689  
coronary artery disease the, score: 0.084034294  
coronary artery disease severe, score: 0.084034294

confidence of prediction: 0.872732  
Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]  
Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation and was admitted, score: 0.126273  
atrial fibrillation new after admission, score: 0.07509972  
fibrillation at a rapid, score: 0.055856444

confidence of prediction: 0.955814  
Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]  
Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf with diastolic dysfunction ef on, score: 0.36628443  
with mild chf and, score: 0.017861972  
diuresed with lasix and, score: 0.009301168

confidence of prediction: 0.511435  
Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]  
Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
on echo copd lung ca s p, score: 0.2282448  
failure chronic obstructive pulmonary disease secondary diabetes,  
score: 0.0026601152

s p cataract surgery, score: 0.002581893

confidence of prediction: 0.821505

Y\_true: [ 2 4 11 13 18 20 22 23 24 26 27 30 38 49]

Y\_pred: [ 2 4 13 18 20 22 23 24 26 27 30 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

cardiac catheterization urgent coronary artery, score: 0.69989395

mid rca x mm [UNK], score: 0.03496784

coronary angiography of this, score: 0.027770182

confidence of prediction: 0.595178

Y\_true: [ 7 9 17 19 28]

Y\_pred: [ 7 9 17 19]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

channel deformity granularity friability congestion, score:

0.18007998

anemia from upper gi, score: 0.11202885

facility gi liver per, score: 0.061290633

confidence of prediction: 0.748436

Y\_true: [ 7 9 17 19 28]

Y\_pred: [ 7 9 17 19]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

significant for thrombocytopenia to reportedly, score: 0.1765763

her longstanding thrombocytopenia and leukopenia, score: 0.115504615

an outpatient thrombocytopenia unclear, score: 0.08092164

confidence of prediction: 0.600464

Y\_true: [ 7 9 17 19 28]

Y\_pred: [ 7 9 17 19]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

artery line placement history of, score: 0.25025216

edema cordis tlc in, score: 0.16017257

facility gi liver per, score: 0.033422258

confidence of prediction: 0.680281

Y\_true: [ 7 9 17 19 28]

Y\_pred: [ 7 9 17 19]

top three important windows for true positive code 19 (39.95:

Hemodialysis)

esrd on hd and cirrhosis, score: 0.10212042

esrd on hd who presented, score: 0.08965155

esrd on hd discharge condition, score: 0.08033462

confidence of prediction: 0.884473

Y\_true: [ 1 4 20 26 34 37]

Y\_pred: [ 1 2 4 26 34 37]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

telemetry hypothyroidism continued on levothyroxine mcg tablet po,

score: 0.37525386  
gerd afib hypothyroidism hl parkinsons alzheimer, score: 0.026699526  
daily levothyroxine mcg tablet po, score: 0.023095498

confidence of prediction: 0.816253  
Y\_true: [ 1 4 20 26 34 37]  
Y\_pred: [ 1 2 4 26 34 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
po daily hyperlipidemia continued on pravastatin mg, score:  
0.09974543  
afib hypothyroidism hl parkinsons alzheimer s dementia, score:  
0.012801119  
4b [UNK] [UNK] minimal, score: 0.0068391133

confidence of prediction: 0.993069  
Y\_true: [ 1 4 20 26 34 37]  
Y\_pred: [ 1 2 4 26 34 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib not on anticoagulation, score: 0.43869388  
afib ra afib she feels well, score: 0.028646402  
atrial fibrillation and gastroesophageal reflux, score: 0.013958146

confidence of prediction: 0.980545  
Y\_true: [ 1 4 20 26 34 37]  
Y\_pred: [ 1 2 4 26 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gastroesophageal reflux disease who presented, score: 0.029392391  
gastroesophageal reflux disease gerd continued omeprazole 50mg po,  
score: 0.01646232  
anticoagulation gerd and no, score: 0.010246839

confidence of prediction: 0.958485  
Y\_true: [ 1 4 20 26 34 37]  
Y\_pred: [ 1 2 4 26 34 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
escherichia coli organisms ml presumptive, score: 0.16064365  
leuks lg 10am urine, score: 0.06261032  
urinary tract infection secondary diagnosis, score: 0.039001066

confidence of prediction: 0.722292  
Y\_true: [10 20 30]  
Y\_pred: [ 7 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn ruptured disks chronic back, score: 0.1097104  
6lnc non rebreather was placed, score: 0.036117245  
suggestive of noncardiogenic pulmonary, score: 0.023379972

confidence of prediction: 0.911631  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]

Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
a child hyperlipidemia social history prior to, score: 0.07663338  
daily dextromethorphan hbr ml by, score: 0.0055912156  
daily daily mirtazapine mg by mouth hs, score: 0.003707153

confidence of prediction: 0.638597  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]  
Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
350x16 and peep general, score: 0.117194995  
three pressors simultaneously her ldh climbed to, score: 0.060529467  
and with lactate elevation, score: 0.035392657

confidence of prediction: 0.505445  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]  
Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
underwent a bronchoscopy for further evaluation, score: 0.19086827  
her airways and samples for culture her respiratory, score:  
0.0379271  
she was intubated at, score: 0.018965317

confidence of prediction: 0.737409  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]  
Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement arterial line placement history of, score: 0.3219799  
and generalized mural thickening of, score: 0.05190244  
and mrsa pnas presented, score: 0.044156447

confidence of prediction: 0.987256  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]  
Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure with her, score: 0.081313774  
respiratory failure hypoxic respiratory failure unclear etiology,  
score: 0.078444175  
she was intubated at, score: 0.02853074

confidence of prediction: 0.713101  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]  
Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
had pre syncope but, score: 0.039837778  
350x16 and peep general, score: 0.024148459  
the elevated lactate and, score: 0.018898452

confidence of prediction: 0.532645  
Y\_true: [ 0 1 4 6 9 12 16 17 20 27 33 35 43 46]  
Y\_pred: [ 4 6 12 17 26 31 33 35 40 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
she was intubated at hospital1, score: 0.10448687  
for culture her respiratory status stabilized, score: 0.027886312  
discharged to home on, score: 0.027574033

confidence of prediction: 0.695635  
Y\_true: [17 19 24]  
Y\_pred: [17 19 21]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
inserted central catheter right intravenous, score: 0.1444115  
venous catheter removed history, score: 0.096967004  
has significantly improved and, score: 0.055100355

confidence of prediction: 0.905140  
Y\_true: [17 19 24]  
Y\_pred: [17 19 21]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on hd cll, score: 0.07132118  
on dialysis he states, score: 0.059779454  
v on hemodialysis diabetes mellitus, score: 0.056246504

confidence of prediction: 0.524898  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
most likely septic shock given the high, score: 0.31015816  
shock mesenteric ischemia gi, score: 0.13005091  
resuscitation and pressors to maintain adequate maps, score:  
0.025266282

confidence of prediction: 0.871310  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
inactive issues hypertension initially held home, score: 0.5712219  
hypovolemia shock cr returned, score: 0.02659227  
chronic [UNK] from stone, score: 0.006533471

confidence of prediction: 0.954681  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
aortic stenosis chf htn anxiety osteoarthritis pressure, score:  
0.04028038



chf and aortic stenosis, score: 0.033281393  
chronic diastolic chf echo reported preserved systolic, score:  
0.02584503

confidence of prediction: 0.957396  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
vs aspiration pneumonia until for a, score: 0.03162363  
vs aspiration so he was started, score: 0.015180624  
resolution aspiration secretions monitor, score: 0.012957758

confidence of prediction: 0.602142  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
patient is intubated and, score: 0.13354096  
intubation right subclavian vein, score: 0.067396566  
was intubated in the ed, score: 0.058378246

confidence of prediction: 0.782104  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
likely pre renal atn secondary, score: 0.21997577  
hypovolemia shock cr returned, score: 0.029142346  
acute kidney injury discharge condition, score: 0.028972883

confidence of prediction: 0.590320  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was intubated in the, score: 0.32109886  
is intubated family history, score: 0.09153289  
he was intubated he also, score: 0.0838151

confidence of prediction: 0.578541  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
with tube feeds his swallowing, score: 0.24188308  
to bring him back to, score: 0.06536467  
tubefeeds w fibersource hn w, score: 0.049026236

confidence of prediction: 0.681679  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96

consecutive hours)  
was intubated in the, score: 0.23282965  
intubation right subclavian vein, score: 0.12963755  
he was intubated he also, score: 0.060445834

confidence of prediction: 0.504165  
Y\_true: [ 0 16 17 20 27 29 31 33 35 40 41 42 46]  
Y\_pred: [ 0 20 27 31 33 35 40 41 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
most likely septic shock given the high, score: 0.09941292  
shock mesenteric ischemia gi, score: 0.051728427  
metas myelos 40am blood, score: 0.025375234

confidence of prediction: 0.983345  
Y\_true: [ 6 21 24 27 34]  
Y\_pred: [27 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure encephalopathy metabolic, score: 0.47697353  
diastolic chronic chf acute copd exacerbation ckd, score: 0.16546623  
congestive heart failure medication changes, score: 0.04399363

confidence of prediction: 0.880723  
Y\_true: [ 6 21 24 27 34]  
Y\_pred: [27 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
insufficiency gerd who lives, score: 0.0828232  
renal insufficiency gerd who lives, score: 0.061628267  
renal insuff gerd dementia rls claudication social, score:  
0.028445996

confidence of prediction: 0.981635  
Y\_true: [ 5 17 35 39 46]  
Y\_pred: [ 0 5 6 20 26 35 46]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
was stable hyponatremia hypovolemic hyponatremia likely either tea  
and, score: 0.28922  
received fent 75mg midaz, score: 0.0056286356  
insufficiency vs insensible losses, score: 0.0050866227

confidence of prediction: 0.935551  
Y\_true: [ 5 17 35 39 46]  
Y\_pred: [ 0 5 6 20 26 35 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
aggressive ivf lactate normalized and, score: 0.069083616  
likely hypotension pre renal given sepsis now resolved  
conjunctivitis, score: 0.024169791  
packed with saline wet, score: 0.007079149

confidence of prediction: 0.547525

Y\_true: [ 5 17 35 39 46]  
Y\_pred: [ 0 5 6 20 26 35 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
likely from sepsis sepsis right foot osteomyelitis resolved, score:  
0.086454734  
sepsis now resolved conjunctivitis found, score: 0.070185974  
aggressive ivf lactate normalized, score: 0.02787853

confidence of prediction: 0.912399  
Y\_true: [ 7 10 11 17 20 30 44 45 49]  
Y\_pred: [ 7 11 17 20 49]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
revealed ulceration granularity friability erythema, score:  
0.033715628  
a gi bleeding study, score: 0.0041956  
sacroiliitis gi bleeding study, score: 0.0031186752

confidence of prediction: 0.647337  
Y\_true: [ 7 10 11 17 20 30 44 45 49]  
Y\_pred: [ 7 11 17 20 49]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
mg daily depression at, score: 0.10647528  
depression htn incisional hernia tobacco, score: 0.10129462  
htn and depression who presents with abd, score: 0.09371961

confidence of prediction: 0.848655  
Y\_true: [ 7 10 11 17 20 30 44 45 49]  
Y\_pred: [ 7 11 17 20 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous line placement colonoscopy with, score: 0.69544226  
revealed ulceration granularity friability erythema, score:  
0.014464748  
prn colestipol 4gm daily klor, score: 0.010394963

confidence of prediction: 0.834144  
Y\_true: [ 7 10 11 17 20 30 44 45 49]  
Y\_pred: [ 7 11 17 20 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
developed a pruritic morbilliform rash, score: 0.08519484  
on coumadin htn and depression who, score: 0.062331315  
colitis depression htn incisional hernia tobacco, score: 0.051849127

confidence of prediction: 0.831802  
Y\_true: [ 7 10 11 17 20 30 44 45 49]  
Y\_pred: [ 7 11 17 20 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
pe on coumadin htn, score: 0.38788494  
on admission coumadin 5mg, score: 0.08816895

hosp on coumadin social history patient, score: 0.048797157

confidence of prediction: 0.631493

Y\_true: [ 2 5 8 20 27 47]

Y\_pred: [ 2 20 27]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

ii diabetes mellitus secondary obstructive sleep, score: 0.07443654

cpap dm type ii htn s, score: 0.06079828

status dm type ii as outpatient, score: 0.03921775

confidence of prediction: 0.955796

Y\_true: [ 2 5 8 20 27 47]

Y\_pred: [ 2 20 27]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hypertension chronic diastolic heart, score: 0.26015836

type ii htn s p r, score: 0.049375467

was held hypertension patient was continued on hctz captopril, score: 0.03262623

confidence of prediction: 0.976927

Y\_true: [ 2 5 8 20 27 47]

Y\_pred: [ 2 20 27]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic heart failure discharge, score: 0.31601146

diastolic chf patient was continued, score: 0.13414459

diastolic chf recent tkr presenting, score: 0.082920484

confidence of prediction: 0.830964

Y\_true: [ 3 9 18 27 37 43]

Y\_pred: [ 3 18 20 25 27 34]

top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)

regurgitation hypertension hypercholesterolemia cva w right, score: 0.1414884

aortic aneurysm htn hypercholesterolemia gerd bronchomalacia

ascending thoracic, score: 0.0022765012

continued she continued to, score: 0.00047799217

confidence of prediction: 0.977710

Y\_true: [ 3 9 18 27 37 43]

Y\_pred: [ 3 18 20 25 27 34]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic doctor first name, score: 0.17698379

cardiothoracic allergies patient recorded, score: 0.011860262

tee was performed in, score: 0.0080194315

confidence of prediction: 0.936661

Y\_true: [ 3 9 18 27 37 43]

Y\_pred: [ 3 18 20 25 27 34]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
history diastolic chf last echo with lvef mitral regurgitation  
hypertension hypercholesterolemia, score: 0.028846303  
and a lasix drip, score: 0.0043401476  
numeric identifier last name, score: 0.0041978206

confidence of prediction: 0.598034

Y\_true: [5 8]

Y\_pred: [5]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
patient was hyponatremic to he remembers, score: 0.43736267  
reflected symptomatic hyponatremia his serum sodium corrected,  
score: 0.07494121  
neurocognitive evaluation hyponatremia the patient s hypnatremia,  
score: 0.045471203

confidence of prediction: 0.664833

Y\_true: [ 4 7 26 28 47 49]

Y\_pred: [ 4 7 26 28]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
one month hyperlipidemia continued on home simvastatin, score:  
0.03220878  
dabigatran etexilate mg po bid, score: 0.018002883  
descending colon recommendations in, score: 0.008072454

confidence of prediction: 0.781049

Y\_true: [ 4 7 26 28 47 49]

Y\_pred: [ 4 7 26 28]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
bleeding and having a, score: 0.18808188  
days of melena has, score: 0.050168484  
with melena and hct, score: 0.039296493

confidence of prediction: 0.986850

Y\_true: [ 4 7 26 28 47 49]

Y\_pred: [ 4 7 26 28]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf on pradaxa history, score: 0.3611191  
afib patient has been on, score: 0.2572084  
afib with a subsequent, score: 0.14437595

confidence of prediction: 0.759003

Y\_true: [ 4 7 26 28 47 49]

Y\_pred: [ 4 7 26 28]

top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
and microscopically egd angioectasia in the, score: 0.19147696  
had an endoscopy and colonoscopy, score: 0.08899841  
egd abnormal mucosa in the, score: 0.058804568

confidence of prediction: 0.871333  
Y\_true: [20 22 23 27 31 33 35 41]  
Y\_pred: [22 27 29 35]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
for nstemi was low as, score: 0.05002474  
indx probnp numeric identifier, score: 0.005845443  
after discharge nstemi troponin of and, score: 0.0038355538

confidence of prediction: 0.982799  
Y\_true: [20 22 23 27 31 33 35 41]  
Y\_pred: [22 27 29 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf with ef he will, score: 0.07064132  
heart failure copd exacerbation and, score: 0.05661598  
probnp numeric identifier 50pm blood, score: 0.010307764

confidence of prediction: 0.835734  
Y\_true: [20 22 23 27 31 33 35 41]  
Y\_pred: [22 27 29 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
discontinued acute renal failure scr in was, score: 0.052301317  
recorded as having no, score: 0.013028693  
traction and minimal fibrotic, score: 0.009445954

confidence of prediction: 0.859580  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous line placement hd, score: 0.33821175  
the abscess is amenable, score: 0.03617033  
and line change after, score: 0.03529454

confidence of prediction: 0.975110  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
eventually tunnelled hemodialysis line was placed, score: 0.17999882  
epogen with hemodialysis for low, score: 0.08553091  
underwent dialysis mwf she, score: 0.06882133

confidence of prediction: 0.870537  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure pt arrived, score: 0.17510675  
hypoxic respiratory failure discharge condition, score: 0.10941938  
required re intubation she, score: 0.028357828

confidence of prediction: 0.708871  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
required re intubation she was, score: 0.15916255  
exam general intubated sedated heent, score: 0.042036913  
she required intubation she was, score: 0.028377486

confidence of prediction: 0.975858  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
pyloric dobbhoff tube feeds with good, score: 0.017868232  
required prolonged intubation due to, score: 0.009116671  
neuro intubated sedation opened, score: 0.008116253

confidence of prediction: 0.874812  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
re intubation she was, score: 0.03265565  
required prolonged intubation due to, score: 0.032548223  
buttocks which improved with, score: 0.027490279

confidence of prediction: 0.873438  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
part to tpn patient was switched to, score: 0.012612864  
distension ileus developed shortly after extubation, score:  
0.011769327  
v ileus as the, score: 0.0055406652

confidence of prediction: 0.872388  
Y\_true: [ 6 17 19 24 27 30 33 35 40 41 43 45 46]  
Y\_pred: [ 0 17 19 23 33 40 41 42 43 45 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
sepsis major surgical or, score: 0.11429999  
hypotension and sepsis and was transferred to, score: 0.06230713  
fluid collection and she, score: 0.045115545

confidence of prediction: 0.919911  
Y\_true: [ 1 3 14 20 24 34 38 47]  
Y\_pred: [ 1 3 4 20 24 34 38]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
cholecystectomy hypothyroidism osteopenia hypertension

hypercholesterolemia, score: 0.29574788  
sob levothyroxine 88mcg tablet daily monday, score: 0.10728605  
levothyroxine mcg tablet sig, score: 0.0531821

confidence of prediction: 0.642647  
Y\_true: [ 1 3 14 20 24 34 38 47]  
Y\_pred: [ 1 3 4 20 24 34 38]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
osteopenia hypertension hypercholesterolemia gerd cardiac risk, score: 0.16962577  
history of exertional angina presenting with sudden, score: 0.0029194471  
factors hypertension hypercholesterolemia cardiac history has, score: 0.002806131

confidence of prediction: 0.917750  
Y\_true: [ 1 3 14 20 24 34 38 47]  
Y\_pred: [ 1 3 4 20 24 34 38]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
history of exertional angina, score: 0.14876738  
contract normally lvef right, score: 0.122784175  
myocardial infarction hypertension dyslipidemia chronic memory loss, score: 0.036309283

confidence of prediction: 0.981645  
Y\_true: [ 1 3 14 20 24 34 38 47]  
Y\_pred: [ 1 3 4 20 24 34 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery disease inferior, score: 0.1433821  
occlusion [UNK] was taken, score: 0.05270808  
bare metal stents placed in, score: 0.048248194

confidence of prediction: 0.621056  
Y\_true: [ 1 3 14 20 24 34 38 47]  
Y\_pred: [ 1 3 4 20 24 34 38]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
hypertension hypercholesterolemia gerd cardiac risk factors, score: 0.047502518  
history hypothyroidism gerd small cell lung cancer, score: 0.032151002  
federal auditor family history one, score: 0.02616614

confidence of prediction: 0.832512  
Y\_true: [ 1 3 14 20 24 34 38 47]  
Y\_pred: [ 1 3 4 20 24 34 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.4214222  
catheterization comments selective coronary angiography in, score: 0.15038458



rca with three overlapping, score: 0.027447334

confidence of prediction: 0.719983

Y\_true: [ 4 8 17 19 32]

Y\_pred: [ 4 17 19 27 35 37]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

and hyperlipidemia who developed a, score: 0.06782109

hypertension hyperlipidemia gout osteoporosis dry senile macular degeneration rheumatic, score: 0.018092217

htn and hyperlipidemia who is admitted from, score: 0.016552642

confidence of prediction: 0.897317

Y\_true: [ 4 8 17 19 32]

Y\_pred: [ 4 17 19 27 35 37]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous line placement history of, score: 0.572097

polysorbate injection peg electrolytes, score: 0.032740403

bacteri mod yeast none, score: 0.032478027

confidence of prediction: 0.991444

Y\_true: [ 4 8 17 19 32]

Y\_pred: [ 4 17 19 27 35 37]

top three important windows for true positive code 19 (39.95: Hemodialysis)

esrd on hd htn, score: 0.05249119

home dialysis schedule she, score: 0.024656476

back on hemodialysis and will, score: 0.020812407

confidence of prediction: 0.827293

Y\_true: [26 28 47]

Y\_pred: [20 26 28]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

elderly female heent sclera, score: 0.010062019

meeting was held and, score: 0.0052753096

fatigue shortness of breath, score: 0.002628235

confidence of prediction: 0.823147

Y\_true: [26 28 47]

Y\_pred: [20 26 28]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

egd history of present illness, score: 0.050817728

and performed egd on egd demonstrated esophagitis as well, score: 0.038395192

endoscopy see egd report images, score: 0.03529464

confidence of prediction: 0.799342

Y\_true: [ 2 17 26 27 30 35 41 49]

Y\_pred: [ 2 9 17 21 26 27 29 30 36 49]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or

unspecified type, not stated as uncontrolled)  
lasix colchicine glipizide probenecid methadone vit b12, score:  
0.05658595  
failure and unfortunately no, score: 0.02049005  
hx dvt dm2 ckd baseline cr, score: 0.014474427

confidence of prediction: 0.786260  
Y\_true: [ 2 17 26 27 30 35 41 49]  
Y\_pred: [ 2 9 17 21 26 27 29 30 36 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line and dobhoff were discontinued, score: 0.46723214  
chol was placed by, score: 0.027860412  
by rll rml consolidative, score: 0.020873068

confidence of prediction: 0.998701  
Y\_true: [ 2 17 26 27 30 35 41 49]  
Y\_pred: [ 2 9 17 21 26 27 29 30 36 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
chronic afib on coumadin mild as, score: 0.00048451623  
ckd hospital transferred from, score: 0.00012740861  
ar infrarenal aaa 8cm hx dvt, score: 6.307647e-05

confidence of prediction: 0.939101  
Y\_true: [ 2 17 26 27 30 35 41 49]  
Y\_pred: [ 2 9 17 21 26 27 29 30 36 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf ef chronic afib on coumadin mild, score: 0.10535087  
chf ckd copd presented to osh, score: 0.09886031  
chf ckd hospital transferred from, score: 0.009135675

confidence of prediction: 0.679795  
Y\_true: [ 2 17 26 27 30 35 41 49]  
Y\_pred: [ 2 9 17 21 26 27 29 30 36 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
chf ckd copd presented to osh for, score: 0.17980573  
aaa 8cm hx dvt, score: 0.011114309  
baseline cr copd on 2l home o2, score: 0.008613493

confidence of prediction: 0.856444  
Y\_true: [ 2 17 26 27 30 35 41 49]  
Y\_pred: [ 2 9 17 21 26 27 29 30 36 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin mild, score: 0.98228097  
on admission coumadin per, score: 0.010954114  
8cm hx dvt dm2, score: 0.0009012515

confidence of prediction: 0.674818  
Y\_true: [ 1 2 6 7 31 33 42]  
Y\_pred: [ 1 4 26 31 40]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
diabetes mellitus hypothyroidism chronic anemia polymyalgia  
rheumatica, score: 0.0036815426  
q6h prn levothyroxine mcg daily multivitamin tab, score:  
0.0024397133  
comfort care at this, score: 0.0017512268

confidence of prediction: 0.825530  
Y\_true: [ 1 2 6 7 31 33 42]  
Y\_pred: [ 1 4 26 31 40]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
of aspiration pneumonia blood and urine, score: 0.23598814  
the aspiration pneumonia she also was, score: 0.033165663  
including power of attorney, score: 0.014627775

confidence of prediction: 0.594355  
Y\_true: [ 8 12 13 17 18 23 24 26 33 34 37 40 41 42]  
Y\_pred: [13 18 24 26 29 37 40 43]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass grafting left internal mammary artery to  
left, score: 0.10454932  
coronary artery bypass grafting surgery surgery was, score:  
0.061132226  
with vein grafts to, score: 0.040399

confidence of prediction: 0.975585  
Y\_true: [ 8 12 13 17 18 23 24 26 33 34 37 40 41 42]  
Y\_pred: [13 18 24 26 29 37 40 43]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
grafting left internal mammary artery to left, score: 0.12172185  
cardiothoracic allergies patient recorded, score: 0.0119481245  
bypass grafting surgery surgery was, score: 0.009086829

confidence of prediction: 0.976957  
Y\_true: [ 8 12 13 17 18 23 24 26 33 34 37 40 41 42]  
Y\_pred: [13 18 24 26 29 37 40 43]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad lesion in setting, score: 0.21154058  
to undergo cabg in, score: 0.1204768  
coronary artery disease s, score: 0.072663076

confidence of prediction: 0.963452  
Y\_true: [ 8 12 13 17 18 23 24 26 33 34 37 40 41 42]  
Y\_pred: [13 18 24 26 29 37 40 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation while pan cultures, score: 0.16519627  
atrial fibrillation warfarin anticoagulation was, score: 0.13120386  
atrial fibrillation was treated with, score: 0.103383586

confidence of prediction: 0.769957  
Y\_true: [ 8 12 13 17 18 23 24 26 33 34 37 40 41 42]  
Y\_pred: [13 18 24 26 29 37 40 43]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
following aggressive diuresis he was, score: 0.05546215  
fevers infiltrate on chest, score: 0.032894827  
gun injury posterior left, score: 0.020059984

confidence of prediction: 0.834998  
Y\_true: [ 8 12 13 17 18 23 24 26 33 34 37 40 41 42]  
Y\_pred: [13 18 24 26 29 37 40 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he required reintubation for respiratory distress and, score:  
0.2656717  
kept intubated for several, score: 0.006162615  
secretions on bronchoscopy given, score: 0.0028501677

confidence of prediction: 0.998511  
Y\_true: [20]  
Y\_pred: [ 5 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn continued lisinopril hctz stopped due to, score: 0.2637982  
hctz hctz stopped and nacl, score: 0.058594856  
insipidus dx hypertension seizure osteoarthritis sleep, score:  
0.05374377

confidence of prediction: 0.999402  
Y\_true: [ 9 13 18 20 23 24 26 27]  
Y\_pred: [ 4 13 18 20 23 24 27]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
cabg x3 lima lad svg om, score: 0.46703246  
bypass grafting x3 with, score: 0.012621932  
descending artery reverse saphenous vein graft, score: 0.008076175

confidence of prediction: 0.990040  
Y\_true: [ 9 13 18 20 23 24 26 27]  
Y\_pred: [ 4 13 18 20 23 24 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.38637537  
cabg x3 lima lad, score: 0.20240906  
cabg x3 lima lad svg om, score: 0.20240906

confidence of prediction: 0.872198  
Y\_true: [ 9 13 18 20 23 24 26 27]  
Y\_pred: [ 4 13 18 20 23 24 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
mi per stress test hypertension dyslipidemia chronic systolic heart,

score: 0.064038806  
un tissue cabg x3, score: 0.038490735

confidence of prediction: 0.697589  
Y\_true: [ 9 13 18 20 23 24 26 27]  
Y\_pred: [ 4 13 18 20 23 24 27]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
old inferior mi per stress, score: 0.46871012  
descending artery reverse saphenous, score: 0.0074252742  
25pm alt sgpt ast, score: 0.0042992537

confidence of prediction: 0.997558  
Y\_true: [ 9 13 18 20 23 24 26 27]  
Y\_pred: [ 4 13 18 20 23 24 27]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
descending artery reverse saphenous vein graft, score: 0.34163472  
cabg x3 lima lad, score: 0.11259032  
vessel cad past medical history, score: 0.01995966

confidence of prediction: 0.957023  
Y\_true: [ 9 13 18 20 23 24 26 27]  
Y\_pred: [ 4 13 18 20 23 24 27]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chronic systolic heart failure bph past surgical, score: 0.0062090703  
chronic systolic heart failure bph s p, score: 0.0062090703  
heart rrr irregular x, score: 0.003934759

confidence of prediction: 0.957713  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
metformin xr glucophage xr mg po, score: 0.10289863  
metformin xr glucophage xr mg po, score: 0.0844227  
diabetes chronic hepatitis c, score: 0.04134318

confidence of prediction: 0.830525  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
with hypertension hyperlipidemia type diabetes chronic, score: 0.13403569  
type diabetes dyslipidemia hypertension asthma regarding, score: 0.05841909  
hyperlipidemia ldl of started, score: 0.04085831

confidence of prediction: 0.513577  
Y\_true: [ 2 4 15 20 22 24 27 38]

Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization with dex to, score: 0.8658733  
cath selective coronary angiography of this, score: 0.016551198  
isosorbide mononitrate extended release, score: 0.007543405

confidence of prediction: 0.966849  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn started metoprolol lisinopril furosemide, score: 0.41576642  
history of htn hl dmii presenting, score: 0.04665901  
home benazapril hctz and, score: 0.03467791

confidence of prediction: 0.799325  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
myocardial infarction nstemi acute on chronic, score: 0.13751416  
for nstemi and dvt was, score: 0.05189574  
catheterization for nstemi he had des to, score: 0.012184

confidence of prediction: 0.961714  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
disease with occlusion of rca, score: 0.089260064  
om rca with total, score: 0.05871953  
diffuse distal lesion and, score: 0.035490032

confidence of prediction: 0.935772  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure though he, score: 0.052907947  
cardiology was consulted who, score: 0.01329353  
for heart failure management, score: 0.013090753

confidence of prediction: 0.858977  
Y\_true: [ 2 4 15 20 22 24 27 38]  
Y\_pred: [ 2 4 15 20 22 24 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with dex to, score: 0.6134554  
cath selective coronary angiography of this, score: 0.04898962  
isosorbide mononitrate extended release, score: 0.013754063

confidence of prediction: 0.966866  
Y\_true: [ 8 19 24 29 35]

Y\_pred: [19 21 29 35 36]  
 top three important windows for true positive code 19 (39.95:  
 Hemodialysis)  
 initial hemodialysis sessions was felt to, score: 0.3245977  
 three hemodialysis sessions with much, score: 0.113049746  
 sessions of hemodialysis and you, score: 0.061988875  
  
 confidence of prediction: 0.753946  
 Y\_true: [ 8 19 24 29 35]  
 Y\_pred: [19 21 29 35 36]  
 top three important windows for true positive code 29 (486:  
 Pneumonia, organism unspecified)  
 community acquired pneumonia his fever curve, score: 0.038865924  
 an infiltrate on his, score: 0.015154985  
 primary community acquired pneumonia acute on chronic, score:  
 0.011952214  
  
 confidence of prediction: 0.790905  
 Y\_true: [ 8 19 24 29 35]  
 Y\_pred: [19 21 29 35 36]  
 top three important windows for true positive code 35 (584.9: Acute  
 kidney failure, unspecified)  
 on chronic renal failure, score: 0.05796155  
 on chronic kidney injury, score: 0.05007388  
 lymphocyte predominant leukocytosis with, score: 0.041368376  
  
 confidence of prediction: 0.919472  
 Y\_true: [ 1 4 8 26 29 32 49]  
 Y\_pred: [ 1 4 26 30 44 49]  
 top three important windows for true positive code 1 (244.9:  
 Unspecified acquired hypothyroidism)  
 in hypothyroidism osteoporosis hyperlipidemia social, score:  
 0.6579824  
 home levothyroxine tsh was checked, score: 0.2478907  
 considered hypothyroidism stable pt, score: 0.0126404865  
  
 confidence of prediction: 0.856158  
 Y\_true: [ 1 4 8 26 29 32 49]  
 Y\_pred: [ 1 4 26 30 44 49]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 hypothyroidism osteoporosis hyperlipidemia social history shx lives,  
 score: 0.23891516  
 elderly female in minimal, score: 0.02277318  
 warfarin mg tablet sig, score: 0.014542505  
  
 confidence of prediction: 0.984803  
 Y\_true: [ 1 4 8 26 29 32 49]  
 Y\_pred: [ 1 4 26 30 44 49]  
 top three important windows for true positive code 26 (427.31:  
 Atrial fibrillation)  
 atrial fibrillation on coumadin h, score: 0.15933856  
 afib with rvr was, score: 0.040808782  
 atrial fibrillation with rvr it, score: 0.018911684

confidence of prediction: 0.688559

Y\_true: [ 1 4 8 26 29 32 49]

Y\_pred: [ 1 4 26 30 44 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

fibrillation on coumadin pt, score: 0.43158212

inh daily warfarin 5mg, score: 0.016692612

coumadin was resumed on, score: 0.015171832

confidence of prediction: 0.964888

Y\_true: [ 4 6 26 27 33 35 49]

Y\_pred: [ 4 21 26 27 35 36 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

coumadin hypertension hyperlipidemia ventricular ectopy chronic, score: 0.060264535

and hyperlipidemia who presents with week, score: 0.011205635

and hctz hl continue pravastatin 40mg qday, score: 0.0058009806

confidence of prediction: 0.994611

Y\_true: [ 4 6 26 27 33 35 49]

Y\_pred: [ 4 21 26 27 35 36 49]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

paf on coumadin stage iv, score: 0.6847929

afib while here consistent, score: 0.033607278

atrial fibrillation on coumadin hypertension, score: 0.032163266

confidence of prediction: 0.915089

Y\_true: [ 4 6 26 27 33 35 49]

Y\_pred: [ 4 21 26 27 35 36 49]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

chf exacerbation was likely, score: 0.32045105

systolic heart failure exacerbation [UNK] bnp, score: 0.23985139

chf exacerbation the patient, score: 0.076936714

confidence of prediction: 0.654135

Y\_true: [ 4 6 26 27 33 35 49]

Y\_pred: [ 4 21 26 27 35 36 49]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

on chronic renal failure creatinine up from, score: 0.16112205

chronic renal failure followed by, score: 0.1501381

on chronic kidney disease, score: 0.13919583

confidence of prediction: 0.828962

Y\_true: [ 4 6 26 27 33 35 49]

Y\_pred: [ 4 21 26 27 35 36 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

paf on coumadin stage, score: 0.8151372

patient s coumadin was, score: 0.0056189564



s refills warfarin mg tablet sig, score: 0.004456499

confidence of prediction: 0.962365

Y\_true: [ 8 11 26 39]

Y\_pred: [26 28 39]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib with rvr major, score: 0.22575721

afib with rvr she, score: 0.16021246

afib with rvr fall, score: 0.16021246

confidence of prediction: 0.912479

Y\_true: [ 8 11 26 39]

Y\_pred: [26 28 39]

top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)

tee cardioversion tee was negative for thrombus, score: 0.88069105

transesophageal echocardiogram esophagogastroduodenoscopy history,  
score: 0.019012516

tee poor image quality, score: 0.007899954

confidence of prediction: 0.654133

Y\_true: [ 3 11 20]

Y\_pred: [ 3 11 20]

top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)

ankle htn hypercholesterolemia not currently on, score: 0.40671137

depression htn hypercholesterolemia discharge condition activity,  
score: 0.060891848

for sedation htn continued home amlodipine, score: 0.006168414

confidence of prediction: 0.650132

Y\_true: [ 3 11 20]

Y\_pred: [ 3 11 20]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)

oxcarbazepine 150mg hospital1 haldol, score: 0.061986253

schizophrenia depression recently fractured ankle htn, score:  
0.043056477

outpatient schizophrenia depression continued home clozapine and,  
score: 0.005253528

confidence of prediction: 0.953390

Y\_true: [ 3 11 20]

Y\_pred: [ 3 11 20]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

and white specks diffusely, score: 0.073713005

sedation htn continued home amlodipine with, score: 0.057456326

story has changed several, score: 0.035220277

confidence of prediction: 0.920515

Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]

Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]

top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
and a bal was done which grew, score: 0.025738848  
and sigmoidoscopy bronchoscopy with bronchoalveolar lavage history of present, score: 0.009037075

confidence of prediction: 0.799429

Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]

Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

restless started spiking fevers and, score: 0.16999058

cirrhosis gastroesophageal reflux disease discharge, score: 0.03172559

on rifaxamin folic acid, score: 0.016732287

confidence of prediction: 0.555805

Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]

Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

intubated for airway protection, score: 0.08406291

associated pneumonia secondary diagnoses, score: 0.05695711

omeprazole respiratory failure mr, score: 0.03049608

confidence of prediction: 0.567897

Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]

Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

cirrhosis gastroesophageal reflux disease discharge condition mental, score: 0.104693346

gerd vre screen positive psoriasis, score: 0.0687425

varice and hemorrhoids mr, score: 0.018084604

confidence of prediction: 0.930580

Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]

Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

was eventually intubated due to worsening, score: 0.20408657

lastname was intubated for airway protection and a bal was, score: 0.0046803774

lastname was intubated in the, score: 0.0046803774

confidence of prediction: 0.520259

Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]

Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

continue tube feeds and encourage oral, score: 0.0488938

tube terminates appropriately within, score: 0.034877118

bronchoscopy with bronchoalveolar lavage history of, score: 0.027109934

confidence of prediction: 0.827864  
Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]  
Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for airway protection, score: 0.22083971  
was intubated in the, score: 0.20678832  
was eventually intubated due to worsening, score: 0.11873891

confidence of prediction: 0.968054  
Y\_true: [ 6 9 12 17 28 33 34 35 40 41 42 45 46 47]  
Y\_pred: [ 4 12 17 20 33 34 40 41 42 43 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
decompression and tpn was started id suggested, score: 0.0149284005  
but all cultures are, score: 0.0010182527  
your medicines followup instructions, score: 0.00097595534

confidence of prediction: 0.844242  
Y\_true: [5 7]  
Y\_pred: [ 7 17]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia and units of, score: 0.2738867  
anemia discharge condition condition, score: 0.18199727  
service orthopaedics allergies patient recorded as having no, score:  
0.049139947

confidence of prediction: 0.633692  
Y\_true: [ 2 17 20 27 29 30 33 37]  
Y\_pred: [20 27 30 33 34 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
chronic asymptomatic chronic pain, score: 0.22416379  
medical history htn diastolic chf copd right, score: 0.08028325  
of antibiotics htn the patient s home, score: 0.061745908

confidence of prediction: 0.978362  
Y\_true: [ 2 17 20 27 29 30 33 37]  
Y\_pred: [20 27 30 33 34 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
dermatomyositis diastolic chf htn who presents, score: 0.037841696  
diastolic heart failure recent echo, score: 0.030502269  
copd diastolic chf htn dermatomyositis and, score: 0.015852736

confidence of prediction: 0.566225  
Y\_true: [ 2 17 20 27 29 30 33 37]  
Y\_pred: [20 27 30 33 34 37]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
diastolic chf copd right hemidiaphragm paralysis, score: 0.09838017

history of copd dermatomyositis diastolic chf htn, score:  
0.028850822  
history of copd diastolic chf htn dermatomyositis, score:  
0.028850822

confidence of prediction: 0.902205  
Y\_true: [ 2 17 20 27 29 30 33 37]  
Y\_pred: [20 27 30 33 34 37]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
to respiratory failure and exacerbated by, score: 0.16600448  
hypercarbic respiratory failure also, score: 0.13637753  
to respiratory failure following the, score: 0.058293495

confidence of prediction: 0.911927  
Y\_true: [ 2 17 20 27 29 30 33 37]  
Y\_pred: [20 27 30 33 34 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
positive uti respiratory distress on, score: 0.17383267  
prn urinary tract infection patient with, score: 0.029328985  
treatment of uti awaiting proof of persistent, score: 0.016405813

confidence of prediction: 0.707346  
Y\_true: [ 7 10 20 27 35]  
Y\_pred: [10 31]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
smoking currently smokes cigarettes day alcohol occasional, score:  
0.111583725  
promote etoh cessation pain, score: 0.0029338251  
history tobacco pack year, score: 0.0019196939

confidence of prediction: 0.842614  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
disease hypertension hyperlipidemia bph depression osteoarthritis  
spinal, score: 0.17751114  
disease hypertension hyperlipidemia bph peripheral neuropathy  
social, score: 0.08365531  
atorvastatin mg tablet sig, score: 0.0073484387

confidence of prediction: 0.993548  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
avr cabg x3 coronary artery disease and, score: 0.020586846  
cardiac catheterization avr 25mm, score: 0.0059739402  
porcine cabg x3 lima to lad svg to om svg, score: 0.0045889774

confidence of prediction: 0.973651

Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
diuresed towards his preoperative, score: 0.45661467  
creams powders or ointments on, score: 0.31184328  
cabg x3 lima to lad svg, score: 0.029667873

confidence of prediction: 0.601584  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
panorex one panorex view, score: 0.30629665  
tunnel disease hypertension hyperlipidemia bph depression  
osteoarthritis, score: 0.223223  
hypertension hyperlipidemia bph peripheral neuropathy, score:  
0.043291755

confidence of prediction: 0.727926  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
diagnoses nstemi severe aortic stenosis vessel, score: 0.072604336  
c an nstemi c peak troponins of, score: 0.032147508  
got asa cxr unremarkable, score: 0.005758407

confidence of prediction: 0.948208  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stent in, score: 0.47133338  
coronary artery disease secondary, score: 0.085511655  
panorex one panorex view, score: 0.06658867

confidence of prediction: 0.752572  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib and was treated, score: 0.7256225  
amiodarone and beta blockade, score: 0.010343502  
systolic ejection murmur radiating to, score: 0.009352818

confidence of prediction: 0.936997  
Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]  
Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gerd hiatal hernia carpal tunnel, score: 0.04625189  
prozac continued gerd home aciphex switched to, score: 0.041478716  
secondary diagnoses gerd carpal tunnel disease arthritis, score:

0.036550123

confidence of prediction: 0.918150

Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]

Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

was the presumed cause, score: 0.019228037

his urinary tract infection a urology, score: 0.013629051

a urinary tract infection he continued to, score: 0.008725581

confidence of prediction: 0.855349

Y\_true: [ 4 8 11 13 15 18 20 22 23 24 26 27 32 34 37 41]

Y\_pred: [ 4 13 18 20 22 24 26 34 37 41]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

on tube feeds ciprofloxacin was started, score: 0.29934922

his feeding tube on and tolerated, score: 0.01939315

per nutrition and speech, score: 0.006753264

confidence of prediction: 0.907680

Y\_true: [ 7 21 26 27 28 39 44 49]

Y\_pred: [ 7 21 26 27 28 36 39 49]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

given 2u prbc with stable, score: 0.2478478

history of present illness, score: 0.12455808

bactrim and fluconazole were, score: 0.05799487

confidence of prediction: 0.865110

Y\_true: [ 7 21 26 27 28 39 44 49]

Y\_pred: [ 7 21 26 27 28 36 39 49]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

htn ckd iii baseline gfr, score: 0.17121257

ckd stage iii paf on, score: 0.118352115

ckd renal function improving per, score: 0.08953426

confidence of prediction: 0.993967

Y\_true: [ 7 21 26 27 28 39 44 49]

Y\_pred: [ 7 21 26 27 28 36 39 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

paf on coumadin presents, score: 0.49891192

afib on sotalol for, score: 0.36371562

afib with rvr in, score: 0.048338655

confidence of prediction: 0.901538

Y\_true: [ 7 21 26 27 28 39 44 49]

Y\_pred: [ 7 21 26 27 28 36 39 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

for heart failure but this was, score: 0.38497138

metoprolol chf in the setting of, score: 0.01372511  
congestive heart failure ckd renal, score: 0.012450646

confidence of prediction: 0.733494  
Y\_true: [ 7 21 26 27 28 39 44 49]  
Y\_pred: [ 7 21 26 27 28 36 39 49]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
had an egd on without, score: 0.13386424  
an upper endoscopy which was normal, score: 0.13074961  
endoscopy bleeding ceased however, score: 0.06264305

confidence of prediction: 0.600940  
Y\_true: [ 7 21 26 27 28 39 44 49]  
Y\_pred: [ 7 21 26 27 28 36 39 49]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
amiodarone mg tablet sig, score: 0.048082117  
amiodarone and continued on, score: 0.018822297  
amiodarone and the metoprolol, score: 0.018316329

confidence of prediction: 0.616075  
Y\_true: [ 7 21 26 27 28 39 44 49]  
Y\_pred: [ 7 21 26 27 28 36 39 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
paf on coumadin presents, score: 0.77054024  
days and coumadin restarted, score: 0.07586429  
afib on sotalol for, score: 0.048668392

confidence of prediction: 0.710369  
Y\_true: [ 3 20]  
Y\_pred: [ 3 20]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
hydrochlorothiazide prescribed by other, score: 0.00050810474  
pmh dm2 obesity htn hypercholesterolemia bilateral knee oa primary,  
score: 0.00042545825  
cover with clean dry, score: 0.00038376186

confidence of prediction: 0.998378  
Y\_true: [ 3 20]  
Y\_pred: [ 3 20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hyperparathyroidism psh csection l ankle, score: 0.011942571  
a roux en y, score: 0.008358554  
morbid obesity major surgical, score: 0.0076569756

confidence of prediction: 0.996654  
Y\_true: [ 0 20 23 24 35 42 46 47]  
Y\_pred: [17 20 29 30]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

myocardial infarction hypertension asthma discharge condition,  
score: 0.033692125

prior mi htn aortic [UNK] htn asthma who presented, score:  
0.025624912

uti mi years ago abdominal, score: 0.009283275

confidence of prediction: 0.519179

Y\_true: [14 15 20 24 26 27 38]

Y\_pred: [14 15 20 24 26 27 38]

top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)

rca on angiography the, score: 0.072226755

cardiac cath history of, score: 0.069752604

comments selective coronary angiography of this, score: 0.0404184

confidence of prediction: 0.507704

Y\_true: [14 15 20 24 26 27 38]

Y\_pred: [14 15 20 24 26 27 38]

top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)

cardiac cath history of, score: 0.37063426

rca on angiography the, score: 0.050249714

mid vessel just after, score: 0.040459383

confidence of prediction: 0.976231

Y\_true: [14 15 20 24 26 27 38]

Y\_pred: [14 15 20 24 26 27 38]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

on metoprolol htn the patient s bp, score: 0.50480694

diagnosed with hypertension at, score: 0.038878925

history of hypertension presents with stemi, score: 0.033118013

confidence of prediction: 0.995453

Y\_true: [14 15 20 24 26 27 38]

Y\_pred: [14 15 20 24 26 27 38]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

vessel cad the lmca, score: 0.1302836

rca with occlusion was also, score: 0.09020278

coronary artery disease the, score: 0.06490541

confidence of prediction: 0.911241

Y\_true: [14 15 20 24 26 27 38]

Y\_pred: [14 15 20 24 26 27 38]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

was a pleasure taking care of, score: 0.016075153

af noted at time of, score: 0.005905439

ecg atrial fibrillation with a controlled, score: 0.0057485043

confidence of prediction: 0.864653

Y\_true: [14 15 20 24 26 27 38]

Y\_pred: [14 15 20 24 26 27 38]



top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
compensated heart failure successful ptca and, score: 0.05763463  
cardiac pmi located in, score: 0.04242598  
compensated chf coronaries the patient presented, score: 0.022499705

confidence of prediction: 0.856987  
Y\_true: [14 15 20 24 26 27 38]  
Y\_pred: [14 15 20 24 26 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac cath history of, score: 0.17018674  
rca on angiography the, score: 0.0968825  
comments selective coronary angiography of, score: 0.04334994

confidence of prediction: 0.818604  
Y\_true: [11 17 19 35 37 41]  
Y\_pred: [17 19 37 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
biopsy picc placement picc d c d for, score: 0.1754894  
picc line placement history of, score: 0.08206833  
line flush picc non heparin, score: 0.03741739

confidence of prediction: 0.917848  
Y\_true: [11 17 19 35 37 41]  
Y\_pred: [17 19 37 41]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
on hemodialysis via lue, score: 0.073787056  
during dialysis and postop, score: 0.06685838  
of hemodialysis last hd, score: 0.055141915

confidence of prediction: 0.937550  
Y\_true: [11 17 19 35 37 41]  
Y\_pred: [17 19 37 41]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
pan resistant uti e coli depression, score: 0.08434036  
meropenum on she remained, score: 0.01878958  
sodium chloride flush ml, score: 0.013980758

confidence of prediction: 0.851430  
Y\_true: [11 17 19 35 37 41]  
Y\_pred: [17 19 37 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
hematocrit tube feeds were started, score: 0.13268626  
tube feeds via dobhoff, score: 0.0580672  
[UNK] tube feeds were tolerated, score: 0.021608794

confidence of prediction: 0.771866  
Y\_true: [ 5 37 41 42]  
Y\_pred: [17 33 37 40 42 44]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
noted a hyperdense lesion, score: 0.0487868  
a subclinical uti infection for this she, score: 0.046553157  
markedly improved moderate pulmonary, score: 0.020015419

confidence of prediction: 0.761900

Y\_true: [ 5 37 41 42]

Y\_pred: [17 33 37 40 42 44]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
post extubation medications on, score: 0.008971094  
of intubation and a bronchoscopy was, score: 0.008001185  
on ards protocol cxr, score: 0.00406329

confidence of prediction: 0.848340

Y\_true: [20 42]

Y\_pred: [ 2 33 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and required intubation before your mental, score: 0.28681055  
and was intubated for protection against, score: 0.038672816  
general intubated sedated no, score: 0.018488508

confidence of prediction: 0.795785

Y\_true: [11]

Y\_pred: [11]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
medical history depression dysthymia social history quit, score:  
0.063580796  
recurred depression dysthymia stable no si, score: 0.04469355  
daily trazodone 50mg qhs, score: 0.006815488

confidence of prediction: 0.935698

Y\_true: [ 2 3 7 10 20 41 43 45]

Y\_pred: [28 30 45]

top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
of tpn was initiated thereafter on, score: 0.33130744  
total of tpn ct a p on, score: 0.022181358  
you on several new, score: 0.0005856088

confidence of prediction: 0.550090

Y\_true: [ 9 20 27 33 40 42]

Y\_pred: [20 23 24 33 42]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
travatan z drops drop, score: 0.105617166  
ss nph insulin human, score: 0.098982275  
asthma dm htn and osa presenting, score: 0.07675877

confidence of prediction: 0.522172  
Y\_true: [ 9 20 27 33 40 42]  
Y\_pred: [20 23 24 33 42]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
had respiratory failure from high, score: 0.16291927  
hypercapnic respiratory failure recurrent, score: 0.15988544  
tube in standard position, score: 0.03237926

confidence of prediction: 0.757572  
Y\_true: [ 9 20 27 33 40 42]  
Y\_pred: [20 23 24 33 42]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
was intubated for several hours, score: 0.13208376  
intact neuro intubated sedated unable to, score: 0.070244685  
patient s intubated status past, score: 0.02301174

confidence of prediction: 0.510000  
Y\_true: [ 4 15 24 27 34 38]  
Y\_pred: [15 24 25 27 38]  
top three important windows for true positive code 15 (37.23: Combined right and left heart cardiac catheterization)  
cardiac catheterization for balloon valvuloplasty temporary pacing wire, score: 0.82692695  
vessel cad the lmca, score: 0.029929735  
cath selective coronary angiography of this, score: 0.020406568

confidence of prediction: 0.982611  
Y\_true: [ 4 15 24 27 34 38]  
Y\_pred: [15 24 25 27 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
heart disease cad noncontributory to, score: 0.048821207  
was thought to be, score: 0.029233797  
improved aeration of the, score: 0.021722954

confidence of prediction: 0.723794  
Y\_true: [ 4 15 24 27 34 38]  
Y\_pred: [15 24 25 27 38]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diuresed in lieu of her dependence, score: 0.17646939  
diuresed with lasix and, score: 0.05645693  
cardiothoracic surgeons interventional cardiologists, score: 0.055200618

confidence of prediction: 0.738323  
Y\_true: [ 4 15 24 27 34 38]  
Y\_pred: [15 24 25 27 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
cardiac catheterization for balloon valvuloplasty temporary pacing

wire, score: 0.49672434  
cath selective coronary angiography of this, score: 0.06602772  
vessel cad the lmca, score: 0.04647093

confidence of prediction: 0.754861  
Y\_true: [17 19 22 26 46]  
Y\_pred: [17 19 26 29 34 49]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
to being interviewed she, score: 0.1626776  
zosyn femoral line without evidence, score: 0.04356583  
history of present illness, score: 0.027952883

confidence of prediction: 0.914199  
Y\_true: [17 19 22 26 46]  
Y\_pred: [17 19 26 29 34 49]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
at dialysis major surgical, score: 0.18091819  
on dialysis she was, score: 0.05560225  
included hemodialysis antibiotics for, score: 0.055438783

confidence of prediction: 0.982252  
Y\_true: [17 19 22 26 46]  
Y\_pred: [17 19 26 29 34 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib past cva with l, score: 0.43397504  
afib past cva l sided, score: 0.43397504  
atrial fibrillation seizure disorder anemia, score: 0.06366066

confidence of prediction: 0.593047  
Y\_true: [ 4 24 26 37 49]  
Y\_pred: [ 4 26 37 49]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
[UNK] closure hyperlipidemia previous left inguinal, score: 0.66361755  
lipitor oral tamsulosin mg capsule, score: 0.03720395  
warfarin mg tablet sig, score: 0.004661762

confidence of prediction: 0.995318  
Y\_true: [ 4 24 26 37 49]  
Y\_pred: [ 4 26 37 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib on coumadin and right, score: 0.38925016  
afib on coumadin and s, score: 0.38925016  
afib rate controlled with, score: 0.06085257

confidence of prediction: 0.924768  
Y\_true: [ 4 24 26 37 49]  
Y\_pred: [ 4 26 37 49]  
top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)  
cultures gnrns colonies imaging cxr, score: 0.66390395  
developed urinary retention which prompted, score: 0.03426651  
and leukocyte he was, score: 0.015834156

confidence of prediction: 0.626670  
Y\_true: [ 4 24 26 37 49]  
Y\_pred: [ 4 26 37 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on coumadin and, score: 0.32731  
4mg daily warfarin 5mg, score: 0.028804775  
afib rate controlled with, score: 0.02055534

confidence of prediction: 0.692853  
Y\_true: [20 31 34 41]  
Y\_pred: [24 29 31 41 43]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
feeding tube courses below, score: 0.021603102  
tube was replaced a, score: 0.017816518  
tube was replaced at, score: 0.017816518

confidence of prediction: 0.969554  
Y\_true: [20 31 34 41]  
Y\_pred: [24 29 31 41 43]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
tube feedings were advanced, score: 0.1337738  
am feeding tube ends in, score: 0.064903766  
and tube feedings were initiated to, score: 0.05143171

confidence of prediction: 0.835639  
Y\_true: [21 28 35]  
Y\_pred: [ 7 21 28 35 36]  
top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
prn hypoglycemia tamsulosin mg, score: 0.032835916  
chronic kidney disease last a1c who, score: 0.026353808  
8u 10u gabapentin mg, score: 0.024896964

confidence of prediction: 0.703734  
Y\_true: [21 28 35]  
Y\_pred: [ 7 21 28 35 36]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
history of present illness, score: 0.47767442  
endoscopy that revealed severe erosive, score: 0.058545183  
lispro humalog kwikpen unit ml, score: 0.040151313

confidence of prediction: 0.618049  
Y\_true: [21 28 35]  
Y\_pred: [ 7 21 28 35 36]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
acute renal failure patient admitted with, score: 0.0897956  
his creatinine improved back, score: 0.05973987  
1gram tid started on, score: 0.054984797

confidence of prediction: 0.937692

Y\_true: [26 27 35 41]

Y\_pred: [26 27 35]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation with rapid, score: 0.2526301  
atrial fibrillation social history lives, score: 0.14355989  
afib rvr while here, score: 0.13416329

confidence of prediction: 0.758064

Y\_true: [26 27 35 41]

Y\_pred: [26 27 35]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diastolic heart failure the patient was, score: 0.17362715  
diuresed with lasix and her, score: 0.06429651  
have mild dchf leading to her effusions, score: 0.035255697

confidence of prediction: 0.517755

Y\_true: [26 27 35 41]

Y\_pred: [26 27 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
acute renal failure the patient, score: 0.12364092  
acute renal failure your creatinine, score: 0.105003126  
acute renal failure tracheobronchomalacia, score: 0.036341142

confidence of prediction: 0.578774

Y\_true: [12 17 21 33 43 47]

Y\_pred: [17 21 29 33 34 35 36 40 41 43]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
weeks picc placed for, score: 0.05877425  
again reevaluated by speech, score: 0.042510994  
oxacillin resistant staphylococci must, score: 0.028964296

confidence of prediction: 0.733403

Y\_true: [12 17 21 33 43 47]

Y\_pred: [17 21 29 33 34 35 36 40 41 43]

top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
chronic renal insufficiency gerd anemia, score: 0.13118893  
elevated creatinine baseline h, score: 0.12506607  
chronic renal insufficiency baseline cr meds were, score: 0.08102957

confidence of prediction: 0.891611

Y\_true: [12 17 21 33 43 47]

Y\_pred: [17 21 29 33 34 35 36 40 41 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
acute respiratory failure at, score: 0.20392944  
with respiratory failure in, score: 0.09360967  
pneumonia respiratory failure mrsa, score: 0.03180812

confidence of prediction: 0.797127  
Y\_true: [12 17 21 33 43 47]  
Y\_pred: [17 21 29 33 34 35 36 40 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
was remained intubated for approximately, score: 0.046274636  
sitter as attempting to, score: 0.035015076  
hr vent settings fio2 tv rr, score: 0.03471668

confidence of prediction: 0.895756  
Y\_true: [ 4 20 26]  
Y\_pred: [ 4 20 26]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
cleared for dc medicine, score: 0.0021325748  
cough breathe deeply and, score: 0.0018249144  
weight lifting lifting or, score: 0.0017733745

confidence of prediction: 0.998741  
Y\_true: [ 4 20 26]  
Y\_pred: [ 4 20 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn hyperlipidemia palpitations on off, score:  
0.14684455  
a fib they increased, score: 0.001887727  
patient has baseline difficulty with hearing, score: 0.0011049984

confidence of prediction: 0.751723  
Y\_true: [ 4 20 26]  
Y\_pred: [ 4 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
a fib medicine was re, score: 0.023409652  
a fib they increased his, score: 0.012572052  
diagnosis bilateral sdh discharge, score: 0.005885604

confidence of prediction: 0.821282  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm htn presents with one, score: 0.10280214  
dm resume metformin and glipizide, score: 0.08718418  
glipizide mg tablet sig, score: 0.070089765

confidence of prediction: 0.826617  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
infection lactic acidosis hypertension secondary atrial, score:  
0.07023664  
mail a pathology report, score: 0.029739179  
ischemia given lactate of, score: 0.023587247

confidence of prediction: 0.736190  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
dm resume metformin and glipizide iss while, score: 0.001769071  
dm htn social history tobacco smokes cigarettes per day etoh, score:  
0.0014845121  
metformin mg tablet sig, score: 0.0011027225

confidence of prediction: 0.862928  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
with dm htn presents with, score: 0.053432282  
gout dm htn social history tobacco, score: 0.04239733  
normal hipto htn antihypertensives held initially, score: 0.04137347

confidence of prediction: 0.970388  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib and chads score of, score: 0.6748598  
atrial fibrillation discharge condition mental, score: 0.17257251  
was a pleasure taking care, score: 0.0090927

confidence of prediction: 0.677459  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
s renal function dictates that, score: 0.036094915  
anemia leukocytosis lactic acidosis concern, score: 0.03565562  
ischemia given lactate of, score: 0.014454126

confidence of prediction: 0.980126  
Y\_true: [ 2 6 7 10 20 26 35 37]  
Y\_pred: [ 2 6 10 20 26 28 35 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
proteus mirabilis organisms ml piperacillin, score: 0.13006917



urinary tract infection lactic, score: 0.09997538  
urine culture grew proteus mirabilis org ml pt, score: 0.09064213

confidence of prediction: 0.567127

Y\_true: [11 32]

Y\_pred: [11 32]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
medical history depression social history she is, score: 0.15115167  
history of depression who presented, score: 0.017211441  
and is being well, score: 0.009928843

confidence of prediction: 0.568401

Y\_true: [11 32]

Y\_pred: [11 32]

top three important windows for true positive code 32 (511.9:  
Unspecified pleural effusion)  
fluid fluid culture in, score: 0.02629394  
and pericardial effusion the, score: 0.022268064  
pleural effusion she was subsequently, score: 0.020232154

confidence of prediction: 0.693289

Y\_true: [ 2 4 7 21 26 29 30 32 36 44]

Y\_pred: [ 2 4 26 29 30]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
type ii diabetes mellitus patient has diet, score: 0.08730569  
controlled diabetes copd patient had, score: 0.037591144  
type ii diabetes mellitus diet controlled hypertension, score:  
0.018789046

confidence of prediction: 0.822171

Y\_true: [ 2 4 7 21 26 29 30 32 36 44]

Y\_pred: [ 2 4 26 29 30]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
controlled hypertension hyperlipidemia discharge condition  
hemodynamically, score: 0.09513334  
failure anemia hyperlipidemia copd social history tob, score:  
0.03806131  
simvastatin mg tablet sig, score: 0.021721672

confidence of prediction: 0.938987

Y\_true: [ 2 4 7 21 26 29 30 32 36 44]

Y\_pred: [ 2 4 26 29 30]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib with ventricular rate, score: 0.27594241  
irregularly irregular s1 s2 present, score: 0.16568494  
afib bp r o2, score: 0.074385636

confidence of prediction: 0.565505

Y\_true: [ 2 4 7 21 26 29 30 32 36 44]

Y\_pred: [ 2 4 26 29 30]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
showing lll infiltrate and effusion the, score: 0.07942587  
bronchus probable postobstructive atelectasis, score: 0.075753525  
a pneumonia your breathing, score: 0.061192982  
  
confidence of prediction: 0.695888  
Y\_true: [ 2 4 7 21 26 29 30 32 36 44]  
Y\_pred: [ 2 4 26 29 30]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
anemia hyperlipidemia copd social history tob quit, score: 0.037967503  
chronic obstructive pulmonary disease type, score: 0.01523132  
controlled diabetes copd patient had increased wheezing, score: 0.009264626  
  
confidence of prediction: 0.868102  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
home levothyroxine continued dispo home with, score: 0.30914745  
simvastatin hypothyroidism not active, score: 0.29072332  
hld hypothyroidism cad s, score: 0.06761486  
  
confidence of prediction: 0.932785  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
history htn hld hypothyroidism cad s p, score: 0.06662347  
was continued hyperlipidemia continued home simvastatin hypothyroidism, score: 0.04417071  
lacunar infarcts presents with week, score: 0.01928488  
  
confidence of prediction: 0.715175  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi lacunar infarcts presents with, score: 0.31982675  
s p mi 5yrs ago svt cataracts, score: 0.31982675  
s p mi p w hypotension malaise, score: 0.31982675  
  
confidence of prediction: 0.769120  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p mi 5yrs, score: 0.12818602  
ecg was stable compared, score: 0.056267187  
coronary artery disease chronic, score: 0.055329297

confidence of prediction: 0.936918  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf ef cad s p, score: 0.1138274  
chf [UNK] cad s p, score: 0.052262172  
systolic heart failure coronary artery disease, score: 0.04497753

confidence of prediction: 0.553697  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
primary diagnosis pneumonia shock unknown etiology, score:  
0.54788035  
had a pneumonia we were, score: 0.02397063  
effusions multifocal consolidation consistent with, score:  
0.017714841

confidence of prediction: 0.954374  
Y\_true: [ 1 4 21 23 24 27 29 34 35]  
Y\_pred: [ 1 4 23 24 27 29 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hemorrhoids keratosis gerd social history lives with, score:  
0.0141928  
hypothyroidism cad s p, score: 0.012912879  
levophed drip in ed, score: 0.0048031346

confidence of prediction: 0.500148  
Y\_true: [20 24 26 37]  
Y\_pred: [ 4 24 26 37 40 42 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
profiline to reverse her coagulopathy, score: 0.19859289  
history cad atrial fibrillation asthma social, score: 0.11291879  
history of cad atrial fibrillation on, score: 0.020665513

confidence of prediction: 0.985260  
Y\_true: [20 24 26 37]  
Y\_pred: [ 4 24 26 37 40 42 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation on coumadin and, score: 0.0355532  
irregularly irregular heart rate nl, score: 0.03048053  
atrial fibrillation the patient was, score: 0.0019170269

confidence of prediction: 0.924194  
Y\_true: [20 24 26 37]  
Y\_pred: [ 4 24 26 37 40 42 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

urinary tract infection pt has, score: 0.16847332  
uti she complained of, score: 0.0504588  
including uti and hyponatremia as, score: 0.04671656

confidence of prediction: 0.841315  
Y\_true: [ 1 6 20 27]  
Y\_pred: [ 1 27 29 40 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
ef hypothyroidism obesity spinal stenosis, score: 0.33849958  
placement hypothyroidism she was continued, score: 0.0750656  
admission synthroid mcg daily singulair, score: 0.014700593

confidence of prediction: 0.978283  
Y\_true: [ 1 6 20 27]  
Y\_pred: [ 1 27 29 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure exacerbation rest, score: 0.15105058  
chronic systolic chf ef patient s echo, score: 0.01660355  
chf with bilateral pleural, score: 0.011580097

confidence of prediction: 0.964484  
Y\_true: [19 26]  
Y\_pred: [19 26]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
prior dialysis schedule of, score: 0.06982938  
esrd on hd and hiv, score: 0.057245616  
esrd on dialysis esrd hiv, score: 0.030284582

confidence of prediction: 0.939693  
Y\_true: [19 26]  
Y\_pred: [19 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation borderline rapid ventricular, score: 0.28287736  
irregular normal s1 s2, score: 0.12002652  
atrial fibrillation brief hospital course, score: 0.1120063

confidence of prediction: 0.617192  
Y\_true: [ 3 18 20 26]  
Y\_pred: [ 3 18 20 26]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
fibrillation hypertension hypercholesterolemia hiv diabetes  
mellitus, score: 0.022717573  
x full rom x chest, score: 0.0034882878  
on admission hydrochlorothiazide 25mg, score: 0.0024322164

confidence of prediction: 0.957829  
Y\_true: [ 3 18 20 26]  
Y\_pred: [ 3 18 20 26]  
top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)  
lotions powders or ointments to, score: 0.35880178  
csru pm chest portable, score: 0.028461121  
cardiothoracic allergies patient recorded, score: 0.014222684

confidence of prediction: 0.944513  
Y\_true: [ 3 18 20 26]  
Y\_pred: [ 3 18 20 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
have it regulated by first name8, score: 0.045596983  
atrial fibrillation hypertension hypercholesterolemia hiv diabetes  
mellitus, score: 0.040538985  
medical history critical aortic stenosis hypertension  
hypercholesterolemia hiv positive, score: 0.024142195

confidence of prediction: 0.918194  
Y\_true: [ 3 18 20 26]  
Y\_pred: [ 3 18 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation that were treated, score: 0.2801512  
atrial fibrillation hypertension hypercholesterolemia, score:  
0.15435687  
atrial fibrillation and beta blockers, score: 0.1032406

confidence of prediction: 0.621381  
Y\_true: [ 2 4 6 32 33]  
Y\_pred: [2 9]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
secondary diabetes mellitus hypertension discharge condition, score:  
0.11390226  
metformin mg hospital1 naproxen nifedipine, score: 0.10006112  
metformin mg tablet sig, score: 0.048223764

confidence of prediction: 0.975595  
Y\_true: [ 0 4 20 30 35 37 46 47]  
Y\_pred: [20 30 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
gib s htn l inguinal hernia, score: 0.083930165  
t3 tte showing right, score: 0.041422587  
claustrophobia htn currently normotensive, score: 0.04011904

confidence of prediction: 0.851017  
Y\_true: [ 0 4 20 30 35 37 46 47]  
Y\_pred: [20 30 37]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
further managment copd maintained on inhalers with, score:  
0.055534303  
diverticulosis [UNK] copd morbid obesity osa lung, score: 0.00479874

patient is aox3 but lethargic and, score: 0.00012437029

confidence of prediction: 0.799505

Y\_true: [ 0 4 20 30 35 37 46 47]

Y\_pred: [20 30 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

urinary source urinary tract infection lung adenocarcinoma, score:  
0.045895994

hr116 bp98 rr18 satting, score: 0.029157456

few bacteria and yeast, score: 0.026871195

confidence of prediction: 0.524109

Y\_true: [ 2 4 13 18 20 24 26 27 39 44]

Y\_pred: [ 2 4 13 18 23 24 26 27 35]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

qpm novolog 100u ml solution, score: 0.08001579

chf diabetes mellitus morbid obesity history, score: 0.04695656

cardiomyopathy diabetes mellitus type pna multisystem, score:  
0.043332107

confidence of prediction: 0.576279

Y\_true: [ 2 4 13 18 20 24 26 27 39 44]

Y\_pred: [ 2 4 13 18 23 24 26 27 35]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

fibrillation hypertension hyperlipidemia ischemic cardiomyopathy  
diabetes mellitus, score: 0.037163448

failure hypertension hyperlipidemia chf, score: 0.03079039

dose ranolazine 1000mg po, score: 0.017544752

confidence of prediction: 0.986811

Y\_true: [ 2 4 13 18 20 24 26 27 39 44]

Y\_pred: [ 2 4 13 18 23 24 26 27 35]

top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

descending reverse saphenous vein graft, score: 0.1191918

coronary artery bypass graft, score: 0.07979883

urgent coronary artery bypass grafting x5 left internal mammary  
artery graft to, score: 0.009127642

confidence of prediction: 0.978742

Y\_true: [ 2 4 13 18 20 24 26 27 39 44]

Y\_pred: [ 2 4 13 18 23 24 26 27 35]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

reverse saphenous vein graft, score: 0.01692613

washing incisions gently with mild soap, score: 0.009092359

coronary artery bypass grafting x5 left internal mammary, score:  
0.005422915

confidence of prediction: 0.979716

Y\_true: [ 2 4 13 18 20 24 26 27 39 44]  
Y\_pred: [ 2 4 13 18 23 24 26 27 35]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s, score: 0.14187305  
three vessel disease with, score: 0.08656256  
urgent coronary artery bypass grafting, score: 0.06608884

confidence of prediction: 0.898306  
Y\_true: [ 2 4 13 18 20 24 26 27 39 44]  
Y\_pred: [ 2 4 13 18 23 24 26 27 35]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation hypertension hyperlipidemia ischemic, score:  
0.4963075  
amiodarone and coumadin for, score: 0.102595  
amiodarone mg tablet sig, score: 0.012943158

confidence of prediction: 0.960086  
Y\_true: [ 2 4 13 18 20 24 26 27 39 44]  
Y\_pred: [ 2 4 13 18 23 24 26 27 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure coronary artery disease, score: 0.16364455  
systolic heart failure post operative atrial, score: 0.16364455  
congestive heart failure icd, score: 0.032552347

confidence of prediction: 0.847835  
Y\_true: [ 0 17 29 33 35 36 40 42 46]  
Y\_pred: [ 0 9 26 31 33 35 40 41 42 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic shock multifocal pneumonia secondary diagnoses, score:  
0.03461687  
made cmo goals of, score: 0.030336017  
meeting with the medical, score: 0.009929173

confidence of prediction: 0.871242  
Y\_true: [ 0 17 29 33 35 36 40 42 46]  
Y\_pred: [ 0 9 26 31 33 35 40 41 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
on fio2 peep of, score: 0.094050944  
eventually made cmo goals of, score: 0.044973385  
vent fio2 peep of rate, score: 0.035386525

confidence of prediction: 0.932735  
Y\_true: [ 0 17 29 33 35 36 40 42 46]  
Y\_pred: [ 0 9 26 31 33 35 40 41 42 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure cr from likely pre renal given hypotension and,  
score: 0.13227206  
ams and inability to protect airway no, score: 0.007836395

made cmo goals of, score: 0.0054810806

confidence of prediction: 0.839838

Y\_true: [ 0 17 29 33 35 36 40 42 46]

Y\_pred: [ 0 9 26 31 33 35 40 41 42 46]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

to intubation ct torso, score: 0.04573337

patient was intubated for unclear reasons, score: 0.04426085

as above intubation unclear reasons for intubation could have,  
score: 0.0064010434

confidence of prediction: 0.658434

Y\_true: [ 0 17 29 33 35 36 40 42 46]

Y\_pred: [ 0 9 26 31 33 35 40 41 42 46]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

tube placement due to, score: 0.025932556

to intubation ct torso, score: 0.024124242

patient was intubated for unclear reasons, score: 0.018684283

confidence of prediction: 0.943272

Y\_true: [ 0 17 29 33 35 36 40 42 46]

Y\_pred: [ 0 9 26 31 33 35 40 41 42 46]

top three important windows for true positive code 46 (995.92:

Severe sepsis)

made cmo goals of care, score: 0.061869428

septic shock multifocal pneumonia secondary diagnoses, score:  
0.053486645

meeting with the medical, score: 0.037261527

confidence of prediction: 0.738395

Y\_true: [20 34]

Y\_pred: [17 20 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

nafcillin ace inhibitors attending first, score: 0.12711021

tissue disease hypertension gerd rheumatoid arthritis, score:  
0.0744168

htn patient s blood, score: 0.061145958

confidence of prediction: 0.771008

Y\_true: [20 34]

Y\_pred: [17 20 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

lupus anticoagulant gerd social history smoking occasional, score:  
0.07573325

immunosuppression with [UNK] and, score: 0.039816957

disease hypertension gerd rheumatoid arthritis discharge condition,  
score: 0.022361444

confidence of prediction: 0.722047



Y\_true: [ 4 20 43]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
cad htn dyslipidemia coronary stent unknown date, score: 0.157577  
atenolol lipitor asa lisinopril discharge, score: 0.012352078  
daily atorvastatin mg tablet sig, score: 0.00752077

confidence of prediction: 0.962611  
Y\_true: [ 4 20 43]  
Y\_pred: [ 4 20 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history cad htn dyslipidemia coronary stent unknown date, score:  
0.31430444  
lipitor asa lisinopril discharge, score: 0.118750796  
ams left sided brain, score: 0.05534351

confidence of prediction: 0.633072  
Y\_true: [20 37 42]  
Y\_pred: [ 2 20 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
femoral artery contralateral second order, score: 0.2639364  
history dm htn past surgical history, score: 0.093137786  
metformin daily hctz 25mg, score: 0.09252053

confidence of prediction: 0.920833  
Y\_true: [20 37 42]  
Y\_pred: [ 2 20 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks sm urine rbc, score: 0.06955513  
urinary tract infection diabetes, score: 0.0531207  
final escherichia coli organisms ml escherichia coli ampicillin,  
score: 0.033424236

confidence of prediction: 0.882904  
Y\_true: [ 7 10 12 20 26 40 41 43 49]  
Y\_pred: [11 12 17 20 24 26 40 41 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
bronch done bal sent checked, score: 0.07975449  
rms bronchus bal sent ett, score: 0.04634499  
trach collar up until the, score: 0.018429361

confidence of prediction: 0.984155  
Y\_true: [ 7 10 12 20 26 40 41 43 49]  
Y\_pred: [11 12 17 20 24 26 40 41 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diovan triamteren hctz simvastatin clonazepam, score: 0.48850194  
cortisol tfts cards consulted and, score: 0.0654465  
stent plavix htn depression obesity social history, score:

0.04685919

confidence of prediction: 0.983586

Y\_true: [ 7 10 12 20 26 40 41 43 49]

Y\_pred: [11 12 17 20 24 26 40 41 43]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation and his blood, score: 0.15353006

afib lorazepam in sod, score: 0.026813526

afib w rvr the, score: 0.016768215

confidence of prediction: 0.773307

Y\_true: [ 7 10 12 20 26 40 41 43 49]

Y\_pred: [11 12 17 20 24 26 40 41 43]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

was reintubated shortly after, score: 0.4697867

then intubated in the, score: 0.0458407

was tolerating trach collar up until, score: 0.032741506

confidence of prediction: 0.935682

Y\_true: [ 7 10 12 20 26 40 41 43 49]

Y\_pred: [11 12 17 20 24 26 40 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

hour of trach trial then, score: 0.097516924

tfs changed now that, score: 0.0514079

tolerating trach collar up until, score: 0.050847057

confidence of prediction: 0.861340

Y\_true: [ 7 10 12 20 26 40 41 43 49]

Y\_pred: [11 12 17 20 24 26 40 41 43]

top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)

hour of trach trial, score: 0.07498262

trach on trach placed in, score: 0.07057876

therefore a tracheostomy was, score: 0.058044825

confidence of prediction: 0.591599

Y\_true: [ 8 9 14 24]

Y\_pred: [14 15 20 24 27 38]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

cardiac catheterization with bare metal, score: 0.257372

catheterization comments coronary angiography in this, score: 0.062277906

cath lab on review, score: 0.03032327

confidence of prediction: 0.992551

Y\_true: [ 8 9 14 24]

Y\_pred: [14 15 20 24 27 38]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

vessel cad with stemi due to, score: 0.08308949  
bare metal stent to, score: 0.059392963  
catheterization stemi cad pt with, score: 0.052768573

confidence of prediction: 0.748410  
Y\_true: [ 8 14 24 26 27 38 48 49]  
Y\_pred: [24 26 27 38 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.143376  
coronary artery disease patent lima to, score: 0.143376  
s p cabg s, score: 0.10759369

confidence of prediction: 0.981912  
Y\_true: [ 8 14 24 26 27 38 48 49]  
Y\_pred: [24 26 27 38 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
irregularly irregular s1 s2 no, score: 0.17170407  
fibrillation rate controlled holding, score: 0.01035836  
a fib on coumadin cll who, score: 0.0063643456

confidence of prediction: 0.521067  
Y\_true: [ 8 14 24 26 27 38 48 49]  
Y\_pred: [24 26 27 38 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
furosemide 80mg hospital1 lisinopril, score: 0.031737477  
ctropnt probnp numeric identifier 21pm blood, score: 0.02344722  
additionally lasix 80mg iv, score: 0.022275249

confidence of prediction: 0.789272  
Y\_true: [ 8 14 24 26 27 38 48 49]  
Y\_pred: [24 26 27 38 49]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.6834491  
cath selective coronary [UNK] in, score: 0.0673746  
cardiac catheterization as you had, score: 0.011667222

confidence of prediction: 0.854958  
Y\_true: [ 8 14 24 26 27 38 48 49]  
Y\_pred: [24 26 27 38 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
a day coumadin mg, score: 0.018555358  
40mg hospital1 coumadin 5mg, score: 0.017234148  
change your coumadin to, score: 0.0038221702

confidence of prediction: 0.970133  
Y\_true: [ 4 9 14 18 20 24 26 38 41 42 47]  
Y\_pred: [18 20 26 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies no known, score: 0.025223915  
washing incisions gently with mild soap, score: 0.009321503  
causing aortic aneurysm no, score: 0.007649374

confidence of prediction: 0.820738  
Y\_true: [ 4 9 14 18 20 24 26 38 41 42 47]  
Y\_pred: [18 20 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diagnosis of aortitis was, score: 0.09456658  
medical history htn per pt his baseline bp usually, score:  
0.06940773  
every hrs primidone mg, score: 0.026302205

confidence of prediction: 0.978753  
Y\_true: [ 4 9 14 18 20 24 26 38 41 42 47]  
Y\_pred: [18 20 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation it was held, score: 0.67179424  
a fib on he was successfully, score: 0.01456996  
atrial fibrillation which was treated, score: 0.0072282976

confidence of prediction: 0.733020  
Y\_true: [ 4 10 29]  
Y\_pred: [ 3 4 29]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
of discharge hyperlipidemia stable with no, score: 0.028010566  
continued home atorvastatin mg, score: 0.023289556  
tobacco abuse hyperlipidemia discharge condition mental, score:  
0.00946361

confidence of prediction: 0.778970  
Y\_true: [ 4 10 29]  
Y\_pred: [ 3 4 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquire pna she was, score: 0.062204514  
community acquired pneumonia despite previous, score: 0.055533  
cxr multifocal pneumonia superimposed, score: 0.034347385

confidence of prediction: 0.581221  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
he was found to, score: 0.28318048  
septic shock respiratory failure acute, score: 0.051163543  
septic shock mr known, score: 0.037193548

confidence of prediction: 0.957483  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure etiology unclear etoh, score: 0.19478182  
systolic heart failure secondary diagnosis, score: 0.19478182  
cocaine abuse chf w ef who presented, score: 0.03159133

confidence of prediction: 0.535657  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
and cocaine copd hypertension etoh abuse cocaine, score: 0.10905042  
status and copd patient was gradually weaned, score: 0.055549294  
fever chills night sweats, score: 0.003644761

confidence of prediction: 0.744870  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
leukocytosis respiratory failure patient remained intubated during,  
score: 0.10527483  
respiratory failure acute on, score: 0.088641755  
nasogastric tube courses below the, score: 0.06446187

confidence of prediction: 0.614376  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
details unknown arf rbbb history of, score: 0.29781595  
acute renal failure on initial, score: 0.08011745  
tube courses below the, score: 0.016174195

confidence of prediction: 0.751236  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
on tube feeds and after extubation on, score: 0.26386958  
and prolonged intubation he was, score: 0.024862673  
all illicit family history, score: 0.012022127

confidence of prediction: 0.990335  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]  
Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
started on tpn on he was started, score: 0.00495496  
throughout admission nutrition patient was, score: 0.0004420728  
ambulatory independent discharge instructions, score: 0.00023510172

confidence of prediction: 0.904285  
Y\_true: [ 0 8 16 21 27 30 33 35 36 41 43 45 46]

Y\_pred: [ 0 20 27 30 33 35 40 41 45 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
he was found to, score: 0.15632571  
septic shock respiratory failure acute, score: 0.07967938  
septic shock persistent fevers and, score: 0.03051699  
  
confidence of prediction: 0.990188  
Y\_true: [ 2 13 18 24 26]  
Y\_pred: [13 18 24 26 45]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
mammary artery anastomosed to, score: 0.3166742  
coronary artery bypass grafting times five, score: 0.21723662  
coronary artery bypass graft, score: 0.07271361  
  
confidence of prediction: 0.973957  
Y\_true: [ 2 13 18 24 26]  
Y\_pred: [13 18 24 26 45]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were inserted after, score: 0.34914556  
lotions powders or ointments to, score: 0.17541564  
incisions no baths or, score: 0.15257607  
  
confidence of prediction: 0.998245  
Y\_true: [ 2 13 18 24 26]  
Y\_pred: [13 18 24 26 45]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery bypass grafting, score: 0.23632595  
coronary artery bypass graft, score: 0.14650859  
coronary artery bypass grafting, score: 0.14650859  
  
confidence of prediction: 0.900486  
Y\_true: [ 2 13 18 24 26]  
Y\_pred: [13 18 24 26 45]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation and placed on, score: 0.035807423  
his rhythm converted within, score: 0.021996638  
amiodarone mg tablet sig, score: 0.021860665  
  
confidence of prediction: 0.758368  
Y\_true: [ 1 4 10 15 17 18 25 27 34 38 40 41 42]  
Y\_pred: [ 1 18 25 27 34]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
tid levoxyl 50mcg qday premarin 625mg, score: 0.2060147  
work hypothyroidism stable with tsh, score: 0.17058085  
of levothyroxine tobacco use patient, score: 0.016210465  
  
confidence of prediction: 0.984420  
Y\_true: [ 1 4 10 15 17 18 25 27 34 38 40 41 42]

Y\_pred: [ 1 18 25 27 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7299242  
diuresed toward the preoperative, score: 0.02059483  
cardiothoracic allergies erythromycin base, score: 0.018517228

confidence of prediction: 0.759662  
Y\_true: [ 1 4 10 15 17 18 25 27 34 38 40 41 42]  
Y\_pred: [ 1 18 25 27 34]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
mitral valve repair with, score: 0.2215569  
mitral regurgitation vena contracta, score: 0.14104775  
severe mitral regurgitation is seen, score: 0.07479126

confidence of prediction: 0.907499  
Y\_true: [ 1 4 10 15 17 18 25 27 34 38 40 41 42]  
Y\_pred: [ 1 18 25 27 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf the etiology of her, score: 0.08515019  
chf and pulmonary edema question, score: 0.04856704  
regurgitation acute diastolic heart failure pmh chronic abd, score:  
0.03178189

confidence of prediction: 0.844101  
Y\_true: [ 1 4 10 15 17 18 25 27 34 38 40 41 42]  
Y\_pred: [ 1 18 25 27 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
bipolar hypothyroid gerd endometriosis past surgical, score:  
0.08514672  
bipolar hypothyroid gerd endometriosis discharge condition, score:  
0.08514672  
her chf gerd stable continued on home, score: 0.012092425

confidence of prediction: 0.628353  
Y\_true: [ 7 20 37 48]  
Y\_pred: [ 7 20 37 48]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
had painless bright red blood, score: 0.1636602  
of 6u prbc s through admission, score: 0.09347826  
death in 60s 80s, score: 0.066024505

confidence of prediction: 0.974041  
Y\_true: [ 7 20 37 48]  
Y\_pred: [ 7 20 37 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
bioprothetic mvr htn emphysema who presented, score: 0.1516894  
bioprothetic mvr htn emphysema admitted with, score: 0.1516894  
annuloplasty in hypertension osteoporosis she has, score: 0.12537396

confidence of prediction: 0.917877

Y\_true: [ 7 20 37 48]

Y\_pred: [ 7 20 37 48]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

escherichia coli organisms ml presumptive, score: 0.17061853

a uti on admission, score: 0.07968512

urinary tract infection one in, score: 0.044102646

confidence of prediction: 0.800925

Y\_true: [ 7 20 37 48]

Y\_pred: [ 7 20 37 48]

top three important windows for true positive code 48 (V45.81:

Aortocoronary bypass status)

s p cabg ms, score: 0.46950403

ir guided angiography and, score: 0.03505208

coronary artery disease history, score: 0.002193276

confidence of prediction: 0.573202

Y\_true: [ 7 40 42]

Y\_pred: [ 7 40 42]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

and units prbc free fluid, score: 0.44982478

to herself and has, score: 0.053278893

woke up somewhat and, score: 0.036935948

confidence of prediction: 0.828195

Y\_true: [ 7 40 42]

Y\_pred: [ 7 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

was subsequently intubated once stabilized she, score: 0.12441111

bronchus intubation and total, score: 0.01822837

mvc intubated at scene major surgical, score: 0.01554127

confidence of prediction: 0.729627

Y\_true: [ 7 40 42]

Y\_pred: [ 7 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

was subsequently intubated once stabilized she, score: 0.08843551

remained intubated she was, score: 0.05192221

remained intubated and returned, score: 0.045452077

confidence of prediction: 0.872797

Y\_true: [ 0 6 12 17 19 20 31 33 41 43 45 46 47]

Y\_pred: [12 19 41]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)

pod a bal was performed which yielded, score: 0.10800393

the tube feeds and has, score: 0.014402191



he remained intubated through pod, score: 0.012025173

confidence of prediction: 0.941330

Y\_true: [ 0 6 12 17 19 20 31 33 41 43 45 46 47]

Y\_pred: [12 19 41]

top three important windows for true positive code 19 (39.95: Hemodialysis)

he receives hemodialysis via right tunneled hd line every, score: 0.09003733

bolt tunneled dialysis line post, score: 0.042550422

on cvvhd while in, score: 0.041160088

confidence of prediction: 0.882232

Y\_true: [ 0 6 12 17 19 20 31 33 41 43 45 46 47]

Y\_pred: [12 19 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

the tube feeds and has, score: 0.11156339

tube feeds will continue, score: 0.097290516

tube feeds via a, score: 0.08381826

confidence of prediction: 0.670044

Y\_true: [ 4 11 20 23 24 27]

Y\_pred: [11 17 20 29 34]

top three important windows for true positive code 11 (311: Depressive disorder, not elsewhere classified)

mg qid depression [UNK] was increased to, score: 0.42187458

h o colonic tubular, score: 0.06499715

daily vancocin mg qid oxycodone, score: 0.049999826

confidence of prediction: 0.947403

Y\_true: [ 4 11 20 23 24 27]

Y\_pred: [11 17 20 29 34]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

hypertension the patient has, score: 0.45672426

and tricolor hypertension legionnaire s disease diagnosed, score: 0.09016046

history of hypertension and, score: 0.05478175

confidence of prediction: 0.674083

Y\_true: [ 4 15 21 24 26 27 36 38]

Y\_pred: [ 4 15 20 24 26 27 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

factors diabetes dyslipidemia tc, score: 0.17514397

of hypertension hyperlipidemia who initially presented, score: 0.062435422

history of hyperlipidemia and hypertension presenting, score: 0.039912734

confidence of prediction: 0.516143

Y\_true: [ 4 15 21 24 26 27 36 38]

Y\_pred: [ 4 15 20 24 26 27 38]

top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization with ptca, score: 0.7768439  
catheterization selective coronary angiography of this, score:  
0.041792378  
catheterization lab patient satting, score: 0.019510994

confidence of prediction: 0.985892  
Y\_true: [ 4 15 21 24 26 27 36 38]  
Y\_pred: [ 4 15 20 24 26 27 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.16471812  
coronary artery disease elevated, score: 0.16471812  
mid vessel disease she was, score: 0.09168775

confidence of prediction: 0.948827  
Y\_true: [ 4 15 21 24 26 27 36 38]  
Y\_pred: [ 4 15 20 24 26 27 38]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with rapid, score: 0.2572031  
atrial fibrillation that occurred during, score: 0.15846276  
atrial fibrillation resolved discharge condition, score: 0.05230808

confidence of prediction: 0.957081  
Y\_true: [ 4 15 21 24 26 27 36 38]  
Y\_pred: [ 4 15 20 24 26 27 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure was discussed, score: 0.104421556  
systolic congestive heart failure atrial fibrillation resolved,  
score: 0.024338942  
it was decided that, score: 0.005311986

confidence of prediction: 0.861777  
Y\_true: [ 4 15 21 24 26 27 36 38]  
Y\_pred: [ 4 15 20 24 26 27 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with ptca, score: 0.51770204  
catheterization selective coronary angiography of this, score:  
0.07333542  
cardiac catheterization upon arrival, score: 0.025267635

confidence of prediction: 0.733941  
Y\_true: [ 1 4 6 8 11 12 16 20 29 31 33 34 40 41 42 47]  
Y\_pred: [ 1 4 20 34]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
asthma hypothyroidism cva with ich, score: 0.12408771  
constipation levothyroxine mcg tablet sig two, score: 0.03857647  
admission omeprazole levothyroxine asa seroquel lisinopril mvi,  
score: 0.004740074

confidence of prediction: 0.839941  
Y\_true: [ 1 4 6 8 11 12 16 20 29 31 33 34 40 41 42 47]  
Y\_pred: [ 1 4 20 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
vit d units weekly, score: 0.013101624  
simvastatin mg tablet sig, score: 0.007104844  
presently legal [UNK] is, score: 0.005810324

confidence of prediction: 0.976803  
Y\_true: [ 1 4 6 8 11 12 16 20 29 31 33 34 40 41 42 47]  
Y\_pred: [ 1 4 20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
gently wash away dried, score: 0.57002145  
anxiety gerd htn hld social history lives, score: 0.14161165  
levothyroxine asa seroquel lisinopril, score: 0.0097421715

confidence of prediction: 0.845585  
Y\_true: [ 1 4 6 8 11 12 16 20 29 31 33 34 40 41 42 47]  
Y\_pred: [ 1 4 20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
levothyroxine asa seroquel lisinopril mvi, score: 0.077738866  
renal service and given, score: 0.020627452  
continued with incentive spirometry, score: 0.015554931

confidence of prediction: 0.540779  
Y\_true: [ 0 4 6 8 20 22 26 30 46]  
Y\_pred: [ 0 20 22 26 30 35]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
and presumed sepsis the etiology was, score: 0.22022158  
picture he was also, score: 0.17859839  
c difficile sepsis hypotension tachycardia likely due, score:  
0.019334354

confidence of prediction: 0.854429  
Y\_true: [ 0 4 6 8 20 22 26 30 46]  
Y\_pred: [ 0 20 22 26 30 35]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
stopped glimepride diabetes med stopped because, score: 0.08922312  
gib s htn l inguinal hernia, score: 0.06145144  
hyperlipidemia dm social history lived at, score: 0.018314503

confidence of prediction: 0.773268  
Y\_true: [ 0 4 6 8 20 22 26 30 46]  
Y\_pred: [ 0 20 22 26 30 35]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
non st elevation myocardial infarction demand related infarct  
discharge, score: 0.0033150874

have represented infarction of the herniated, score: 0.0024071725  
need a diuretic to, score: 0.0012219344

confidence of prediction: 0.913527  
Y\_true: [ 0 4 6 8 20 22 26 30 46]  
Y\_pred: [ 0 20 22 26 30 35]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation stopped glimepride diabetes, score: 0.14879243  
afib there are no, score: 0.14534858  
fibrillation hypoxemia inguinal hernia, score: 0.030474009

confidence of prediction: 0.724854  
Y\_true: [ 0 4 6 8 20 22 26 30 46]  
Y\_pred: [ 0 20 22 26 30 35]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
diverticulosis [UNK] copd morbid obesity osa lung, score: 0.06271064  
of metastases copd mild co2 retainer based, score: 0.0074429093  
issues hypoglycemia pt is, score: 0.0057706614

confidence of prediction: 0.560945  
Y\_true: [ 4 9 15 21 27 35 48]  
Y\_pred: [ 4 21 24 27 35 36 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors diabetes dyslipidemia hypertension cardiac history aortic,  
score: 0.2574672  
in house hyperlipidemia continued on home simvastatin, score:  
0.093094684  
secondary hypertension hyperlipidemia coronary artery disease  
discharge, score: 0.07791385

confidence of prediction: 0.883715  
Y\_true: [ 4 9 15 21 27 35 48]  
Y\_pred: [ 4 21 24 27 35 36 48]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
on chronic kidney injury patient baseline cr is around, score:  
0.005196482  
lobe nodularities subcentimeter that, score: 0.0041614496  
antibiotics torsemide attending first, score: 0.0037918065

confidence of prediction: 0.944113  
Y\_true: [ 4 9 15 21 27 35 48]  
Y\_pred: [ 4 21 24 27 35 36 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
critical as chf patient initially presented, score: 0.08807502  
congestive heart failure due to, score: 0.043438893  
cabg congestive heart failure with ef in, score: 0.015795004

confidence of prediction: 0.653635

Y\_true: [ 4 9 15 21 27 35 48]  
Y\_pred: [ 4 21 24 27 35 36 48]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
on chronic kidney injury patient baseline cr is around, score: 0.39200956  
with cr of likely secondary to, score: 0.03926477  
after aggressive diuresis his, score: 0.018935362

confidence of prediction: 0.772432  
Y\_true: [ 4 9 15 21 27 35 48]  
Y\_pred: [ 4 21 24 27 35 36 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
aortic balloon valvuloplasty history, score: 0.026192088  
s p vessel cabg and, score: 0.003684116  
s p vessel cabg congestive heart, score: 0.003684116

confidence of prediction: 0.934616  
Y\_true: [ 1 4 20 23 24 37]  
Y\_pred: [ 1 4 20 23 24 27 37]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
daily levothyroxine 20mcg asa 162mg daily, score: 0.08387742  
daily levothyroxine mcg tablet sig one, score: 0.02552566  
history htn hypothyroidism constipation cad silent, score: 0.0029653935

confidence of prediction: 0.953386  
Y\_true: [ 1 4 20 23 24 37]  
Y\_pred: [ 1 4 20 23 24 27 37]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
injections dementia hld pituitary tumor hx of, score: 0.024415735  
40mg qaftnoon simvastatin daily, score: 0.005990174  
hypothyroidism constipation cad silent mi, score: 0.005360003

confidence of prediction: 0.876881  
Y\_true: [ 1 4 20 23 24 37]  
Y\_pred: [ 1 4 20 23 24 27 37]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
medical history htn hypothyroidism constipation cad silent mi  
chronic low back, score: 0.18415555  
history of htn prior, score: 0.16783907  
iph with htn to, score: 0.059201274

confidence of prediction: 0.616022  
Y\_true: [ 1 4 20 23 24 37]  
Y\_pred: [ 1 4 20 23 24 27 37]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
cad silent mi chronic low back pain, score: 0.79865015  
htn with cad who presented with right, score: 0.0034353805

lesion in addition the background, score: 0.001214933

confidence of prediction: 0.859163

Y\_true: [ 1 4 20 23 24 37]

Y\_pred: [ 1 4 20 23 24 27 37]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

cad silent mi chronic low back pain, score: 0.030940019

htn with cad who presented with right, score: 0.014847008

a u a was, score: 0.010076416

confidence of prediction: 0.964983

Y\_true: [ 1 4 20 23 24 37]

Y\_pred: [ 1 4 20 23 24 27 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

leuks mod discharge labs 40am, score: 0.21779639

a uti she has been, score: 0.1146721

urinary tract infection we are, score: 0.0939676

confidence of prediction: 0.889967

Y\_true: [ 1 2 3 17 33 37 41 42]

Y\_pred: [ 1 2 17 33 40 41 42 43]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

anxiety hypothyroidism hypernatremia arhtritis, score: 0.16109182

nph hypothyroid synthroid id ceftazidime for, score: 0.094997525

dm hypothyroid past surgical history, score: 0.012277233

confidence of prediction: 0.884708

Y\_true: [ 1 2 3 17 33 37 41 42]

Y\_pred: [ 1 2 17 33 40 41 42 43]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

disorder diabetes mellitus diabetes insipidus obesity mrsa

enterobacter, score: 0.009450651

o dm hypothyroid past surgical history, score: 0.0024717066

pseudotumor cerebri diabetes insipidus hypernatremia, score:

0.0018167789

confidence of prediction: 0.773538

Y\_true: [ 1 2 3 17 33 37 41 42]

Y\_pred: [ 1 2 17 33 40 41 42 43]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

and subsequently developed symptomatic, score: 0.080616556

klebsiella serratia picc removed, score: 0.066342466

picc line placed tip in, score: 0.046814714

confidence of prediction: 0.839552

Y\_true: [ 1 2 3 17 33 37 41 42]

Y\_pred: [ 1 2 17 33 40 41 42 43]

top three important windows for true positive code 33 (518.81: Acute

respiratory failure)  
trach difficult intubation [UNK], score: 0.22935666  
her respiratory failure subsequently, score: 0.06061522  
percutaneous tracheostomy cuffed nonfenestrated percutaneous  
endoscopic gastrostomy, score: 0.034370724

confidence of prediction: 0.880795  
Y\_true: [ 1 2 3 17 33 37 41 42]  
Y\_pred: [ 1 2 17 33 40 41 42 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
percutaneous endoscopic gastrostomy lumbar puncture opening, score:  
0.14241791  
exchanged peg trach picc, score: 0.07694213  
tracheostomy percutaneous endoscopic gastrostomy lumbar puncture  
opening, score: 0.06271257

confidence of prediction: 0.742251  
Y\_true: [ 1 2 3 17 33 37 41 42]  
Y\_pred: [ 1 2 17 33 40 41 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
trach difficult intubation [UNK], score: 0.79313004  
neuro trach off sedation pseudotumor, score: 0.057381213  
tracheostomy percutaneous endoscopic gastrostomy lumbar, score:  
0.012304088

confidence of prediction: 0.572231  
Y\_true: [ 3 20 27 34 37]  
Y\_pred: [ 3 4 11 20 27 37]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
hearing hypertension hypercholesterolemia social history the, score:  
0.08270205  
with dementia htn hld, score: 0.0032904209  
85f with alzheimer s, score: 0.0031315063

confidence of prediction: 0.999763  
Y\_true: [ 3 20 27 34 37]  
Y\_pred: [ 3 4 11 20 27 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension hypercholesterolemia social history the, score:  
0.5412239  
with dementia htn hld history of hemorrhagic, score: 0.07783243  
htn continued home lisinopril metoprolol, score: 0.04632683

confidence of prediction: 0.572265  
Y\_true: [ 3 20 27 34 37]  
Y\_pred: [ 3 4 11 20 27 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
aha valvular heart disease guidelines if, score: 0.114831276

to protect it from beating too, score: 0.05408408  
with early chf and levaquin was d, score: 0.041561775

confidence of prediction: 0.855852  
Y\_true: [ 3 20 27 34 37]  
Y\_pred: [ 3 4 11 20 27 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
rehab uti on presentation, score: 0.13737527  
for presumed uti that possibly lowered, score: 0.096522905  
recent uti and pt was, score: 0.036675517

confidence of prediction: 0.915125  
Y\_true: [ 8 20 26 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
details unknown htn mild copd mild, score: 0.099559635  
hemodynamically stable hypertension patient was markedly  
hypertensive, score: 0.0634996  
elevated troponin patient had, score: 0.039601445

confidence of prediction: 0.748772  
Y\_true: [ 8 20 26 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
htn mild copd mild carotid stenosis recent, score: 0.8869962  
loudest in upper lobes, score: 0.0192495  
every hours last dose, score: 0.00404955

confidence of prediction: 0.738884  
Y\_true: [ 8 20 26 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
emboli aspiration pneumonia metastatic lung cancer, score:  
0.12872392  
ground glass opacities in, score: 0.03898525  
pe and aspiration pna patient was initially, score: 0.024183111

confidence of prediction: 0.725664  
Y\_true: [ 8 20 26 30 31 37]  
Y\_pred: [20 30 31 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
despite adequate pe and, score: 0.04395224  
have a uti and an elevated, score: 0.035267968  
have urinary retention likely from, score: 0.030082934

confidence of prediction: 0.901445  
Y\_true: [ 4 11 21 26 29 34 36 48]  
Y\_pred: [ 4 21 26 34 36 37 48]  
top three important windows for true positive code 4 (272.4: Other



and unspecified hyperlipidemia)  
issues hypertension hyperlipidemia continued on metoprolol, score:  
0.120472394  
stenosis htn hl and current c, score: 0.0650639  
c11 hypertension hyperlipidemia gerd depression vit b12, score:  
0.037608117

confidence of prediction: 0.906992  
Y\_true: [ 4 11 21 26 29 34 36 48]  
Y\_pred: [ 4 21 26 34 36 37 48]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
[UNK] psh silicon wire, score: 0.011752939  
svg lpl continued on, score: 0.008633546  
ppi chronic kidney disease cr at baseline, score: 0.008229916

confidence of prediction: 0.917630  
Y\_true: [ 4 11 21 26 29 34 36 48]  
Y\_pred: [ 4 21 26 34 36 37 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation please continue to, score: 0.18574359  
atrial fibrillation we controlled, score: 0.10395222  
irregularly irregular normal s1 s2, score: 0.091203734

confidence of prediction: 0.920066  
Y\_true: [ 4 11 21 26 29 34 36 48]  
Y\_pred: [ 4 21 26 34 36 37 48]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
as above gerd continued on home ppi, score: 0.03992878  
hypertension hyperlipidemia gerd depression vit b12 defic, score:  
0.007194877  
picc line with its, score: 0.0058104405

confidence of prediction: 0.952906  
Y\_true: [ 4 11 21 26 29 34 36 48]  
Y\_pred: [ 4 21 26 34 36 37 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease cr at baseline likely, score: 0.034918852  
svg lpl continued on, score: 0.0061581912  
[UNK] psh silicon wire, score: 0.005677137

confidence of prediction: 0.855512  
Y\_true: [ 4 11 21 26 29 34 36 48]  
Y\_pred: [ 4 21 26 34 36 37 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg ckd baseline, score: 0.50902265  
s p cabg and, score: 0.22755197  
statin asa coronary artery disease s p cabg lima lad svg diagonal  
svg om svg, score: 0.0016753159

confidence of prediction: 0.784203  
Y\_true: [11 12 16 31 33 40 41 42]  
Y\_pred: [10 31 33 40 42]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
likely aspiration legionella negative pcp, score: 0.11218846  
to an aspiration event in the setting, score: 0.01859725  
had an eeg that, score: 0.008141446

confidence of prediction: 0.901022  
Y\_true: [11 12 16 31 33 40 41 42]  
Y\_pred: [10 31 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure thought to, score: 0.32424778  
and was intubated for airway protection, score: 0.06426705  
hypoxemic respiratory failure he was intubated in the, score:  
0.053486716

confidence of prediction: 0.902008  
Y\_true: [11 12 16 31 33 40 41 42]  
Y\_pred: [10 31 33 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was urgently intubated on intubation airways were, score: 0.10870439  
was intubated in the, score: 0.07465645  
and was intubated for airway protection, score: 0.03805791

confidence of prediction: 0.842885  
Y\_true: [11 12 16 31 33 40 41 42]  
Y\_pred: [10 31 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated in the, score: 0.03313153  
urgently intubated on intubation airways were, score: 0.029984295  
isolated bal gram stain pmns gpc, score: 0.025490915

confidence of prediction: 0.615931  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
controlled diabetes dyslipidemia hypertension cardiac, score:  
0.30657482  
diabetes diet controlled dyslipidemia hypertension, score:  
0.03181375  
closely in the micu, score: 0.013926342

confidence of prediction: 0.820124  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line was placed and, score: 0.2561455  
to meropenem pcn allergy, score: 0.16022745  
line arterial line egd, score: 0.09658504

confidence of prediction: 0.500758  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
in dementia htn who presented with, score: 0.103677  
wwii navy retired location sugar, score: 0.06017212  
diabetes dyslipidemia hypertension cardiac, score: 0.05852266

confidence of prediction: 0.971569  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib with rescue ventricular, score: 0.27766517  
af on coumadin s, score: 0.22896075  
afib chest pain afib with twi in, score: 0.11624122

confidence of prediction: 0.984157  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
for decompensated chf and transferred to, score: 0.04833861  
lambl s excrescences normal, score: 0.01018494  
diuresed with lasix as, score: 0.0063066687

confidence of prediction: 0.881427  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
arterial line egd history of present illness, score: 0.02445434  
to aspiration he was, score: 0.0106641995  
not interested in hospice, score: 0.0047467547

confidence of prediction: 0.908530  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
arrest aspiration event pt was, score: 0.121254705  
aspiration event further diuresis was, score: 0.075872056  
an aspiration pna and, score: 0.06413009

confidence of prediction: 0.911698  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
caucasian male intubated and sedated, score: 0.07484525  
pt was intubated during arrest without, score: 0.037144255  
his respiratory status the, score: 0.03142045

confidence of prediction: 0.702965  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
caucasian male intubated and sedated, score: 0.061007004  
to pursue reintubation which would, score: 0.049867354  
pt was intubated during arrest, score: 0.043079212

confidence of prediction: 0.803143  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
developed mucous plugging of his, score: 0.043335766  
a trach and peg were discussed, score: 0.027135374  
a trach and peg to be, score: 0.017993903

confidence of prediction: 0.796277  
Y\_true: [ 0 2 8 12 16 17 20 26 27 28 31 33 40 41 43 46 47]  
Y\_pred: [ 2 4 6 17 20 26 27 28 31 33 40 41 43 49]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
trach and peg to be, score: 0.12588422  
developed mucous plugging of, score: 0.028015828  
a trach and peg were discussed, score: 0.020776313

confidence of prediction: 0.977279  
Y\_true: [11 15 18 25 27 38]  
Y\_pred: [18 24 27 38]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued and, score: 0.34808728  
wires are again seen, score: 0.015460301  
leaflet on echocardiogram indications, score: 0.014393444

confidence of prediction: 0.508936  
Y\_true: [11 15 18 25 27 38]  
Y\_pred: [18 24 27 38]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
acute mr chf procedure right heart catheterization, score: 0.04693292  
mitral regurgitation in the, score: 0.042518374  
an ekg showed nsr, score: 0.028029045

confidence of prediction: 0.678672

Y\_true: [11 15 18 25 27 38]

Y\_pred: [18 24 27 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

rca normal 2a acute, score: 0.4804996

mitral valve repair with, score: 0.11334639

heart catheterization was performed, score: 0.04505973

confidence of prediction: 0.519243

Y\_true: [10 16 35 40 42 49]

Y\_pred: [17 35 40 42 49]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

workup including paracentesis a liver biopsy, score: 0.062462237

liver failure secondary to, score: 0.043402486

protection and extubated successfully, score: 0.019479057

confidence of prediction: 0.796563

Y\_true: [10 16 35 40 42 49]

Y\_pred: [17 35 40 42 49]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

she was intubated on for airway protection, score: 0.08152675

tube placement endotracheal intubation extubated history of, score: 0.0029435784

adverse drug reactions attending first, score: 0.0022656948

confidence of prediction: 0.705109

Y\_true: [10 16 35 40 42 49]

Y\_pred: [17 35 40 42 49]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

she was intubated on for airway protection, score: 0.019564232

tube placement endotracheal intubation extubated history of, score: 0.008458336

femoral femoral popliteal and posterior, score: 0.003503

confidence of prediction: 0.618928

Y\_true: [10 16 35 40 42 49]

Y\_pred: [17 35 40 42 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

was on warfarin for dvt in, score: 0.6393336

po daily coumadin 5mg, score: 0.084640846

medications stopped coumadin until, score: 0.051696412

confidence of prediction: 0.792250

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

picc the picc was pulled, score: 0.06192066

placement central line placement history of, score: 0.02261743

mr name13 stitle with, score: 0.008813924

confidence of prediction: 0.978427

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

cough insomnia hypertension urinary incontinence breast, score:

0.5916935

cvp r ij and, score: 0.039856423

inhaler last name stitle, score: 0.02655794

confidence of prediction: 0.858607

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

lobe pneumonia and muscle, score: 0.046825726

discharge diagnosis pneumonia mucus plugging cachexia weakness,

score: 0.013969127

with suctioning and are, score: 0.0108158095

confidence of prediction: 0.580613

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

ventilator respiratory failure multifactorial in, score: 0.16602165

trach collar in place, score: 0.093677945

isolated respiratory viral screen, score: 0.033986475

confidence of prediction: 0.936705

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

cx citrobacter organisms ml cefepime, score: 0.06754674

a citrobacter uti which was treated, score: 0.06491756

uti the patient was, score: 0.027019938

confidence of prediction: 0.644568

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

tube extrem wwp no, score: 0.13657294

on tube feeds via an ng, score: 0.12447709

tracheostomy peg tube placement central, score: 0.07214054

confidence of prediction: 0.798647

Y\_true: [ 8 11 16 17 20 29 33 37 40 41 42 43]

Y\_pred: [17 20 29 33 37 41 43]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours

or more)  
current ventilator settings are cmv, score: 0.113979  
tracheostomy and peg tube placement, score: 0.069260515  
ventilator respiratory failure multifactorial, score: 0.04082458

confidence of prediction: 0.696419  
Y\_true: [ 2 14 20 24 27 38]  
Y\_pred: [ 2 4 15 20 23 24 27 35 38]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm htn and hyperlipidemia, score: 0.07508267  
htn and pvd presenting, score: 0.04035047  
hypertension diabetes mellitus ii discharge condition, score:  
0.03939367

confidence of prediction: 0.725169  
Y\_true: [ 2 14 20 24 27 38]  
Y\_pred: [ 2 4 15 20 23 24 27 35 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
in dm htn and hyperlipidemia, score: 0.086217724  
hypertension and on the, score: 0.07363303  
dm htn and pvd presenting, score: 0.060250793

confidence of prediction: 0.980929  
Y\_true: [ 2 14 20 24 27 38]  
Y\_pred: [ 2 4 15 20 23 24 27 35 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease involving, score: 0.29082668  
stemi cad patient s ekg, score: 0.08835091  
coronary artery disease inferior, score: 0.08181151

confidence of prediction: 0.996454  
Y\_true: [ 2 14 20 24 27 38]  
Y\_pred: [ 2 4 15 20 23 24 27 35 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chronic systolic chf lvef hepatitis b core, score: 0.0056925006  
chronic systolic chf patient appeared euvoletic repeat, score:  
0.001623988  
dinitrate mg three times, score: 0.00052394107

confidence of prediction: 0.803914  
Y\_true: [ 2 14 20 24 27 38]  
Y\_pred: [ 2 4 15 20 23 24 27 35 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization without angioplasty or, score: 0.3741689  
vessel stenosis the first, score: 0.08418435  
cardiac catheterization this revealed 3v, score: 0.06021068

confidence of prediction: 0.591762

Y\_true: [ 1 4 8 11 19 27 29 33 40 42 43]  
Y\_pred: [ 1 4 17 19 27 40 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
ai hypothyroidism chronic bronchitis hyperparathyroidism, score:  
0.53345424  
daily levothyroxine mcg tablet sig two, score: 0.08325787  
mg daily synthroid mcg daily renvela mg, score: 0.0028371948

confidence of prediction: 0.536789  
Y\_true: [ 1 4 8 11 19 27 29 33 40 42 43]  
Y\_pred: [ 1 4 17 19 27 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
tabs hospital1 simvastatin mg qhs trazadone, score: 0.17937687  
htn hld and diastolic, score: 0.09702325  
iddm htn hld and diastolic, score: 0.083017044

confidence of prediction: 0.778982  
Y\_true: [ 1 4 8 11 19 27 29 33 40 42 43]  
Y\_pred: [ 1 4 17 19 27 40 42]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
of dialysis major surgical, score: 0.1442523  
esrd on hd t, score: 0.099959634  
of dialysis on further, score: 0.059886176

confidence of prediction: 0.781773  
Y\_true: [ 1 4 8 11 19 27 29 33 40 42 43]  
Y\_pred: [ 1 4 17 19 27 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic dysfunction who initially, score: 0.042719208  
diastolic [UNK] sent via, score: 0.009238024  
hypokalemia hx chf echo with ef mild, score: 0.0077854563

confidence of prediction: 0.868489  
Y\_true: [ 1 4 8 11 19 27 29 33 40 42 43]  
Y\_pred: [ 1 4 17 19 27 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was re intubated on a cxr, score: 0.1431569  
patient was intubated on extubation was attempted on but, score:  
0.025680576  
to painful stimuli she had, score: 0.023229226

confidence of prediction: 0.719808  
Y\_true: [ 1 4 8 11 19 27 29 33 40 42 43]  
Y\_pred: [ 1 4 17 19 27 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated on extubation was attempted, score: 0.19575633  
was re intubated on a cxr showed, score: 0.057546988



pleural effusion eeg this, score: 0.015367926

confidence of prediction: 0.619696

Y\_true: [ 2 3 7 24 26 35 37 49]

Y\_pred: [ 1 2 26 35 37 49]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

dm type pvd hypothyroidism, score: 0.10978986

mellitus type atrial fibrillation, score: 0.06668129

metformin 500mg po qpm, score: 0.045563336

confidence of prediction: 0.992905

Y\_true: [ 2 3 7 24 26 35 37 49]

Y\_pred: [ 1 2 26 35 37 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib on coumadin dm, score: 0.6199137

afib on coumadin ate baseline, score: 0.28258398

fibrillation pvd discharge condition, score: 0.019535929

confidence of prediction: 0.865414

Y\_true: [ 2 3 7 24 26 35 37 49]

Y\_pred: [ 1 2 26 35 37 49]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

acute renal failure resolved with blood, score: 0.055682257

with abf graft s p, score: 0.015629115

likely acute renal failure day post, score: 0.015416187

confidence of prediction: 0.781283

Y\_true: [ 2 3 7 24 26 35 37 49]

Y\_pred: [ 1 2 26 35 37 49]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

a urinary tract infection but a, score: 0.13862018

three days urinary retention incontinence since, score: 0.019010494

stable presumptive uti was treated with, score: 0.01021785

confidence of prediction: 0.793027

Y\_true: [ 2 3 7 24 26 35 37 49]

Y\_pred: [ 1 2 26 35 37 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)

afib on coumadin ate, score: 0.65878975

afib on coumadin dm, score: 0.16964586

was on coumadin for, score: 0.044957083

confidence of prediction: 0.534348

Y\_true: [ 1 8 9 29 35]

Y\_pred: [ 1 29 35]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

discharge hypothyroidism he was, score: 0.21462637

pre hypothyroidism pulmonary fibrosis mgus, score: 0.17503412  
and hypothyroidism who presents with, score: 0.10743021

confidence of prediction: 0.853464

Y\_true: [ 1 8 9 29 35]

Y\_pred: [ 1 29 35]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
for possible pneumonia pcp was, score: 0.08767027  
than pneumonia cxr increasing hazy opacification of, score:  
0.061474822  
proven uip in the, score: 0.013175433

confidence of prediction: 0.510231

Y\_true: [ 1 8 9 29 35]

Y\_pred: [ 1 29 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
suggesting pre renal etiology his medication, score: 0.16522634  
acute renal failure his creatinine was, score: 0.113195665  
renal function improved back, score: 0.09397916

confidence of prediction: 0.594310

Y\_true: [ 1 7 26 27 28]

Y\_pred: [ 1 7 26 27 28]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
of levothyroxine tsh was, score: 0.18426289  
hypothyroidism cirrhosis of unknown, score: 0.14915174  
admission levothyroxine mcg daily lisinopril, score: 0.101228654

confidence of prediction: 0.986773

Y\_true: [ 1 7 26 27 28]

Y\_pred: [ 1 7 26 27 28]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia gi bleed with, score: 0.47470087  
anemia acute on chronic, score: 0.12289886  
anemia melena major surgical, score: 0.05679857

confidence of prediction: 0.913075

Y\_true: [ 1 7 26 27 28]

Y\_pred: [ 1 7 26 27 28]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation was noted amiodarone was continued schizophrenia,  
score: 0.36105347  
afib and prior lv thrombus, score: 0.15241738  
atrial fibrillation schizophrenia discharge condition, score:  
0.07457136

confidence of prediction: 0.966553

Y\_true: [ 1 7 26 27 28]

Y\_pred: [ 1 7 26 27 28]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf with ef pericardial, score: 0.11816336  
chf ef who was admitted, score: 0.07835431  
heart failure clinic within, score: 0.01693592

confidence of prediction: 0.916952

Y\_true: [ 1 7 26 27 28]

Y\_pred: [ 1 7 26 27 28]

top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)

history of present illness, score: 0.2781424

otherwise normal egd to, score: 0.15958504

otherwise normal egd to, score: 0.123952754

confidence of prediction: 0.544804

Y\_true: [ 1 2 23 24 30]

Y\_pred: [ 1 23 24]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

pmr hypothyroidism patient was continued on, score: 0.25658813

home synthroid transitional issues, score: 0.06648261

daily levothyroxine mcg tablet sig, score: 0.061253134

confidence of prediction: 0.568828

Y\_true: [ 1 2 23 24 30]

Y\_pred: [ 1 23 24]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)

o of mi s p stent copd on 2l at, score: 0.057736922

medical history coronary artery disease with h, score: 0.007879763

stable s p stent, score: 0.007204462

confidence of prediction: 0.709860

Y\_true: [ 1 2 23 24 30]

Y\_pred: [ 1 23 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

s p stent copd on 2l at, score: 0.36556745

coronary artery disease with h, score: 0.1464185

stable s p stent denied, score: 0.10039261

confidence of prediction: 0.806965

Y\_true: [ 4 10 14 20 23 24 42]

Y\_pred: [ 4 15 23 24 31 34 38 42 44]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

and [UNK] hyperlipidemia lipitor zetia pvd, score: 0.104529485

hyperlipidemia discharge condition stable discharge, score:

0.04513568

ezetimibe mg tablet sig, score: 0.030353932

confidence of prediction: 0.595102

Y\_true: [ 4 10 14 20 23 24 42]

Y\_pred: [ 4 15 23 24 31 34 38 42 44]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi age, score: 0.40212128  
s p mi at, score: 0.40212128  
history cad mi further details unknown, score: 0.04235002

confidence of prediction: 0.956161  
Y\_true: [ 4 10 14 20 23 24 42]  
Y\_pred: [ 4 15 23 24 31 34 38 42 44]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.11124785  
coronary artery disease successful stenting of, score: 0.11124785  
s p mi age, score: 0.06648065

confidence of prediction: 0.880204  
Y\_true: [ 4 10 14 20 23 24 42]  
Y\_pred: [ 4 15 23 24 31 34 38 42 44]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
was intubated and sedated and, score: 0.092539705  
presented intubated from the, score: 0.035020225  
shocked and intubated in the, score: 0.030339288

confidence of prediction: 0.780285  
Y\_true: [ 3 10 37 42]  
Y\_pred: [ 3 10 37 40 42]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
medical history hypercholesterolemia migraine arthritis s p, score: 0.042889126  
rhw with hypercholesterolemia migraine and recent, score: 0.037647884  
of migraine hypercholesterolemia s p carpal, score: 0.023342077

confidence of prediction: 0.584124  
Y\_true: [ 3 10 37 42]  
Y\_pred: [ 3 10 37 40 42]  
top three important windows for true positive code 10 (305.1: Tobacco use disorder)  
correlated closely with findings, score: 0.0339791  
children smokes cigarettes daily but no, score: 0.020840991  
hypercholesterolemia migraine and recent, score: 0.005068768

confidence of prediction: 0.908494  
Y\_true: [ 3 10 37 42]  
Y\_pred: [ 3 10 37 40 42]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
uncomplicated uti her examination improved she, score: 0.3107101  
a urinary tract infection and were, score: 0.070131294  
altitude sports activities no, score: 0.016107976

confidence of prediction: 0.539045  
Y\_true: [ 3 10 37 42]  
Y\_pred: [ 3 10 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
bed intubated and sedated, score: 0.08184715  
patient was intubated including receiving 300mg, score: 0.05606661  
decreased vibratory sense proprioception lt, score: 0.030895848

confidence of prediction: 0.927426  
Y\_true: [ 4 10 14 20 24 38]  
Y\_pred: [ 4 14 20 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stent poba hld palpitations hyperhomocysteinemia prostate, score:  
0.10399252  
hyperlipidemia patient is on, score: 0.10170427  
htn and hld who presented with, score: 0.055782065

confidence of prediction: 0.524612  
Y\_true: [ 4 10 14 20 24 38]  
Y\_pred: [ 4 14 20 24 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization stent placement, score: 0.42456877  
cardiac cath selective coronary angiography in, score: 0.04251723  
cath lab he a x, score: 0.02335506

confidence of prediction: 0.958109  
Y\_true: [ 4 10 14 20 24 38]  
Y\_pred: [ 4 14 20 24 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension patient s blood, score: 0.13446203  
restenosis in htn and hld who, score: 0.1309515  
zetia crestor lisinopril amlodipine, score: 0.12701163

confidence of prediction: 0.990139  
Y\_true: [ 4 10 14 20 24 38]  
Y\_pred: [ 4 14 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad in stent restenosis, score: 0.13667731  
s p x 18mm, score: 0.10620494  
cardiac catheterization stent placement, score: 0.07809988

confidence of prediction: 0.892954  
Y\_true: [ 4 10 14 20 24 38]  
Y\_pred: [ 4 14 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization stent placement, score: 0.68434006

cardiac cath selective coronary angiography in, score: 0.04284241  
cath lab he a x, score: 0.016419407

confidence of prediction: 0.763658  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
possible throughout hospitalization that, score: 0.046454765  
septic shock with gnr bacteremia, score: 0.028509127  
septic shock from urinary source that, score: 0.02189568

confidence of prediction: 0.940564  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
warfarin hypothyroidism s p ileostomy, score: 0.44619644  
retention hypothyroidism bilateral subdural hematomas, score:  
0.024943173  
dialysis levothyroxine 50mcg daily loperamide 2mg, score:  
0.0022047958

confidence of prediction: 0.904455  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
on hd pvd s, score: 0.08555669  
on cvvh as toxins, score: 0.08229104  
and hemodialysis once he, score: 0.07480393

confidence of prediction: 0.752004  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi systolic chf, score: 0.26408854  
s p mi in medically managed systolic chf last, score: 0.26408854  
s p mi systolic chf lvef, score: 0.26408854

confidence of prediction: 0.554636  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cad s p mi in medically managed systolic chf last, score:  
0.051727686  
cad s p mi systolic, score: 0.02179705  
failure worsened ef of, score: 0.018371258

confidence of prediction: 0.995364  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib of warfarin hypothyroidism, score: 0.3888125  
afib with rvr he, score: 0.04464243  
afib with rvr after, score: 0.020313108

confidence of prediction: 0.982282  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf lvef with aicd dm2, score: 0.29897082  
congestive heart failure worsened ef of, score: 0.040597316  
managed systolic chf last echo per, score: 0.0286253

confidence of prediction: 0.968627  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
septic shock from urinary source, score: 0.046371393  
septic shock with gnr bacteremia, score: 0.04290929  
septic shock patient continued to, score: 0.033573598

confidence of prediction: 0.852514  
Y\_true: [ 0 1 5 10 19 23 24 26 27 46 49]  
Y\_pred: [ 0 1 2 11 19 23 24 26 27 46 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib of warfarin hypothyroidism, score: 0.43608144  
fibrillation on warfarin status post turp for urinary retention,  
score: 0.10286464  
amiodarone and warfarin heparin, score: 0.006471287

confidence of prediction: 0.954641  
Y\_true: [ 8 11 16 37 47]  
Y\_pred: [ 4 31 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
acquired uti and ultimately sent, score: 0.29234046  
a uti and an evolving, score: 0.032703247  
events pneumonia patient had a, score: 0.024116892

confidence of prediction: 0.715034  
Y\_true: [ 4 10 19 23 24 35 37]  
Y\_pred: [ 4 19 21 23 24]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
with stent hyperlipidemia hcv genotype peg, score: 0.41884392  
p lr rt htn cad s p, score: 0.012173028  
unknown dose simvastatin mg po daily, score: 0.010261149

confidence of prediction: 0.913461  
Y\_true: [ 4 10 19 23 24 35 37]

Y\_pred: [ 4 19 21 23 24]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
started on hemodialysis he was, score: 0.09102156  
continue hemodialysis as an, score: 0.07570126  
started on hemodialysis you will, score: 0.068436205  
  
confidence of prediction: 0.691457  
Y\_true: [ 4 10 19 23 24 35 37]  
Y\_pred: [ 4 19 21 23 24]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
vascular compromise gangrene resulting in a, score: 0.005076434  
extremity amputation anemia of, score: 0.0037819848  
lrrt htn cad s p mi with stent hyperlipidemia hcv, score:  
0.0025097935  
  
confidence of prediction: 0.593303  
Y\_true: [ 4 10 19 23 24 35 37]  
Y\_pred: [ 4 19 21 23 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
htn cad s p mi with stent hyperlipidemia hcv, score: 0.18629171  
extremity amputation anemia of, score: 0.03838604  
gangrene resulting in a, score: 0.030783866  
  
confidence of prediction: 0.817074  
Y\_true: [ 1 4 17 20 33 34 37]  
Y\_pred: [ 1 3 4 20 34 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
ppi hypothyroidism continued on levothyroxine mcg daily  
hyperlipidemia continued, score: 0.56193036  
oral levothyroxine mcg tablet sig, score: 0.05294283  
monthly levothyroxine mcg daily lisinopril, score: 0.025390018  
  
confidence of prediction: 0.715891  
Y\_true: [ 1 4 17 20 33 34 37]  
Y\_pred: [ 1 3 4 20 34 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
with metastatic breast ca, score: 0.042597637  
mcg daily hyperlipidemia continued on simvastatin mg daily  
medications, score: 0.021566063  
showed metastatic breast carcinoma date, score: 0.0071424413  
  
confidence of prediction: 0.982398  
Y\_true: [ 1 4 17 20 33 34 37]  
Y\_pred: [ 1 3 4 20 34 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension stable continued on atenolol, score: 0.35248595  
medical history hypertension hypercholesterolemia tah bso, score:  
0.119839445



met vs unresectable meningioma she, score: 0.058350004

confidence of prediction: 0.871674

Y\_true: [ 1 4 17 20 33 34 37]

Y\_pred: [ 1 3 4 20 34 37]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)

met vs unresectable meningioma, score: 0.06696315

was generalized achiness at, score: 0.019076148

mg daily gerd continued on ppi hypothyroidism, score: 0.017290195

confidence of prediction: 0.899514

Y\_true: [ 1 4 17 20 33 34 37]

Y\_pred: [ 1 3 4 20 34 37]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

[UNK] urinary tract infection secondary metastatic, score:  
0.105704345

a urinary tract infection you were, score: 0.070281096

uti x week fevers, score: 0.017543849

confidence of prediction: 0.511895

Y\_true: [ 4 8 20 37]

Y\_pred: [ 4 20 37 40 42]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

brain injury uti discharge, score: 0.012220405

small vessel ischemic changes, score: 0.008293665

female with subarachnoid hemorrhage, score: 0.007836626

confidence of prediction: 0.991826

Y\_true: [ 4 8 20 37]

Y\_pred: [ 4 20 37 40 42]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

disorder essential htn hyperlipidemia anemia asthma skin, score:  
0.48861918

in her cognition she had decreased pain, score: 0.02990652

as above hyperventilation could, score: 0.013537366

confidence of prediction: 0.955226

Y\_true: [ 4 8 20 37]

Y\_pred: [ 4 20 37 40 42]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

she had uti found on ua and, score: 0.021225909

brain injury uti discharge condition neurologically, score:  
0.0056418325

as above hyperventilation could, score: 0.0049250885

confidence of prediction: 0.837552

Y\_true: [ 4 8 11 17 21 26 33 34 35 36 42 48]

Y\_pred: [ 4 12 26 27 30 34 36 37 41 43 48]

top three important windows for true positive code 4 (272.4: Other

and unspecified hyperlipidemia)  
c11 htn hyperlipidemia gerd depression cad s p cabg, score:  
0.054715198  
as above hyperlipidemia he was continued on, score: 0.039161727

confidence of prediction: 0.983159  
Y\_true: [ 4 8 11 17 21 26 33 34 35 36 42 48]  
Y\_pred: [ 4 12 26 27 30 34 36 37 41 43 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
levalbuterol hcl mg ml, score: 0.0077698757  
levalbuterol hcl mg ml, score: 0.00517532  
amiodarone mg tablet sig, score: 0.0044512157

confidence of prediction: 0.815102  
Y\_true: [ 4 8 11 17 21 26 33 34 35 36 42 48]  
Y\_pred: [ 4 12 26 27 30 34 36 37 41 43 48]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
bronchs gold stage iii, score: 0.027839601  
by microscan timentin mcg ml, score: 0.014419147  
access peripherals picc discontinue, score: 0.013337245

confidence of prediction: 0.597835  
Y\_true: [ 4 8 11 17 21 26 33 34 35 36 42 48]  
Y\_pred: [ 4 12 26 27 30 34 36 37 41 43 48]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
years ckd baseline creatinine aortic stenosis, score: 0.2628089  
chronic kidney disease the patient s, score: 0.026566189  
ccy psh silicon wire, score: 0.008790847

confidence of prediction: 0.849985  
Y\_true: [ 4 8 11 17 21 26 33 34 35 36 42 48]  
Y\_pred: [ 4 12 26 27 30 34 36 37 41 43 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg and, score: 0.50983745  
s p cabg and, score: 0.22791621  
s p cabg lima lad svg diagonal svg om svg, score: 0.11072509

confidence of prediction: 0.979450  
Y\_true: [20 26 27 37 47 49]  
Y\_pred: [26 27 37 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation on coumadin s, score: 0.3854569  
atrial fibrillation initially had rvr, score: 0.17438643  
atrial fibrillation has replaced sinus, score: 0.090876736

confidence of prediction: 0.986573  
Y\_true: [20 26 27 37 47 49]  
Y\_pred: [26 27 37 49]  
top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)  
extremely weak and has, score: 0.0032062966  
heart failure this admission but, score: 0.0019551606  
chronic diastolic heart failure diuretics were discontinued, score:  
0.001471876

confidence of prediction: 0.982255  
Y\_true: [20 26 27 37 47 49]  
Y\_pred: [26 27 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection dehydration, score: 0.06792917  
for uti discharge disposition, score: 0.044374418  
loteprednol etabonate lotemax ophthalmic drops suspension, score:  
0.0436064

confidence of prediction: 0.624677  
Y\_true: [20 26 27 37 47 49]  
Y\_pred: [26 27 37 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin s, score: 0.6906347  
for sleep warfarin mg, score: 0.12182762  
chronic white matter disease, score: 0.018184273

confidence of prediction: 0.986257  
Y\_true: [20 26]  
Y\_pred: [26 29]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib incomplete rbbb [UNK], score: 0.95429826  
atrial fibrillation ischemic embolic stroke, score: 0.013256879  
afib she denies any, score: 0.008745883

confidence of prediction: 0.741554  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
source severe sepsis presented with fever tachycardia, score:  
0.22160652  
shock pyelonephritis nephrolithiasis atrial, score: 0.14628968  
shock from a urinary, score: 0.12853903

confidence of prediction: 0.560805  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
gerd and hyperlipidemia were stable and she, score: 0.17737697  
macrocrystal mg simvastatin mg tablet daily, score: 0.024514984  
hospital1 duloxetine mg capsule, score: 0.021736827

confidence of prediction: 0.608026

Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
seizure disorder depression who presents now with, score: 0.46616504  
macrodantin depression anemia seborrheic dermatitis left, score:  
0.20941971  
con meq packet lasix, score: 0.014432125

confidence of prediction: 0.568675  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
prn picc vancomycin mg recon, score: 0.1305564  
placement right picc terminates in the upper, score: 0.088496625  
placed and vanc levaquin, score: 0.047647946

confidence of prediction: 0.829179  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn the patient was, score: 0.14716484  
pale elderly female pleasant comfortable, score: 0.0416741  
target inr hypertension hypercholesterolemia glaucoma seizure,  
score: 0.03799787

confidence of prediction: 0.982709  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation on coumadin copd, score: 0.31476215  
atrial fibrillation with rapid, score: 0.06731696  
atrial fibrillation on coumadin presented, score: 0.06478261

confidence of prediction: 0.726278  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
on coumadin copd on 2l nc htn, score: 0.11314149  
diagnoses chronic obstructive pulmonary disease discharge, score:  
0.0015983452  
obstructive nephrolithiasis with associated, score: 0.00095430855

confidence of prediction: 0.945076  
Y\_true: [ 0 4 11 17 20 26 30 46 49]  
Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
shock from a urinary, score: 0.12560087  
source severe sepsis presented with fever tachycardia, score:

0.12093965

shock pyelonephritis nephrolithiasis atrial, score: 0.10790535

confidence of prediction: 0.722392

Y\_true: [ 0 4 11 17 20 26 30 46 49]

Y\_pred: [ 0 4 11 17 20 26 27 30 34 46 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

fibrillation on coumadin copd, score: 0.35729575

regularly and coumadin adjusted, score: 0.13361585

to discharge coumadin dose, score: 0.029419959

confidence of prediction: 0.646298

Y\_true: [33 40 42]

Y\_pred: [ 4 17 20 39 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

following intubation and administration of, score: 0.052566826

vent settings tv rr peep fio2 gen intubated responds to, score:

0.029956559

pt was intubated and sedated, score: 0.022212233

confidence of prediction: 0.723225

Y\_true: [33 40 42]

Y\_pred: [ 4 17 20 39 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

vent settings tv rr peep, score: 0.10234463

fio2 gen intubated responds to, score: 0.08931631

following intubation and administration of, score: 0.04034203

confidence of prediction: 0.998715

Y\_true: [ 7 20 44]

Y\_pred: [20]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

htn home hctz and lisinopril was, score: 0.20078492

hypertension on lisinopril hctz hemorrhoids s p, score: 0.17746013

hydrochlorothiazide mg mg daily, score: 0.093908064

confidence of prediction: 0.930891

Y\_true: [ 2 4 12 20 30 47]

Y\_pred: [ 2 12 30 40 42]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

tid metformin glucophage mg po bid, score: 0.09890812

refills metformin glucophage mg po bid albuterol, score: 0.051355798

on metformin and sliding scale, score: 0.00564832

confidence of prediction: 0.909837

Y\_true: [ 2 4 12 20 30 47]

Y\_pred: [ 2 12 30 40 42]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
digits bronchoscopy and mediastinoscopy, score: 0.01558932  
node dissection bronchoscopy with bronchoalveolar lavage history of  
present, score: 0.01080197  
to wean your oxygen, score: 0.0079248035

confidence of prediction: 0.604504  
Y\_true: [ 2 4 12 20 30 47]  
Y\_pred: [ 2 12 30 40 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd hepatic cirrhosis from fatty, score: 0.416051  
pft s show fev1, score: 0.002589276  
upper lung pneumothorax otherwise little change cxr, score:  
0.0016796247

confidence of prediction: 0.840612  
Y\_true: [ 6 9 20 35]  
Y\_pred: [6 9]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
to lactic acidosis and end organ, score: 0.18156411  
lactic acidosis lactate levels trended down, score: 0.057876136  
patient was initially admitted, score: 0.0539972

confidence of prediction: 0.770850  
Y\_true: [ 6 9 20 35]  
Y\_pred: [6 9]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
fibrinogen and thrombocytopenia stabilized as, score: 0.25460547  
acute anemia thrombocytopenia stable since admission in, score:  
0.14392301  
due to thrombocytopenia elevated inr, score: 0.11368918

confidence of prediction: 0.782254  
Y\_true: [ 2 24 26 27 32 36 37 49]  
Y\_pred: [ 2 23 24 26 27 37 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
mi in dm ii diet controlled multiple cva, score: 0.01493682  
lipase vitb12 folate tsh rpr, score: 0.006147056  
renal failure the patient, score: 0.0013397817

confidence of prediction: 0.744098  
Y\_true: [ 2 24 26 27 32 36 37 49]  
Y\_pred: [ 2 23 24 26 27 37 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p mi and, score: 0.1555992  
coronary artery disease stroke, score: 0.05939963  
p pcm cad s p mi pvd, score: 0.020203969

confidence of prediction: 0.997777  
Y\_true: [ 2 24 26 27 32 36 37 49]  
Y\_pred: [ 2 23 24 26 27 37 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fib on coumadin s, score: 0.040980663  
afib s p pcm, score: 0.02084327  
atrial fibrillation coronary artery disease, score: 0.004976675

confidence of prediction: 0.951634  
Y\_true: [ 2 24 26 27 32 36 37 49]  
Y\_pred: [ 2 23 24 26 27 37 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure the effusion, score: 0.25804433  
chf with ef of, score: 0.15911421  
diastolic heart failure pleural effusion, score: 0.15740032

confidence of prediction: 0.927020  
Y\_true: [ 2 24 26 27 32 36 37 49]  
Y\_pred: [ 2 23 24 26 27 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
home uti pt with grossly, score: 0.15205713  
klebsiella organisms ml pending, score: 0.08051548  
a uti and a, score: 0.0659594

confidence of prediction: 0.869617  
Y\_true: [ 2 24 26 27 32 36 37 49]  
Y\_pred: [ 2 23 24 26 27 37 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
also takes coumadin for anticoagulation coumadin was, score:  
0.016149502  
coumadin listed coumadin restarted, score: 0.010440106  
a day coumadin mg, score: 0.0043244916

confidence of prediction: 0.624544  
Y\_true: [ 1 8 9 11 17 20 26 34 47]  
Y\_pred: [20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
adductor and hamstring weakness, score: 0.16628252  
prn htn metoprolol tartrate tid, score: 0.07628725  
afib dm2 peripheral neuropathy lumbosacral, score: 0.074863374

confidence of prediction: 0.841496  
Y\_true: [ 1 8 9 11 17 20 26 34 47]  
Y\_pred: [20 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
lisinopril gerd omeprazole asthma albuterol ipratropium, score:  
0.048382033

cancer thrombocytopenia treated with rituxin, score: 0.013248137  
oral disintegrating tab mg po, score: 0.012738154

confidence of prediction: 0.818158

Y\_true: [ 1 2 20 35]

Y\_pred: [ 1 20 29 35]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

qpm levothyroxine mg daily hospital1, score: 0.27747682

ii hypothyroidism seizures following chemo, score: 0.2151141

and levothyroxine for panhypopituitarism was, score: 0.020585356

confidence of prediction: 0.951934

Y\_true: [ 1 2 20 35]

Y\_pred: [ 1 20 29 35]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

psoriasis anxiety htn social history lives, score: 0.18576461

liver disease pt presented, score: 0.105055265

improved following pressors initiation and steroid, score:

0.030403296

confidence of prediction: 0.688170

Y\_true: [ 1 2 20 35]

Y\_pred: [ 1 20 29 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

given arf and hypotension her, score: 0.14004739

acute renal failure at the, score: 0.08806354

pressors initiation and steroid, score: 0.037977826

confidence of prediction: 0.643599

Y\_true: [ 2 10]

Y\_pred: [2]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

history dm2 diet controlled hba1c last, score: 0.10668949

diet controlled dm tobacco and etoh, score: 0.06725077

keppra dm management with pcp, score: 0.04533381

confidence of prediction: 0.842209

Y\_true: [ 1 3 15 22 24 38]

Y\_pred: [ 1 3 23 24 38]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

grip hypothyroidism continued 50mcg levothyroxine daily code full,  
score: 0.17691332

history hypothyroidism hypercholesterolemia tias, score: 0.08277301

admission levothyroxine mcg plavix, score: 0.051854108

confidence of prediction: 0.744101

Y\_true: [ 1 3 15 22 24 38]

Y\_pred: [ 1 3 23 24 38]



top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
history hypothyroidism hypercholesterolemia tias x last one, score: 0.022728637  
secondary hypothyroidism hypercholesterolemia tias discharge condition stable, score: 0.014466971  
cath coronary angiography of, score: 0.004195561

confidence of prediction: 0.999181  
Y\_true: [ 1 3 15 22 24 38]  
Y\_pred: [ 1 3 23 24 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
vessel cad rca wit, score: 0.37352198  
stemi s p pci coronaries, score: 0.027466478  
cea nstemi stemi secondary hypothyroidism, score: 0.02537332

confidence of prediction: 0.778252  
Y\_true: [ 1 3 15 22 24 38]  
Y\_pred: [ 1 3 23 24 38]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
cardiac catheterization left carotid, score: 0.35899416  
cath coronary angiography of this, score: 0.10190317  
vessel cad rca wit, score: 0.048885144

confidence of prediction: 0.873008  
Y\_true: [ 4 7 21 35 36]  
Y\_pred: [ 4 9 28 40 42 49]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hyperlipidemia remote h o, score: 0.1144621  
revascularization hypertension hyperlipidemia presenting with one, score: 0.058387168  
revascularization hypertension hyperlipidemia presenting with upper, score: 0.058387168

confidence of prediction: 0.526054  
Y\_true: [11]  
Y\_pred: [11]  
top three important windows for true positive code 11 (311: Depressive disorder, not elsewhere classified)  
the hospital depression pt was continued on, score: 0.029720118  
admission paroxetine mg po, score: 0.025267158  
diabetes mellitus depression social history lives in, score: 0.014124038

confidence of prediction: 0.947649  
Y\_true: [ 1 4 8 16 26 27]  
Y\_pred: [ 1 4 11 20 26 30 49]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
simvastatin hypothyroid history of hypothyroid on levothyroxine tsh normal, score: 0.064240746

daily levothyroxine [UNK] qsunday levothyroxine 88mcg last name,  
score: 0.019580347  
on levothyroxine depression history of, score: 0.016206466

confidence of prediction: 0.978642  
Y\_true: [ 1 4 8 16 26 27]  
Y\_pred: [ 1 4 11 20 26 30 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors diabetes dyslipidemia hypertension cardiac history  
paroxysmal, score: 0.049214534  
simvastatin mg tablet sig, score: 0.004129591  
qhs warfarin lantus 34u, score: 0.0023556093

confidence of prediction: 0.936373  
Y\_true: [ 1 4 8 16 26 27]  
Y\_pred: [ 1 4 11 20 26 30 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation atrial [UNK] atrial, score: 0.10036839  
atrial fibrillation atrial flutter status, score: 0.07845601  
arrhythmias have been managed, score: 0.0780609

confidence of prediction: 0.568041  
Y\_true: [ 3 20 29 34]  
Y\_pred: [ 3 20 29]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
stitle gerd hypercholesterolemia hypertension tinea versicolor  
tinea, score: 0.09298115  
above results htn sbps 140s monitored, score: 0.012296369  
patient was discontinued from, score: 0.0030213213

confidence of prediction: 0.724085  
Y\_true: [ 3 20 29 34]  
Y\_pred: [ 3 20 29]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
above results htn sbps, score: 0.33201885  
fumes cigarette smoke dust, score: 0.2365926  
cigarette smoke [UNK] and, score: 0.06295777

confidence of prediction: 0.521886  
Y\_true: [ 3 20 29 34]  
Y\_pred: [ 3 20 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia with ceftriaxone and, score: 0.2742624  
asthma exacerbation pneumonia discharge condition, score: 0.02987207  
[UNK] and car exhaust, score: 0.009096309

confidence of prediction: 0.801638  
Y\_true: [ 5 6 9 16 17 20 33 37 40 41 44]  
Y\_pred: [12 17 20 29 33 37 40 41 43 45]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
required aggressive repletion she had anemia, score: 0.090779856  
nutritional deficiencies as well, score: 0.03031974  
derangements requiring aggressive repletion grams of, score: 0.021069169

confidence of prediction: 0.885803  
Y\_true: [ 5 6 9 16 17 20 33 37 40 41 44]  
Y\_pred: [12 17 20 29 33 37 40 41 43 45]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
seizure disorder hypertension anxiety depression lmp, score: 0.10708681  
had alcoholic steatohepatitis vs nash with, score: 0.04234769  
bacteri many yeast none, score: 0.040308185

confidence of prediction: 0.650082  
Y\_true: [ 5 6 9 16 17 20 33 37 40 41 44]  
Y\_pred: [12 17 20 29 33 37 40 41 43 45]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
acute respiratory failure multifocal bacterial, score: 0.08304079  
feeds and ppn while, score: 0.08010437  
tube has withdrawn with, score: 0.048956517

confidence of prediction: 0.910186  
Y\_true: [ 5 6 9 16 17 20 33 37 40 41 44]  
Y\_pred: [12 17 20 29 33 37 40 41 43 45]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
leuks mod urine rbc, score: 0.20562376  
urinary tract infection it is, score: 0.11673164  
culture escherichia coli escherichia coli ampicillin, score: 0.106403306

confidence of prediction: 0.630850  
Y\_true: [ 5 6 9 16 17 20 33 37 40 41 44]  
Y\_pred: [12 17 20 29 33 37 40 41 43 45]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
that required intubation pneumonia and, score: 0.077450335  
while intubated and her, score: 0.070405595  
requiring intubation she developed a, score: 0.060149785

confidence of prediction: 0.842907  
Y\_true: [ 5 6 9 16 17 20 33 37 40 41 44]  
Y\_pred: [12 17 20 29 33 37 40 41 43 45]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
tube for feeds and when, score: 0.06603864  
pyloric feeding tube has withdrawn, score: 0.06390755  
given tube feeds and ppn, score: 0.05643652

confidence of prediction: 0.887629  
Y\_true: [ 0 6 9 10 12 17 29 33 35 37 40 41 43 46]  
Y\_pred: [17 29 40 41 43]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
l11 m4 e1 b0 [UNK] [UNK], score: 0.036392648  
hd3 required central line placement and pressor, score: 0.034412406  
he was again hypoxic, score: 0.026257427

confidence of prediction: 0.677457  
Y\_true: [ 0 6 9 10 12 17 29 33 35 37 40 41 43 46]  
Y\_pred: [17 29 40 41 43]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
of pneumonia below is, score: 0.2563643  
hospital acquired pneumonia he was influenza, score: 0.05926085  
suv max likely inflammatory, score: 0.019100344

confidence of prediction: 0.653235  
Y\_true: [ 0 6 9 10 12 17 29 33 35 37 40 41 43 46]  
Y\_pred: [17 29 40 41 43]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
patient was intubated and started on, score: 0.28989378  
namepattern1 on bal poly, score: 0.028215118  
stay paracentesis x2 in, score: 0.016389161

confidence of prediction: 0.899137  
Y\_true: [ 0 6 9 10 12 17 29 33 35 37 40 41 43 46]  
Y\_pred: [17 29 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
to tube feeds and iv d5w, score: 0.06321366  
antibiotics tube feeds were stopped continue, score: 0.0393298  
patchy ground glass opacities, score: 0.013568491

confidence of prediction: 0.520025  
Y\_true: [ 0 6 9 10 12 17 29 33 35 37 40 41 43 46]  
Y\_pred: [17 29 40 41 43]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
ardsnet ventilatory settings his antibiotics, score: 0.034328647  
pending sm ab pending, score: 0.0334996  
neg af culture pending, score: 0.032908704

confidence of prediction: 0.998126  
Y\_true: [14 17 24 26 27 38 39]  
Y\_pred: [ 6 24 26 27 29 31]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
mid lad occlusion that was revascularized, score: 0.09576111  
descending artery history of, score: 0.03194703  
decompensated heart failure due to, score: 0.00978769

confidence of prediction: 0.948772  
Y\_true: [14 17 24 26 27 38 39]  
Y\_pred: [ 6 24 26 27 29 31]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with a ventricular, score: 0.1984589  
afib with hr to, score: 0.1315129  
afib with rvr now, score: 0.10873499

confidence of prediction: 0.962760  
Y\_true: [14 17 24 26 27 38 39]  
Y\_pred: [ 6 24 26 27 29 31]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure with evidence, score: 0.29312095  
diastolic heart failure echocardiogram, score: 0.29216006  
chf unknown ef on lasix, score: 0.07951498

confidence of prediction: 0.621559  
Y\_true: [16 33 40 42]  
Y\_pred: [28 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
and was intubated shortly on arrival to, score: 0.15566352  
pca when tolerating oral intake, score: 0.043115344  
her hospitalization endo the, score: 0.012194724

confidence of prediction: 0.592215  
Y\_true: [16 33 40 42]  
Y\_pred: [28 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and was intubated shortly on arrival to, score: 0.048900593  
pca when tolerating oral intake, score: 0.046742644  
appropriately ttp at incision, score: 0.011700537

confidence of prediction: 0.893910  
Y\_true: [ 7 11 21 24 28 31 35 36]  
Y\_pred: [ 7 23 24 28 31]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
the black stools you, score: 0.27352524  
of five endoclips with epi, score: 0.20839097  
continued gi bleed the, score: 0.030842807

confidence of prediction: 0.554702  
Y\_true: [ 7 11 21 24 28 31 35 36]  
Y\_pred: [ 7 23 24 28 31]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lower extremity arteriogram egd x, score: 0.16783817  
coronary artery disease discharge, score: 0.035731554

lad and circumflex coronaries on asa and, score: 0.030495696

confidence of prediction: 0.781137

Y\_true: [ 7 11 21 24 28 31 35 36]

Y\_pred: [ 7 23 24 28 31]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

performed an endoscopy procedure, score: 0.09226059

x with endoclipping operations, score: 0.062271487

egd was performed active bleeding, score: 0.058191903

confidence of prediction: 0.707300

Y\_true: [ 7 11 21 24 28 31 35 36]

Y\_pred: [ 7 23 24 28 31]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

for aspiration pneumonia and work up, score: 0.29412445

bursitis depression frontotemporal brain, score: 0.022718403

aspiration mycobacterial infection and the, score: 0.021825755

confidence of prediction: 0.965583

Y\_true: [26 29 32]

Y\_pred: [26]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation with rapid ventricular, score: 0.15509406

afib with rvr prior, score: 0.05794961

atrial fib w rvr and, score: 0.03521404

confidence of prediction: 0.855776

Y\_true: [ 3 8 27 29 34 47 48]

Y\_pred: [29 34 48]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

community acquired pna urine legionella antigen, score: 0.109779745

of pna and positive, score: 0.074271835

pneumonia right apical nodule, score: 0.04030392

confidence of prediction: 0.830202

Y\_true: [ 3 8 27 29 34 47 48]

Y\_pred: [29 34 48]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

were continued gerd she was continued on, score: 0.014192636

smokes the last years rare, score: 0.002058583

developed pulomony edema at, score: 0.001849608

confidence of prediction: 0.875117

Y\_true: [ 3 8 27 29 34 47 48]

Y\_pred: [29 34 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg in, score: 0.18329272

s p cabg in vessel multiple, score: 0.18329272

s p cabg and, score: 0.18329272

confidence of prediction: 0.580007

Y\_true: [ 4 7 34 36 37 48]

Y\_pred: [ 2 4 7 34 37 48]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

the floor hyperlipidemia continued statin gerd initially, score: 0.049435977

severe htn hyperlipidemia ldl chol tg, score: 0.028722005

cabg s p cath, score: 0.020976497

confidence of prediction: 0.772367

Y\_true: [ 4 7 34 36 37 48]

Y\_pred: [ 2 4 7 34 37 48]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

anemia diverticulosis klebsiella urinary, score: 0.4877717

anemia and a klebsiella, score: 0.1093802

ischemia urinary tract infection, score: 0.040502995

confidence of prediction: 0.850954

Y\_true: [ 4 7 34 36 37 48]

Y\_pred: [ 2 4 7 34 37 48]

top three important windows for true positive code 34 (530.81: Esophageal reflux)

continued statin gerd initially placed on pantoprazole, score: 0.07997416

hospital1 methazolamide mg tablet, score: 0.0073009324

chol tg ckd baseline, score: 0.006585839

confidence of prediction: 0.928238

Y\_true: [ 4 7 34 36 37 48]

Y\_pred: [ 2 4 7 34 37 48]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)

klebsiella uti hematochezia patient, score: 0.111127354

ischemia urinary tract infection admission urine, score: 0.035792314

a urinary tract infection and were, score: 0.032478098

confidence of prediction: 0.870199

Y\_true: [ 4 7 34 36 37 48]

Y\_pred: [ 2 4 7 34 37 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg htn, score: 0.3094136

s p cabg dm, score: 0.3094136

p remote cabg aspirin, score: 0.033085518

confidence of prediction: 0.816345

Y\_true: [ 4 37 41 46]

Y\_pred: [ 4 17 20 37 40]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

100mg hospital1 hld continued on zocor dementia, score: 0.09774156  
htn hld dm2 tardive dyskinesia, score: 0.061531074  
type ii hyperlipidemia tardive dyskinesias secondary, score:  
0.05660406

confidence of prediction: 0.963225  
Y\_true: [ 4 37 41 46]  
Y\_pred: [ 4 17 20 37 40]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks lg 20pm urine, score: 0.38547087  
uti and subtherapeutic depakote, score: 0.10994964  
her uti was covered with, score: 0.059973966

confidence of prediction: 0.800966  
Y\_true: [ 4 11 14 21 23 24 36 38 47]  
Y\_pred: [ 4 11 15 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors dyslipidemia hypertension cardiac history cad, score:  
0.10279011  
infarction hypertension dyslipidemia left lower lateral, score:  
0.069670625  
avf rbbb hyperlipidemia the patient was, score: 0.028722612

confidence of prediction: 0.677972  
Y\_true: [ 4 11 14 21 23 24 36 38 47]  
Y\_pred: [ 4 11 15 24 38]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
medical history depression glaucoma benign prostatic hypertrophy,  
score: 0.11549505  
80mg daily depression home trazodone and citalopram were, score:  
0.015424538  
oral hospital1 omeprazole mg, score: 0.0067398218

confidence of prediction: 0.987736  
Y\_true: [ 4 11 14 21 23 24 36 38 47]  
Y\_pred: [ 4 11 15 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease with, score: 0.09859069  
bare metal stent of, score: 0.06476591  
metal [UNK] placement in, score: 0.031918973

confidence of prediction: 0.860588  
Y\_true: [ 4 11 14 21 23 24 36 38 47]  
Y\_pred: [ 4 11 15 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with bare, score: 0.49746978  
cath lab the patient was, score: 0.028281506  
cath lab his cr, score: 0.026638063



confidence of prediction: 0.632156  
Y\_true: [ 3 7 20 26 27 28 30 35]  
Y\_pred: [ 3 7 11 26 27 28 35]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
education hypertension hypercholesterolemia h o stroke, score: 0.06827069  
40mg q8h x3 she was also, score: 0.0015771519  
off were unsuccessful you, score: 0.0015549225

confidence of prediction: 0.684743  
Y\_true: [ 3 7 20 26 27 28 30 35]  
Y\_pred: [ 3 7 11 26 27 28 35]  
top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
egd which didnt show any, score: 0.07366233  
was cauterized apc history of present illness, score: 0.054793164  
of prbc were ordered, score: 0.029252881

confidence of prediction: 0.994518  
Y\_true: [ 3 7 20 26 27 28 30 35]  
Y\_pred: [ 3 7 11 26 27 28 35]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib off coumadin dchf, score: 0.32927835  
afib in and is, score: 0.04133805  
atrial fib with a slow, score: 0.02128761

confidence of prediction: 0.989193  
Y\_true: [ 3 7 20 26 27 28 30 35]  
Y\_pred: [ 3 7 11 26 27 28 35]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diastolic heart failure tte in, score: 0.07545064  
dchf cva dementia multifactorial, score: 0.02600459  
diastolic chf wide open tr, score: 0.02317683

confidence of prediction: 0.734836  
Y\_true: [ 3 7 20 26 27 28 30 35]  
Y\_pred: [ 3 7 11 26 27 28 35]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
otherwise normal egd to, score: 0.25939804  
alcohol povidone dropperette sig, score: 0.085531145  
otherwise normal egd to, score: 0.044243418

confidence of prediction: 0.729314  
Y\_true: [ 3 7 20 26 27 28 30 35]  
Y\_pred: [ 3 7 11 26 27 28 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
and pre renal azotemia transiently in, score: 0.67051333  
cauterized apc history of present illness, score: 0.0179472  
occasional rvr depression continued home, score: 0.013033148

confidence of prediction: 0.962251  
Y\_true: [ 8 33]  
Y\_pred: [ 5 33 39]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
developed hypoxic respiratory failure and was, score: 0.033459347  
profound hypoxia hypoxemia patient was, score: 0.03303233  
of future intubation with his outpatient, score: 0.025535889

confidence of prediction: 0.637777  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
pvd hypothyroid anxiety cad, score: 0.5138316  
x hypothyroidism anxiety anemia hypercholestroemia, score: 0.23309657  
qd synthroid mcg po qd zolof, score: 0.024256784

confidence of prediction: 0.559812  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
vicu telemetry pod1 overnight, score: 0.06442345  
condition comfort measures only, score: 0.03947046  
placement [UNK] tube placement tunnelled, score: 0.038986154

confidence of prediction: 0.704840  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
trial off hemodialysis repeat bedside swallowing, score: 0.081123255  
temporary hd catheter placed placement, score: 0.03054901  
failure requiring hemodialysis still in failure post, score: 0.025788594

confidence of prediction: 0.769564  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
uni iliac stent graft, score: 0.20503546  
in hd controlled hr, score: 0.041213684  
medical history htn cad s p cabg, score: 0.040958997

confidence of prediction: 0.974462  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib psh cabg x last, score: 0.8345952  
irregular plaque thrombus and, score: 0.0125238355  
a fib dialysed at bedside, score: 0.0042255064

confidence of prediction: 0.522839  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
aaa uti treated dysphagia post, score: 0.20248249  
extubated [UNK] dobhoff placed, score: 0.064772144  
interstitial thickening and ground, score: 0.035803553

confidence of prediction: 0.867713  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
started tube feeds added cipro, score: 0.094722055  
tube feeds advanced to, score: 0.087091565  
started tube feeds and po, score: 0.034923848

confidence of prediction: 0.852148  
Y\_true: [ 1 3 7 17 19 20 26 31 37 40 41 43 48]  
Y\_pred: [ 1 17 19 20 26 28 37 41 44 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg x hypothyroidism, score: 0.44828656  
s p cabg x last in, score: 0.44828656  
sternotomy and cabg there, score: 0.028510306

confidence of prediction: 0.861231  
Y\_true: [ 1 5 11 17 20 26 34 48]  
Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
kidney hypothyroidism mild dementia social, score: 0.39220375  
hyponatremia hypothyroidism depression surgical wound, score:  
0.23991923  
remeron levothyroxine was started in, score: 0.09094145

confidence of prediction: 0.978936  
Y\_true: [ 1 5 11 17 20 26 34 48]  
Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
to have hyponatremia and hypokalemia hyponatremia na on admission  
from, score: 0.32348838  
diagnosis primary hyponatremia hypothyroidism, score: 0.19474176  
antibiotics regarding hyponatremia follow up patient s, score:  
0.023651037

confidence of prediction: 0.727909  
Y\_true: [ 1 5 11 17 20 26 34 48]

Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
consult and picc placement for iv antibiotics, score: 0.06977391  
a picc line was placed in, score: 0.027219065  
gastroesophageal reflux s p, score: 0.024315264

confidence of prediction: 0.812030  
Y\_true: [ 1 5 11 17 20 26 34 48]  
Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
consult was called to, score: 0.15111054  
to diag hypertension hyperlipidemia h o, score: 0.116828375  
un epic supra porcine aortic, score: 0.05779048

confidence of prediction: 0.971189  
Y\_true: [ 1 5 11 17 20 26 34 48]  
Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
fib amiodarone appears to have, score: 0.23675485  
amiodarone after four weeks, score: 0.018922511  
refusing to eat for, score: 0.006424341

confidence of prediction: 0.755209  
Y\_true: [ 1 5 11 17 20 26 34 48]  
Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
therapy gastroesophageal reflux s p splenectomy, score: 0.05690135  
line was placed in, score: 0.008128196  
albumin uric acid 30pm, score: 0.0059878626

confidence of prediction: 0.727569  
Y\_true: [ 1 5 11 17 20 26 34 48]  
Y\_pred: [ 1 4 5 17 20 26 34 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg lima to lad, score: 0.32329226  
admission for cabg avr, score: 0.11369565  
avr and cabg on, score: 0.056349754

confidence of prediction: 0.862727  
Y\_true: [ 5 8 17 37]  
Y\_pred: [ 6 35 37]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
leuk sm 20am urine rbc, score: 0.32432103  
presumed uti with [UNK] prior, score: 0.16477424  
leuk mod 56pm urine, score: 0.054976016

confidence of prediction: 0.559377  
Y\_true: [ 6 20 27 33 37 40 42]

Y\_pred: [ 7 20 27 33 37 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension continued home blood, score: 0.09653862  
of dmii htn asthma osa dchf peripheral, score: 0.0863241  
with dmii htn asthma osa dchf, score: 0.082655385

confidence of prediction: 0.979384  
Y\_true: [ 6 20 27 33 37 40 42]  
Y\_pred: [ 7 20 27 33 37 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure she was, score: 0.6552384  
diastolic congestive heart failure diabetes mellitus, score:  
0.07155758  
diuresed with lasix she, score: 0.007974231

confidence of prediction: 0.955486  
Y\_true: [ 6 20 27 33 37 40 42]  
Y\_pred: [ 7 20 27 33 37 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure acute on, score: 0.17507151  
hypercarbic respiratory failure major surgical, score: 0.15595491  
and respiratory failure hypercarbic respiratory failure with, score:  
0.1185757

confidence of prediction: 0.856930  
Y\_true: [ 6 20 27 33 37 40 42]  
Y\_pred: [ 7 20 27 33 37 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection discharge condition, score: 0.21853344  
a urinary tract infection these are, score: 0.0819501  
weights uti she had a positive, score: 0.043697827

confidence of prediction: 0.778304  
Y\_true: [ 6 20 27 33 37 40 42]  
Y\_pred: [ 7 20 27 33 37 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
intubation and ventilation history of, score: 0.43701172  
hospitalization neuro intubated ventilated and, score: 0.15950726  
to command moving limbs normal, score: 0.062244684

confidence of prediction: 0.691634  
Y\_true: [ 6 20 27 33 37 40 42]  
Y\_pred: [ 7 20 27 33 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
intubation and ventilation history of, score: 0.5042069  
to command moving limbs normal, score: 0.11280996  
requiring intubation she was, score: 0.050297234

confidence of prediction: 0.875366  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
of hypothyroidism hypertension dlbcl in, score: 0.22964571  
hypertension hypothyroidism hyperlipidemia osteoporosis, score:  
0.22124016  
lad hypothyroidism hypertension and, score: 0.09230458

confidence of prediction: 0.788628  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypertension hypothyroidism hyperlipidemia osteoporosis based on  
compression, score: 0.13744019  
hypertension dlbcl in remission and, score: 0.009859669  
lad hypothyroidism hypertension and recent discharges, score:  
0.008835447

confidence of prediction: 0.912680  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
wwii was taking to, score: 0.0811003  
lad in hypertension hypothyroidism hyperlipidemia osteoporosis  
based, score: 0.06536765  
hypertension she has a, score: 0.06313996

confidence of prediction: 0.687195  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
hospital acquired pneumonia secondary hypertension, score: 0.1687339  
vanc finished vanc course, score: 0.035361636  
she was empirically treated, score: 0.02958358

confidence of prediction: 0.846705  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
primary hypoxic respiratory failure hospital acquired pneumonia  
secondary hypertension, score: 0.08133552  
intubated for two bronchoscopies, score: 0.020494351  
hypoxia pseudomonal pneumonia on presentation, score: 0.015133546

confidence of prediction: 0.858845  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]

top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
being intubated for two bronchoscopies, score: 0.14008617  
and intubation history of, score: 0.018103248  
name for intubation branch times, score: 0.0030924326

confidence of prediction: 0.581645  
Y\_true: [ 1 4 8 20 29 32 33 40 42 44]  
Y\_pred: [ 1 4 20 29 33 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
for intubation branch times, score: 0.55558765  
being intubated for two bronchoscopies, score: 0.14175223  
and intubation history of, score: 0.049159076

confidence of prediction: 0.939245  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors dyslipidemia hypertension cardiac history 3v, score:  
0.065666094  
hypertension hyperlipidemia who presents with chest, score:  
0.0330564  
hypertension hyperlipidemia peripheral vascular disease, score:  
0.032333925

confidence of prediction: 0.645170  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
non st elevation myocardial infarction hypertensive urgency, score:  
0.016200347  
to have nstemi then with st elevations, score: 0.014116071  
indx ctropnt 45pm ck, score: 0.008520504

confidence of prediction: 0.964750  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.057742342  
coronary artery disease patent, score: 0.057742342  
coronary artery disease ef, score: 0.057742342

confidence of prediction: 0.903077  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic congestive heart failure secondary diagnosis hypertension,  
score: 0.32254425

diastolic dysfunction moderate systemic, score: 0.01935677  
history 3v cabg in, score: 0.016855218

confidence of prediction: 0.514798  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
stenosis diverticulitis gerd claustrophobia etoh patient drinks,  
score: 0.03558651  
renal artery stenosis in accessory, score: 0.03463539  
bruit on l side, score: 0.03318472

confidence of prediction: 0.886604  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
renal insufficiency creatinine peaked, score: 0.06206137  
secondary to arf patient was, score: 0.05174232  
acute renal failure hyponatremia left, score: 0.048651747

confidence of prediction: 0.748495  
Y\_true: [ 4 14 22 24 27 34 35 38]  
Y\_pred: [ 4 5 20 22 24 27 34 35 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
c catheterization history of present, score: 0.17140892  
selective coronary angiography of this, score: 0.14062396  
comments selective coronary angiography of this, score: 0.09220127

confidence of prediction: 0.888817  
Y\_true: [ 1 4 10 20 26 49]  
Y\_pred: [ 4 20 26 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors hypertension hyperlipidemia cardiac history cabg none,  
score: 0.3584303  
copd hypertension hyperlipidemia pvd carotid, score: 0.08190149  
copd hypertension hyperlipidemia pvd s p, score: 0.06637452

confidence of prediction: 0.993416  
Y\_true: [ 1 4 10 20 26 49]  
Y\_pred: [ 4 20 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
for copd hypertension hyperlipidemia pvd carotid artery, score:  
0.06958616  
with pfts htn continued on home regimen, score: 0.055252604  
of copd hypertension hyperlipidemia pvd s p, score: 0.053274788

confidence of prediction: 0.961296  
Y\_true: [ 1 4 10 20 26 49]  
Y\_pred: [ 4 20 26 34]



top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation current smoking pack, score: 0.16809225  
a fib coumadin was held pre, score: 0.08452495  
irregularly irregular rate pmi located, score: 0.064945035

confidence of prediction: 0.901524  
Y\_true: [ 3 15 24 35 38]  
Y\_pred: [ 3 24 38]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
cardiac history former cath and stent lcx cabg, score: 0.030310687  
provide support hypercholesterolemia total cholesterol was  
previously, score: 0.013208172  
integrillin ivfs 2l asa, score: 0.007326944

confidence of prediction: 0.967418  
Y\_true: [ 3 15 24 35 38]  
Y\_pred: [ 3 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease status, score: 0.09474402  
bare metal stent in, score: 0.061185833  
coronary artery disease st, score: 0.04654573

confidence of prediction: 0.806763  
Y\_true: [ 3 15 24 35 38]  
Y\_pred: [ 3 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
comments coronary angiography in, score: 0.18242678  
left heart catheterization drug eluting, score: 0.1391932  
vessel stenosis the lcx, score: 0.086475104

confidence of prediction: 0.596125  
Y\_true: [17 27 28 48]  
Y\_pred: [ 7 17 27 28 30 48]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
a femoral cordis was placed the, score: 0.05691094  
and revealed nonbleeding diverticulosis of the, score: 0.04509336  
volume repletion his respiratory, score: 0.022490218

confidence of prediction: 0.946932  
Y\_true: [17 27 28 48]  
Y\_pred: [ 7 17 27 28 30 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cabg copd chf carcinoid tumor s, score: 0.09928073  
congestive heart failure decubitus ulcer discharge, score:  
0.04939445  
yourself every morning name8, score: 0.006928774

confidence of prediction: 0.656024

Y\_true: [17 27 28 48]  
Y\_pred: [ 7 17 27 28 30 48]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
the esophagogastroduodenoscopy revealed angioectasia in your, score: 0.077317685  
were performed and revealed, score: 0.05826087  
otherwise normal egd to, score: 0.051703386

confidence of prediction: 0.805868  
Y\_true: [17 27 28 48]  
Y\_pred: [ 7 17 27 28 30 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg the patient s, score: 0.4618714  
from vein harvest neuro, score: 0.031808943  
from vein harvest right, score: 0.031808943

confidence of prediction: 0.641709  
Y\_true: [10 42]  
Y\_pred: [42]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
to command intubated restless responding to, score: 0.25559425  
attempted intubation in the, score: 0.094504334  
and intubated you were, score: 0.07155583

confidence of prediction: 0.932537  
Y\_true: [20 24 27 29 35]  
Y\_pred: [ 4 23 24 27 29 30 34 35]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p stents acute, score: 0.7571954  
s p mi s, score: 0.031033227  
w cad lcx [UNK], score: 0.027890855

confidence of prediction: 0.990292  
Y\_true: [20 24 27 29 35]  
Y\_pred: [ 4 23 24 27 29 30 34 35]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
congestive heart failure leukocytosis thrombocytosis, score: 0.039725017  
chf and reported copd who, score: 0.016854785  
cad and reported copd, score: 0.008826695

confidence of prediction: 0.749464  
Y\_true: [20 24 27 29 35]  
Y\_pred: [ 4 23 24 27 29 30 34 35]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
community acquired pneumonia secondary degenerative joint, score: 0.07128035

and pneumonia you were, score: 0.028984373  
to be pna and received, score: 0.019067233

confidence of prediction: 0.500673  
Y\_true: [20 24 27 29 35]  
Y\_pred: [ 4 23 24 27 29 30 34 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
acute renal failure discharge condition, score: 0.08514715  
arf on admission she, score: 0.056693792  
focus on symptom management, score: 0.045132823

confidence of prediction: 0.911479  
Y\_true: [ 2 8 20 23 24 30 37 44]  
Y\_pred: [ 2 20 23 24 37 40 42]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
glucophage xr mg po, score: 0.121450976  
lasix dm2 during his hospitalization, score: 0.081785165  
htn dm2 copd home o2, score: 0.08067221

confidence of prediction: 0.973177  
Y\_true: [ 2 8 20 23 24 30 37 44]  
Y\_pred: [ 2 20 23 24 37 40 42]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
mi stent hypertension dm2 copd home o2, score: 0.14046177  
mi stent htn dm2 copd home o2, score: 0.1003695  
dirbili indbili 28pm blood, score: 0.011770157

confidence of prediction: 0.712655  
Y\_true: [ 2 8 20 23 24 30 37 44]  
Y\_pred: [ 2 20 23 24 37 40 42]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi and stent placement while, score: 0.31093618  
s p mi stent htn dm2 copd, score: 0.31093618  
medical history cad s p mi stent hypertension dm2 copd, score: 0.0017656485

confidence of prediction: 0.874693  
Y\_true: [ 2 8 20 23 24 30 37 44]  
Y\_pred: [ 2 20 23 24 37 40 42]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p mi and stent placement while, score: 0.16425811  
s p mi stent htn, score: 0.16425811  
his advair was continued, score: 0.022157153

confidence of prediction: 0.509486  
Y\_true: [ 2 8 20 23 24 30 37 44]  
Y\_pred: [ 2 20 23 24 37 40 42]  
top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)  
and enterococcus uti positive for enterococcus secondary, score:  
0.21209903  
placed successfully sphincterotomy stent placement otherwise, score:  
0.06098654  
enterococcus in urine he, score: 0.01655904

confidence of prediction: 0.966287  
Y\_true: [ 0 11 26 33 37 40 42 49]  
Y\_pred: [17 26 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
irregularly irregular no murmurs gallops, score: 0.34038478  
atrial fibrillation shoulder pain discharge, score: 0.060704835  
atrial fibrillation rate on coumadin, score: 0.018455913

confidence of prediction: 0.622479  
Y\_true: [ 0 11 26 33 37 40 42 49]  
Y\_pred: [17 26 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection bacterial pan, score: 0.30727017  
culture yeast organisms ml, score: 0.054049592  
by uti and acute shoulder, score: 0.050293952

confidence of prediction: 0.535310  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
units qam nph units qpm insulin, score: 0.10110778  
gerd dm requires insulin sacral, score: 0.069661535  
gerd diabetes mellitus chronic low, score: 0.050446555

confidence of prediction: 0.507196  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
retardation hypertension hyperlipidemia bipolar disorder anxiety,  
score: 0.07639802  
depression copd gerd dm requires, score: 0.0198962  
depression copd gerd diabetes mellitus, score: 0.0198962

confidence of prediction: 0.873028  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ss lidoderm patch ferrous, score: 0.060904063  
[UNK] hypertension dm2 who presented with, score: 0.052742925  
hyperlipidemia bipolar disorder anxiety, score: 0.042046413

confidence of prediction: 0.653091  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
status post myocardial infarction mild, score: 0.014909725  
medical history cad prior mi c diff gib resp, score: 0.0045752684  
bipolar disorder anxiety depression, score: 0.0032511945

confidence of prediction: 0.768497  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
coronary artery disease status post myocardial infarction, score: 0.14599252  
cad prior mi c diff gib resp, score: 0.08386263  
bipolar disorder anxiety depression, score: 0.03927185

confidence of prediction: 0.671586  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
on transfer copd while the patient was, score: 0.3266669  
anxiety depression copd gerd, score: 0.2862042  
regurgitation brief hospital course, score: 0.0018615013

confidence of prediction: 0.607097  
Y\_true: [ 2 4 20 23 24 30 34 49]  
Y\_pred: [ 2 4 20 21 23 24 30 34 36]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
lidoderm patch ferrous sulfate, score: 0.00885422  
depression copd gerd dm requires insulin sacral, score: 0.006332036  
depression copd gerd diabetes mellitus chronic low, score: 0.006332036

confidence of prediction: 0.848676  
Y\_true: [ 6 7 17 20 28]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
and had endoscopy on, score: 0.22934538  
anemia secondary diagnosis hepatitis, score: 0.16041233  
was hypothermic 34c upon, score: 0.056450684

confidence of prediction: 0.802226  
Y\_true: [ 6 7 17 20 28]  
Y\_pred: [ 7 20 28]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
heart disease hypertension or, score: 0.43272814  
medical history hypertension hepatitis c aortic, score: 0.067652985

history of hypertension and, score: 0.059526745

confidence of prediction: 0.718766

Y\_true: [ 6 7 17 20 28]

Y\_pred: [ 7 20 28]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

history of present illness, score: 0.45619676

and had endoscopy on which revealed varices, score: 0.17965712

tract the gastroenterology doctors, score: 0.08318741

confidence of prediction: 0.639732

Y\_true: [ 2 8 17 20 26 27 37 40 43 44 48]

Y\_pred: [20 24 26 31 41 44]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

xanax prn amitriptyline amlodipine, score: 0.12657738

cva x3 iddm2 nephrolithiasis psh cabgx3 yrs, score: 0.078651205

coreg pletal fluoxetine folic, score: 0.07516426

confidence of prediction: 0.929301

Y\_true: [ 2 8 17 20 26 27 37 40 43 44 48]

Y\_pred: [20 24 26 31 41 44]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib again with rvr and, score: 0.5102257

afib w rvr overnight, score: 0.27489617

afib w rvr with, score: 0.07166105

confidence of prediction: 0.682507

Y\_true: [ 2 8 17 20 26 27 37 40 43 44 48]

Y\_pred: [20 24 26 31 41 44]

top three important windows for true positive code 44 (99.04: Transfusion of packed cells)

pt was transfused units prbcs during transfusion o2 sats, score: 0.016899107

began spiking temps pan cx, score: 0.014741435

volume loss widespread emphysema, score: 0.010284195

confidence of prediction: 0.706558

Y\_true: [ 1 4 8 17 20 24]

Y\_pred: [ 1 3 4 5 20 24 37]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

home levothyroxine hypercholesterolemia stable continued, score: 0.3179251

stay hypothyroidism tsh was, score: 0.16870292

daily levothyroxine mcg tablet sig, score: 0.036212817

confidence of prediction: 0.842338

Y\_true: [ 1 4 8 17 20 24]

Y\_pred: [ 1 3 4 5 20 24 37]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

pci htn hyperlipidemia breast cancer s p, score: 0.09534998  
mg daily valsartan mg, score: 0.036411367  
valsartan mg tablet sig, score: 0.021640858

confidence of prediction: 0.978121  
Y\_true: [ 1 4 8 17 20 24]  
Y\_pred: [ 1 3 4 5 20 24 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
p pci htn hyperlipidemia breast cancer s, score: 0.19265373  
htn pt presented with, score: 0.089367  
roto pda hypertension hypercholesterolemia, score: 0.04360811

confidence of prediction: 0.935384  
Y\_true: [ 1 4 8 17 20 24]  
Y\_pred: [ 1 3 4 5 20 24 37]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p pci htn, score: 0.25431466  
s p multiple pcis, score: 0.07742117  
mg isosorbide dinitrate mg, score: 0.006379336

confidence of prediction: 0.960432  
Y\_true: [ 1 2 3 8 21 22 27 35 36]  
Y\_pred: [ 1 2 3 4 22 27 35]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
gout hypothyroidism anxiety social, score: 0.07156015  
secondary hypothyroidism diabetes hyperlipidemia discharge, score:  
0.070455454  
80mg hypothyroidism continued levothyroxine 75mcg daily gout, score:  
0.052372016

confidence of prediction: 0.530137  
Y\_true: [ 1 2 3 8 21 22 27 35 36]  
Y\_pred: [ 1 2 3 4 22 27 35]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
restarting oral diabetes medications you need, score: 0.11941234  
artery upper pole and, score: 0.024195163  
s colchicine metformin and dyazide were, score: 0.023008117

confidence of prediction: 0.597607  
Y\_true: [ 1 2 3 8 21 22 27 35 36]  
Y\_pred: [ 1 2 3 4 22 27 35]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
htn dm hypercholesterolemia originally presented to, score:  
0.33611307  
for her hypercholesterolemia a lipid panel, score: 0.017692888  
metformin mg daily trazodone, score: 0.009395801

confidence of prediction: 0.718528

Y\_true: [ 1 2 3 8 21 22 27 35 36]  
Y\_pred: [ 1 2 3 4 22 27 35]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
indx ctropnt 16pm blood, score: 0.115457736  
coronaries nstemi the patient had, score: 0.06510156  
s nstemi an echocardiogram, score: 0.027460491  
  
confidence of prediction: 0.778031  
Y\_true: [ 1 2 3 8 21 22 27 35 36]  
Y\_pred: [ 1 2 3 4 22 27 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
probnp numeric identifier 14am blood, score: 0.09086584  
systolic heart failure anemia secondary hypothyroidism, score:  
0.06743187  
congestive heart failure likely secondary to, score: 0.066706896  
  
confidence of prediction: 0.864777  
Y\_true: [ 1 2 3 8 21 22 27 35 36]  
Y\_pred: [ 1 2 3 4 22 27 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
her renal failure was, score: 0.40701905  
a pre renal state urine microscopy, score: 0.067455724  
on chronic renal failure acute systolic, score: 0.06442455  
  
confidence of prediction: 0.703907  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
of hypothyroidism depression he has, score: 0.35671583  
admission levothyroxine mcg daily celexa, score: 0.09374891  
levothyroxine mcg daily celexa mg, score: 0.07617505  
  
confidence of prediction: 0.559721  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization arctic sun cooling, score: 0.17487979  
catheterization comments coronary angiography in this, score:  
0.093949385  
cardiac catheterization at this point, score: 0.009260584  
  
confidence of prediction: 0.960380  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease with occlusion of, score: 0.11036937  
coronary artery disease successful, score: 0.11036937  
w cad pda distribution, score: 0.084005676



confidence of prediction: 0.966016  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib s p vfib, score: 0.21213934  
atrial fibrillation after this he, score: 0.042769726  
atrial fibrillation with rbbb st, score: 0.026390556

confidence of prediction: 0.924708  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
outpatient aspiration acquired pna the, score: 0.12264684  
video eeg study because, score: 0.109328  
an aspiration event prior to, score: 0.09274336

confidence of prediction: 0.699159  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure while cooled, score: 0.23044893  
he was diuresised with lasix drip, score: 0.012661866  
threat pupils equal round and, score: 0.010954045

confidence of prediction: 0.810079  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization arctic sun cooling, score: 0.3609875  
catheterization comments coronary angiography in this, score:  
0.06579986  
cardiac catheterization at this point, score: 0.013652425

confidence of prediction: 0.750811  
Y\_true: [ 1 11 14 16 24 26 31 35 38 43]  
Y\_pred: [ 1 3 14 17 24 26 31 35 38 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
protocol and rewarmed patient, score: 0.15129526  
sputum culture grew out methicillin, score: 0.060390167  
sputum culture grew out mssa, score: 0.060390167

confidence of prediction: 0.827921  
Y\_true: [10 23 33 34 40 42]  
Y\_pred: [34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
daily for gerd you were started, score: 0.05816643

bipolar disorder gerd discharge condition mental, score: 0.044934876  
eventually underwent rapid sequence intubation, score: 0.011501748

confidence of prediction: 0.689771

Y\_true: [10 23 33 34 40 42]

Y\_pred: [34 40 42]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

sequence intubation for airway protection and, score: 0.23409103

he was intubated due to, score: 0.13329229

general sedated intubated no acute, score: 0.13110495

confidence of prediction: 0.803304

Y\_true: [10 23 33 34 40 42]

Y\_pred: [34 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

sequence intubation for airway protection, score: 0.19219948

and mechanical ventilation history, score: 0.06882722

general sedated intubated no acute, score: 0.028757608

confidence of prediction: 0.507004

Y\_true: [ 2 4 7 10 20 34]

Y\_pred: [ 1 4 7 10 20 34 37]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

on medication hyperlipidemia htn hypothyroidism gerd past, score:  
0.13867886

rosuvastatin mg tablet sig, score: 0.036994115

crestor compazine metoprolol tid, score: 0.014485631

confidence of prediction: 0.856718

Y\_true: [ 2 4 7 10 20 34]

Y\_pred: [ 1 4 7 10 20 34 37]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

moderate bright red blood, score: 0.15580511

she was transfused 2units of, score: 0.05326106

of prbc on for, score: 0.052790564

confidence of prediction: 0.536092

Y\_true: [ 2 4 7 10 20 34]

Y\_pred: [ 1 4 7 10 20 34 37]

top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)

she smokes cigarettes per day and, score: 0.056353513

discharge medications rosuvastatin mg, score: 0.000851571

surgery service after undergoing, score: 0.0006216614

confidence of prediction: 0.937224

Y\_true: [ 2 4 7 10 20 34]

Y\_pred: [ 1 4 7 10 20 34 37]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)  
medication hyperlipidemia htn hypothyroidism gerd past surgical,  
score: 0.15255134  
enterotomies with component separation, score: 0.062331762  
colic fistula otherwise nml, score: 0.059375323

confidence of prediction: 0.740522  
Y\_true: [ 2 4 7 10 20 34]  
Y\_pred: [ 1 4 7 10 20 34 37]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
htn hypothyroidism gerd past surgical history exlap, score:  
0.05118274  
enter the ileocecal valve, score: 0.0073990216  
diabetes colon cancer physical, score: 0.006704397

confidence of prediction: 0.560139  
Y\_true: [ 4 24]  
Y\_pred: [ 1 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease she has, score: 0.22442032  
coronary artery disease factor leiden, score: 0.21265802  
coronary artery disease hematocrit, score: 0.05218068

confidence of prediction: 0.950964  
Y\_true: [ 8 12 16 29 33 36 40 42]  
Y\_pred: [12 29 36 40]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
sputum and bal fungal cx bal cx and blood cultures, score: 0.0360368  
intubation flexible bronchoscopy history of, score: 0.011788491  
a bronchoscopy which took samples of, score: 0.010592546

confidence of prediction: 0.730977  
Y\_true: [ 8 12 16 29 33 36 40 42]  
Y\_pred: [12 29 36 40]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
community acquired pneumonia secondary diagnosis hiv, score:  
0.12805602  
and patchy consolidative opacities atypical pneumonia acuity, score:  
0.047328558  
antibody igg test 00pm, score: 0.013133193

confidence of prediction: 0.819492  
Y\_true: [ 8 12 16 29 33 36 40 42]  
Y\_pred: [12 29 36 40]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal insufficiency creatinine at baseline thought, score:  
0.026643742  
cd4 vl burkitt s, score: 0.013570294  
anxiety anal herpes low, score: 0.00911601

confidence of prediction: 0.730816

Y\_true: [ 8 12 16 29 33 36 40 42]

Y\_pred: [12 29 36 40]

top three important windows for true positive code 40 (96.04:

Insertion of endotracheal tube)

intubation flexible bronchoscopy history, score: 0.22634734

sputum and bal fungal, score: 0.19851243

he was intubated for broncoscopy, score: 0.03588956

confidence of prediction: 0.574287

Y\_true: [ 2 12 26 29 41 43 45 48]

Y\_pred: [12 17 26 33 40 41 42 43 45 48]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)

for hypoxic respiratory failure, score: 0.085490435

and extubation bronchoscopy history of, score: 0.08003017

underwent bronchoscopy to obtain, score: 0.07993988

confidence of prediction: 0.849121

Y\_true: [ 2 12 26 29 41 43 45 48]

Y\_pred: [12 17 26 33 40 41 42 43 45 48]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib for the remainder, score: 0.30095875

atrial fibrillation on admission he, score: 0.19595678

infiltrate with cough and, score: 0.0069922637

confidence of prediction: 0.586199

Y\_true: [ 2 12 26 29 41 43 45 48]

Y\_pred: [12 17 26 33 40 41 42 43 45 48]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

on tube feeds he was kept, score: 0.07648936

monitor bps and restart, score: 0.03228785

for hypoxic respiratory failure, score: 0.02504846

confidence of prediction: 0.512760

Y\_true: [ 2 12 26 29 41 43 45 48]

Y\_pred: [12 17 26 33 40 41 42 43 45 48]

top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)

for hypoxic respiratory failure, score: 0.0637114

cxr widespread ground glass opacification of, score: 0.049449224

monitor bps and restart amlodipine, score: 0.042836387

confidence of prediction: 0.962365

Y\_true: [ 2 12 26 29 41 43 45 48]

Y\_pred: [12 17 26 33 40 41 42 43 45 48]

top three important windows for true positive code 45 (99.15:

Parenteral infusion of concentrated nutritional substances)

started on tpn since his pod up, score: 0.005974526

was given tpn and was eventually restarted, score: 0.0012000419

or salt overload multifocal, score: 0.00040269422

confidence of prediction: 0.854550

Y\_true: [ 2 12 26 29 41 43 45 48]

Y\_pred: [12 17 26 33 40 41 42 43 45 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg x t2dm bladder, score: 0.3731307

s p cabg he, score: 0.3731307

with cad cabg x t2dm bladder, score: 0.21641019

confidence of prediction: 0.852915

Y\_true: [ 4 15 20 24 27 29 30 38]

Y\_pred: [ 4 20 24 27 30 31 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

chemo xrt hyperlipidemia uterine fibroids laryngeal, score: 0.6769879

squamous cell lung carcinoma, score: 0.007253844

rosuvastatin mg tablet sig, score: 0.007229816

confidence of prediction: 0.735348

Y\_true: [ 4 15 20 24 27 29 30 38]

Y\_pred: [ 4 20 24 27 30 31 38]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

to lad htn severe copd on 2l, score: 0.21280764

pulmonary artery hypertension diastolic, score: 0.0768515

pulmonary artery hypertension with pa mm, score: 0.051130533

confidence of prediction: 0.976961

Y\_true: [ 4 15 20 24 27 29 30 38]

Y\_pred: [ 4 20 24 27 30 31 38]

top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)

s p des to, score: 0.23112571

coronary artery disease the, score: 0.049807332

coronary artery disease pulmonary, score: 0.049807332

confidence of prediction: 0.939451

Y\_true: [ 4 15 20 24 27 29 30 38]

Y\_pred: [ 4 20 24 27 30 31 38]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

systolic heart failure patient has, score: 0.022616837

diastolic congestive heart failure ef it is, score: 0.020820135

diastolic congestive heart failure coronary artery, score: 0.020820135

confidence of prediction: 0.510104

Y\_true: [ 4 15 20 24 27 29 30 38]

Y\_pred: [ 4 20 24 27 30 31 38]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

obstructive pulmonary disease laryngeal, score: 0.16617966  
severe copd on 2l home o2, score: 0.08167593  
s severe copd patient is on 2l, score: 0.03820849

confidence of prediction: 0.813651  
Y\_true: [ 4 15 20 24 27 29 30 38]  
Y\_pred: [ 4 20 24 27 30 31 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.52627194  
selective coronary angiography of this, score: 0.13609372  
cardiac cath study date, score: 0.036606956

confidence of prediction: 0.514132  
Y\_true: [ 3 5 11 20]  
Y\_pred: [ 0 2 3 4 5 17 20 46]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
ii hypertension hypercholesterolemia psh appendectomy social, score:  
0.5595039  
for dmii htn [UNK] who, score: 0.009906657  
for dmii htn hyperlipidemia, score: 0.009906657

confidence of prediction: 0.980189  
Y\_true: [ 3 5 11 20]  
Y\_pred: [ 0 2 3 4 5 17 20 46]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
chronic inflammation hyponatremia corrected sodium is on, score:  
0.30649439  
broad spectrum antibioitcs coverage with vanc cipro, score:  
0.014457233  
noted the development of, score: 0.0022473957

confidence of prediction: 0.923097  
Y\_true: [ 3 5 11 20]  
Y\_pred: [ 0 2 3 4 5 17 20 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
for dmii htn [UNK] who presents, score: 0.08440236  
for dmii htn hyperlipidemia who presents to, score: 0.08440236  
type ii hypertension hypercholesterolemia psh appendectomy social,  
score: 0.06898313

confidence of prediction: 0.862620  
Y\_true: [ 6 9 16 17 20 28 33 40 42 44]  
Y\_pred: [ 7 17 28 40 42 44]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line was placed in, score: 0.16433544  
of ffp ocreotide gtt, score: 0.1503531  
line care picc line care per routine, score: 0.11237376

confidence of prediction: 0.747744

Y\_true: [ 6 9 16 17 20 28 33 40 42 44]  
Y\_pred: [ 7 17 28 40 42 44]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
history of present illness, score: 0.28674158  
did demonstrated esophageal varices, score: 0.06963109  
endoscopy showed multiple blood, score: 0.02721846

confidence of prediction: 0.877118  
Y\_true: [ 6 9 16 17 20 28 33 40 42 44]  
Y\_pred: [ 7 17 28 40 42 44]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was electively intubated for airway protection endoscopy, score:  
0.53991723  
he was intubated he received, score: 0.05265851  
arrest cpr initiated state, score: 0.038455456

confidence of prediction: 0.681362  
Y\_true: [ 6 9 16 17 20 28 33 40 42 44]  
Y\_pred: [ 7 17 28 40 42 44]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was electively intubated for airway protection endoscopy, score:  
0.26370096  
arrest cpr initiated state, score: 0.084432244  
when intubated his bp, score: 0.042537306

confidence of prediction: 0.568406  
Y\_true: [ 6 9 16 17 20 28 33 40 42 44]  
Y\_pred: [ 7 17 28 40 42 44]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
received units prbc s and, score: 0.1729619  
given fluids prbc s and, score: 0.06500534  
black tarry stools bright red blood in, score: 0.029977575

confidence of prediction: 0.779142  
Y\_true: [ 4 26]  
Y\_pred: [26 27 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation along with other, score: 0.11454115  
atrial fibrillation his ct was, score: 0.07140627  
atrial fibrillation one year hypercholesterolemia, score: 0.04799315

confidence of prediction: 0.880866  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
home metformin glucophage mg po bid, score: 0.080340505

in retail business but he, score: 0.07112635  
dm ra and pancreatic, score: 0.03921748

confidence of prediction: 0.582211  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 3 (272.0: Pure hypercholesterolemia)  
status htn hypercholesterolemia spinal stenosis dm, score: 0.10695264  
defibrillator htn hypercholesterolemia spinal stenosis dm, score: 0.01697335  
location lusb x irregular, score: 0.0061984854

confidence of prediction: 0.886693  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
dofetilide gout hyperlipidemia gerd spinal stenosis pvd, score: 0.10240942  
daily glimepiride nf mg oral hospital1 januvia nf sitagliptin mg oral, score: 0.018575527

confidence of prediction: 0.620653  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
fib usually on asa, score: 0.18258107  
fibrillaton on coumadin and, score: 0.11918568  
was a pleasure taking care, score: 0.03751533

confidence of prediction: 0.951318  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
systolic heart failure with ef a, score: 0.28254825  
pacer was interrogated and discontinuation of his, score: 0.26601034  
lasix and enalapril were, score: 0.009880835

confidence of prediction: 0.641385  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
gout hyperlipidemia gerd spinal stenosis pvd with, score: 0.0854476  
hematemesis suggesting ongoing bleeding, score: 0.03433008  
home metformin glucophage mg, score: 0.019138115

confidence of prediction: 0.611524  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]



top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
his acute kidney injury medications on, score: 0.058803033  
ra renal insufficiency renal stones, score: 0.019610606  
significant comorbidities despite medical, score: 0.008289593

confidence of prediction: 0.849401  
Y\_true: [ 2 3 4 7 20 25 26 27 28 34 35 48 49]  
Y\_pred: [ 2 3 4 26 27 34 35 37 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
ef a fib defibrillator, score: 0.003588363  
silent mi admission in, score: 0.0028887184  
lasix enalapril januvia and, score: 0.002415575

confidence of prediction: 0.966044  
Y\_true: [ 3 8 23 25 27 36 48]  
Y\_pred: [ 2 21 27 48]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
systolic heart failure acute on, score: 0.13392285  
systolic heart failure patient presented with, score: 0.13392285  
systolic congestive heart failure hematuria leukocytosis chronic, score: 0.0119048655

confidence of prediction: 0.823114  
Y\_true: [ 3 8 23 25 27 36 48]  
Y\_pred: [ 2 21 27 48]  
top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)  
s p cabg dm, score: 0.76870435  
p 4v cabg in, score: 0.0402458  
clips from cabg are, score: 0.02610151

confidence of prediction: 0.613330  
Y\_true: [ 2 4 5 16 17 20 26 39 46 49]  
Y\_pred: [ 2 4 20 26 49]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
diabetes mellitus type ii previous, score: 0.050466973  
hypertension type diabetes hyperlipidemia discharge, score: 0.025209863  
discharge diabetes mellitus type ii patient, score: 0.016846515

confidence of prediction: 0.712935  
Y\_true: [ 2 4 5 16 17 20 26 39 46 49]  
Y\_pred: [ 2 4 20 26 49]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
type diabetes hyperlipidemia discharge condition mental, score: 0.16477762  
mg hospital1 hyperlipidemia continue on simvastatin mg, score: 0.14614758

fibrillation hypertension hyperlipidemia degenerative joint, score:  
0.03230348

confidence of prediction: 0.704551

Y\_true: [ 2 4 5 16 17 20 26 39 46 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

placement secondary hypertension type diabetes hyperlipidemia,  
score: 0.13001366

hypertension patient s bp on, score: 0.083846524

hospital1 and diovan mg, score: 0.06432775

confidence of prediction: 0.975657

Y\_true: [ 2 4 5 16 17 20 26 39 46 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib on coumadin and, score: 0.45595694

atrial fibrillation we gave you, score: 0.057938628

atrial fibrillation her atrial fibrillation with rapid, score:  
0.047914725

confidence of prediction: 0.785722

Y\_true: [ 2 4 5 16 17 20 26 39 46 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)

afib on coumadin and, score: 0.9264675

daily added warfarin mg, score: 0.024717486

and adjust coumadin dose, score: 0.0034588801

confidence of prediction: 0.940127

Y\_true: [ 4 20]

Y\_pred: [ 4 20 26]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

atenolol chlorthalidone hyperlipidemia on simvastatin gout on,  
score: 0.07601018

of hypertension hyperlipidemia osteoarthritis bilateral carpal  
tunnel, score: 0.04489079

hypertension hyperlipidemia discharge condition mental, score:  
0.019195318

confidence of prediction: 0.993997

Y\_true: [ 4 20]

Y\_pred: [ 4 20 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history hypertension on atenolol chlorthalidone

hyperlipidemia on, score: 0.09525774

history of hypertension hyperlipidemia osteoarthritis bilateral  
carpal, score: 0.04506459

strokes hypertension hyperlipidemia discharge condition mental,

score: 0.045013484

confidence of prediction: 0.881447

Y\_true: [11 19 26]

Y\_pred: [19 26]

top three important windows for true positive code 19 (39.95: Hemodialysis)

femoral hemodialysis catheter infection, score: 0.08334259

tunneled hd catheter in, score: 0.06301083

esrd on hd through a, score: 0.05569629

confidence of prediction: 0.980890

Y\_true: [11 19 26]

Y\_pred: [19 26]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib rvr in the setting, score: 0.24946621

suspected ivc thrombus ruled, score: 0.016460108

was our pleasure to, score: 0.009425887

confidence of prediction: 0.754830

Y\_true: [ 1 4 20 27 34 37]

Y\_pred: [ 1 4 20 34 37 40]

top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)

medication hypothyroidism cervical cancer s, score: 0.26960334

of hypothyroidism and worsening lower, score: 0.19545573

issues hypothyroidism thyroid studies, score: 0.18543398

confidence of prediction: 0.884588

Y\_true: [ 1 4 20 27 34 37]

Y\_pred: [ 1 4 20 34 37 40]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

daily coenzyme q10 mg hospital1 folic, score: 0.12631562

po daily hyperlipidemia continued rosuvastatin mg po, score: 0.06598606

rosuvastatin mg daily albuterol, score: 0.028794212

confidence of prediction: 0.889436

Y\_true: [ 1 4 20 27 34 37]

Y\_pred: [ 1 4 20 34 37 40]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

improve her ipf she endorses, score: 0.1390517

on discharge hypertension continued on lisinopril mg, score: 0.08425614

medical history hypertension pulmonary hypertension osteoarthritis in her s, score: 0.08221185

confidence of prediction: 0.932360

Y\_true: [ 1 4 20 27 34 37]

Y\_pred: [ 1 4 20 34 37 40]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)  
cholesterol fibromyalgia gerd s p right total, score: 0.034459613  
a rheumatologic panel as, score: 0.0057504154  
s1 disectomy x2 complicated, score: 0.0051624095

confidence of prediction: 0.916026  
Y\_true: [ 1 4 20 27 34 37]  
Y\_pred: [ 1 4 20 34 37 40]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection discharge condition, score: 0.19925703  
for urinary tract infection followup instructions, score:  
0.038340237  
wbc and bacteria tropinin, score: 0.029135311

confidence of prediction: 0.928853  
Y\_true: [ 4 20 22 26 33 35 42 49]  
Y\_pred: [ 4 20 26 29 33 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
copd htn hyperlipidemia h o prostate, score: 0.1504453  
fev1 htn hyperlipidemia and recent gib from, score: 0.08151911  
of copd hyperlipidemia htn who presents to, score: 0.049704295

confidence of prediction: 0.974966  
Y\_true: [ 4 20 22 26 33 35 42 49]  
Y\_pred: [ 4 20 26 29 33 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
copd fev1 htn hyperlipidemia and recent gib, score: 0.15331937  
polyps lichen simplex chronicus, score: 0.043501828  
asthma copd htn hyperlipidemia h o, score: 0.04124416

confidence of prediction: 0.944564  
Y\_true: [ 4 20 22 26 33 35 42 49]  
Y\_pred: [ 4 20 26 29 33 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
a fib does not appear, score: 0.021151049  
fib flutter ekg from shows, score: 0.01405079  
contract normally lvef the, score: 0.011512782

confidence of prediction: 0.693698  
Y\_true: [ 4 20 22 26 33 35 42 49]  
Y\_pred: [ 4 20 26 29 33 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
he requested intubation when, score: 0.12908976  
post discharge intubated at, score: 0.079478525  
nor of pneumonia on, score: 0.07296806

confidence of prediction: 0.744495  
Y\_true: [ 4 20 22 26 33 35 42 49]  
Y\_pred: [ 4 20 26 29 33 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
he was intubated on presentation, score: 0.17980812  
required intubation for a brief, score: 0.14955401  
was intubated at home, score: 0.09212174

confidence of prediction: 0.605114  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
of htn hyperlipidemia dchf, score: 0.05802725  
o htn hyperlipidemia dchf, score: 0.045520283  
risk factors dyslipidemia hypertension cardiac history cad, score:  
0.025786033

confidence of prediction: 0.531933  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization with drug, score: 0.7629922  
cardiac catheterization lab where an, score: 0.016770843  
coronary artery intra aortic balloon pump placment, score:  
0.013862725

confidence of prediction: 0.652565  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic renal failure his hctz, score: 0.1521189  
gout colostomy chronic renal insufficiency baseline cr s p, score:  
0.021014964  
colectomy with colostomy in, score: 0.016008612

confidence of prediction: 0.749201  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
with nstemi he was subsequently, score: 0.15186688  
with nstemi and found to have, score: 0.048501305  
non st elevation myocardial infarction hypertension, score:  
0.0133802015

confidence of prediction: 0.967450  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.1442537

coronary artery disease moderate, score: 0.1442537  
stents mi dchf mild to moderate, score: 0.06592887

confidence of prediction: 0.994500  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
dchf he appeared euvoletic on, score: 0.8054002  
dchf mild to moderate as, score: 0.030559152  
dchf mild to moderate as, score: 0.023867818

confidence of prediction: 0.843072  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
the second diagonal contains, score: 0.0125017725  
esp in afternoons but, score: 0.0066696275  
aids gerd b12 deficiency vitamin d, score: 0.0059024408

confidence of prediction: 0.810426  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal failure his hctz, score: 0.1102478  
gout colostomy chronic renal insufficiency baseline cr s p, score:  
0.01499293  
colectomy with colostomy in, score: 0.011655245

confidence of prediction: 0.859545  
Y\_true: [ 4 11 14 15 21 22 24 27 34 35 36 38]  
Y\_pred: [ 4 15 21 22 24 27 34 36 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with drug, score: 0.5028177  
cardiac cath comments selective coronary angiography in, score:  
0.026407517  
cardiac catheterization lab where, score: 0.018675227

confidence of prediction: 0.572350  
Y\_true: [ 2 5 6 35 47]  
Y\_pred: [ 2 5 35]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
and metformin his lactate improved, score: 0.15924498  
metformin mg tablet sig, score: 0.017529733  
tabs daily metformin qam nadolol daily citalopram, score: 0.01311024

confidence of prediction: 0.673102  
Y\_true: [ 2 5 6 35 47]  
Y\_pred: [ 2 5 35]

top three important windows for true positive code 5 (276.1: Hyposmolality and/or hyponatremia)  
his hospitalization hyponatremia na dropped form to, score: 0.4896851  
recorded as having no, score: 0.07176153  
q 4h prn trimethoprim sulfamethoxazole mg, score: 0.0713919

confidence of prediction: 0.961945  
Y\_true: [ 2 5 6 35 47]  
Y\_pred: [ 2 5 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
admission was prerenal and improved with ivf, score: 0.021055214  
recorded as having no, score: 0.014379351  
surgical repair arf cr at up from, score: 0.0069633094

confidence of prediction: 0.732385  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
htn hyperlipidemia and cad he, score: 0.0739993  
type hypertension hyperlipidemia degenerative joint, score: 0.06512308  
type hypertension hyperlipidemia degenerative, score: 0.06512308

confidence of prediction: 0.983587  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)  
coronary artery bypass graft x3 on, score: 0.27718368  
left internal mammary artery, score: 0.036489196  
coronary bypass grafting past, score: 0.023647457

confidence of prediction: 0.668284  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line placement urgent coronary, score: 0.13447528  
place picc line today for iv, score: 0.06004158  
days he continued to, score: 0.037385315

confidence of prediction: 0.979307  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 18 (39.61: Extracorporeal circulation auxiliary to open heart surgery)  
grafting past medical history, score: 0.026356598  
wires and mediastinal clips, score: 0.017200818  
cardiothoracic allergies patient recorded, score: 0.0069026626

confidence of prediction: 0.578668

Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
postop leukocytosis diabetes mellitus type hypertension, score:  
0.0400451  
chronic renal insufficiency baseline creatinine and potassium,  
score: 0.026263185  
postop leukocytosis unknown etiology diabetes mellitus, score:  
0.023123575

confidence of prediction: 0.743044  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
st elevation myocardial infarction with troponin, score: 0.23860708  
st elevation myocardial infarction acute systolic, score: 0.23860708  
st elevation myocardial infarction acute, score: 0.23860708

confidence of prediction: 0.991814  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s, score: 0.0990762  
coronary artery bypass graft, score: 0.089313135  
urgent coronary artery bypass graft, score: 0.04615275

confidence of prediction: 0.929674  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure he was discharged, score: 0.3416956  
non st elevation myocardial, score: 0.04303393  
systolic heart failure postop leukocytosis diabetes, score:  
0.04263656

confidence of prediction: 0.846383  
Y\_true: [ 4 13 17 18 21 22 24 27 35 36 38 39]  
Y\_pred: [ 2 4 13 17 18 21 22 24 27 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
postop leukocytosis diabetes mellitus type hypertension, score:  
0.044997342  
chronic renal insufficiency baseline creatinine and potassium,  
score: 0.024900457  
postop leukocytosis unknown etiology diabetes mellitus, score:  
0.01946634

confidence of prediction: 0.790893  
Y\_true: [ 2 6 20 29 33 37 40 41 42 43]



Y\_pred: [ 2 6 37 42]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

acidosis further imaging showed, score: 0.019875247

acidosis an urgent pulmonary, score: 0.017511861

history htn dm gout osa class iii, score: 0.014130916

confidence of prediction: 0.546215

Y\_true: [ 2 6 20 29 33 37 40 41 42 43]

Y\_pred: [ 2 6 37 42]

top three important windows for true positive code 6 (276.2:  
Acidosis)

his acidosis was corrected and mental, score: 0.075923756

a hypercarbic acidosis further imaging showed, score: 0.059891753

be hypercarbic acidosis an urgent pulmonary, score: 0.04691352

confidence of prediction: 0.898919

Y\_true: [ 2 6 20 29 33 37 40 41 42 43]

Y\_pred: [ 2 6 37 42]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

failure urinary tract infection discharge condition, score:  
0.013308578

made significant recommendations as to, score: 0.0059208223

lethargic and minimally following, score: 0.0050039357

confidence of prediction: 0.583097

Y\_true: [ 2 6 20 29 33 37 40 41 42 43]

Y\_pred: [ 2 6 37 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

remained intubated and was, score: 0.176314

remained intubated and was, score: 0.13167833

he was intubated at that, score: 0.062194146

confidence of prediction: 0.831544

Y\_true: [ 0 5 8 20 26 27 29 35 47]

Y\_pred: [ 5 20 26 29 37]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)

and mild hyponatremia mildly elevated lfts, score: 0.43559062

continued mild hyponatremia with na bicarb and, score: 0.07734936

continued mild hyponatremia and she was, score: 0.07734936

confidence of prediction: 0.899420

Y\_true: [ 0 5 8 20 26 27 29 35 47]

Y\_pred: [ 5 20 26 29 37]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

htn and sjogren s syndrome, score: 0.11039033

and atenolol hypertension colonic adenoma sensorineural hearing,  
score: 0.024593703

to falls htn and, score: 0.022550976

confidence of prediction: 0.971594

Y\_true: [ 0 5 8 20 26 27 29 35 47]

Y\_pred: [ 5 20 26 29 37]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

fibrillation off coumadin due, score: 0.1783998

irregularly irregular no m, score: 0.16980223

afib not on coumadin, score: 0.121524975

confidence of prediction: 0.789464

Y\_true: [ 0 5 8 20 26 27 29 35 47]

Y\_pred: [ 5 20 26 29 37]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

possible pneumonia her initial, score: 0.19996516

have a pneumonia during your, score: 0.06988879

have a pna and treated, score: 0.046553776

confidence of prediction: 0.618153

Y\_true: [ 6 9 37 41 46]

Y\_pred: [ 8 9 35 37 41]

top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)

kidney injury thrombocytopenia anemia discharge condition mental,  
score: 0.11793474

cvl placement thrombocytopenia the patient had a significant  
thrombocytopenia during her icu course, score: 0.054267757

systemic infection urosepsis for, score: 0.02572448

confidence of prediction: 0.906421

Y\_true: [ 6 9 37 41 46]

Y\_pred: [ 8 9 35 37 41]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)

urinary tract infection hypoglycemia presenting, score: 0.295834

her uti is sensitive, score: 0.05372517

uti currently not being, score: 0.036774352

confidence of prediction: 0.843060

Y\_true: [ 6 9 37 41 46]

Y\_pred: [ 8 9 35 37 41]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

to amikacin imipenem ertapenem it was, score: 0.16080312

tube feeds to support, score: 0.06898297

paracentesis feeding tube placement history, score: 0.030355664

confidence of prediction: 0.708297

Y\_true: [12 41 43]

Y\_pred: [12 17 37 41]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)

burkholderia cepacia bal serratia and coag, score: 0.41745147  
ml bal serratia marcescens, score: 0.09962221  
decannulated trachea and patient, score: 0.039766703

confidence of prediction: 0.832006

Y\_true: [12 41 43]

Y\_pred: [12 17 37 41]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

tolerating enteral feedings the patient, score: 0.31792498

trach decannulated trachea and patient, score: 0.052920178

and enteral feedings were held, score: 0.0410325

confidence of prediction: 0.926076

Y\_true: [ 4 11 14 20 38]

Y\_pred: [ 4 11 24 38]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

his procedures hyperlipidemia we changed simvastatin to, score:  
0.31456915

factors diabetes dyslipidemia hypertension cardiac history, score:  
0.059696015

hld nephrolithiasis presenting with, score: 0.03203395

confidence of prediction: 0.642291

Y\_true: [ 4 11 14 20 38]

Y\_pred: [ 4 11 24 38]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)

and terazosin depression mood, score: 0.008736481

daily oxybutynin chloride mg tablet, score: 0.0043497644

and basal inferior hypokinesia, score: 0.0037627602

confidence of prediction: 0.760081

Y\_true: [ 4 11 14 20 38]

Y\_pred: [ 4 11 24 38]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)

coronary catheterization with intervention with, score: 0.5623038

cardiac catheterization the catheterization, score: 0.13065833

cath lab for the no, score: 0.015886975

confidence of prediction: 0.835633

Y\_true: [ 1 8 26]

Y\_pred: [ 1 20 26 41]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

spine hypothyroidism paroxysmal svt social history, score: 0.3290659

of hypothyroidism paroxysmal svt s, score: 0.31533366

hx hypothyroidism paroxysmal svt s, score: 0.15045077

confidence of prediction: 0.923759

Y\_true: [ 1 8 26]

Y\_pred: [ 1 20 26 41]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation discharge condition quite, score: 0.21817814  
atrial fibrillation as well, score: 0.13121165  
fibrillation she was rate, score: 0.11388739

confidence of prediction: 0.577158  
Y\_true: [10 15 16 17 18 25 26 40 43]  
Y\_pred: [15 18 25 26 31 33 38 40 42]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
catheterization intra aortic balloon, score: 0.12586816  
pump mitral valve replacement, score: 0.06304344  
iabp ci was we, score: 0.06130692

confidence of prediction: 0.973506  
Y\_true: [10 15 16 17 18 25 26 40 43]  
Y\_pred: [15 18 25 26 31 33 38 40 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed without, score: 0.4219601  
flail posterior leaflet chordae lae, score: 0.019581642  
tee showed significant rv, score: 0.0062967218

confidence of prediction: 0.804823  
Y\_true: [10 15 16 17 18 25 26 40 43]  
Y\_pred: [15 18 25 26 31 33 38 40 42]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
severe mitral regurgitation status post, score: 0.15223321  
severe mitral regurgitation and evidence, score: 0.13943882  
severe mitral regurgitation with a, score: 0.05010782

confidence of prediction: 0.921425  
Y\_true: [10 15 16 17 18 25 26 40 43]  
Y\_pred: [15 18 25 26 31 33 38 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib he was febrile, score: 0.24218918  
afib and was started, score: 0.13390285  
amiodarone mg tablet s, score: 0.0429205

confidence of prediction: 0.843603  
Y\_true: [10 15 16 17 18 25 26 40 43]  
Y\_pred: [15 18 25 26 31 33 38 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
he was intubated and had, score: 0.2545212  
was electively intubated and sedated, score: 0.22311543  
from intubation causing gastric, score: 0.066968985

confidence of prediction: 0.900136  
Y\_true: [ 1 4 5 9 10 20 27 34]  
Y\_pred: [ 1 4 20 27 31 34]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
anxiety hypothyroidism osteoarthritis gerd, score: 0.29794753  
daily hypothyroidism continued levothyroxine mcg daily, score:  
0.22105858  
rb hypothyroidism and hypertension, score: 0.07511022

confidence of prediction: 0.931093  
Y\_true: [ 1 4 5 9 10 20 27 34]  
Y\_pred: [ 1 4 20 27 31 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia depression anxiety  
hypothyroidism osteoarthritis, score: 0.067127615  
as outpatient hyperlipidemia continued simvastatin mg daily, score:  
0.01781479  
mg hospital1 omeprazole mg, score: 0.0046555647

confidence of prediction: 0.839096  
Y\_true: [ 1 4 5 9 10 20 27 34]  
Y\_pred: [ 1 4 20 27 31 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
[UNK] m5 e0 b0 hct mcv, score: 0.2024668  
medical history hypertension hyperlipidemia depression anxiety,  
score: 0.05356228  
this resolved hypertension initially held home, score: 0.037639342

confidence of prediction: 0.990929  
Y\_true: [ 1 4 5 9 10 20 27 34]  
Y\_pred: [ 1 4 20 27 31 34]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic diastolic heart failure patient has mild, score:  
0.011663974  
likely need chf education, score: 0.0013254036  
congestive heart failure h1n1 influenza infection, score:  
0.0013182673

confidence of prediction: 0.962155  
Y\_true: [ 1 4 5 9 10 20 27 34]  
Y\_pred: [ 1 4 20 27 31 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
mcg daily gerd continued omeprazole mg po, score: 0.017390124  
hypothyroidism osteoarthritis gerd right femoral fracture s, score:  
0.012298872  
of mild thrombocytopenia wbc, score: 0.009907753

confidence of prediction: 0.956300  
Y\_true: [ 7 9 13 14 18 23 24 25 27 33 38]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)

coronary artery bypass grafting x3 with left, score: 0.09968155  
artery and reverse saphenous vein graft, score: 0.039821807  
wires were discontinued without, score: 0.038328923

confidence of prediction: 0.985975  
Y\_true: [ 7 9 13 14 18 23 24 25 27 33 38]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were discontinued without, score: 0.7160973  
diuresed toward the preoperative, score: 0.020204702  
bypass grafting x3 with left, score: 0.008412073

confidence of prediction: 0.971573  
Y\_true: [ 7 9 13 14 18 23 24 25 27 33 38]  
Y\_pred: [13 18 20 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stemi in, score: 0.21382749  
s p stemi with, score: 0.21382749  
coronary artery disease s, score: 0.08587963

confidence of prediction: 0.941755  
Y\_true: [ 6 19]  
Y\_pred: [19 34 35]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
notified and dialysis catheter was, score: 0.08776496  
with hydration hd originally, score: 0.010057275  
hd treatments renal team was, score: 0.009113392

confidence of prediction: 0.936274  
Y\_true: [ 5 6 9 21 34 35 36 37 41 47]  
Y\_pred: [ 5 8 35]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
played a role but, score: 0.019788042  
with a psychiatrist via, score: 0.007384322  
front desk hyper hyponatremia pt presented with na, score:  
0.005798741

confidence of prediction: 0.758444  
Y\_true: [ 5 6 9 21 34 35 36 37 41 47]  
Y\_pred: [ 5 8 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
kidney injury bacteremia discharge, score: 0.15162943  
cirrhosis being managed by, score: 0.055313885  
acute kidney injury patient had, score: 0.02834795

confidence of prediction: 0.974610  
Y\_true: [ 1 20 26 49]  
Y\_pred: [ 1 4 20 26]  
top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)  
pcp hypothyroidism continued levothyroxine tsh was wnl, score: 0.04475968  
hld hypothyroidism remote history of, score: 0.027965745  
daily levothyroxine mcg daily tylenol, score: 0.005689204

confidence of prediction: 0.980996  
Y\_true: [ 1 20 26 49]  
Y\_pred: [ 1 4 20 26]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
on warfarin htn hl and bph s, score: 0.09315487  
pe in htn hl and bph s, score: 0.0925325  
of pe htn held atenolol in, score: 0.04098581

confidence of prediction: 0.891337  
Y\_true: [ 1 20 26 49]  
Y\_pred: [ 1 4 20 26]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib patient was well, score: 0.29319954  
irregularly irregular normal s1 s2, score: 0.1351002  
atrial fibrillation r mca stroke, score: 0.059324313

confidence of prediction: 0.857994  
Y\_true: [ 2 4 21 23 24 26 29 35 36]  
Y\_pred: [10 21 23 24 26 29 36 44]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
renal insufficiency baseline creatinine, score: 0.14580853  
aaa ckd bl cr atrial fibrillation, score: 0.1324909  
aaa cri bl cr atrial, score: 0.07752989

confidence of prediction: 0.618038  
Y\_true: [ 2 4 21 23 24 26 29 35 36]  
Y\_pred: [10 21 23 24 26 29 36 44]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
multiple prior mis and s p des, score: 0.11294445  
multiple prior mis s p des of, score: 0.11294445  
multiple prior mis s p des to, score: 0.11294445

confidence of prediction: 0.836597  
Y\_true: [ 2 4 21 23 24 26 29 35 36]  
Y\_pred: [10 21 23 24 26 29 36 44]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p des to, score: 0.46091768  
s p multiple prior, score: 0.07877075  
coronary artery disease atrial, score: 0.03271216

confidence of prediction: 0.927652  
Y\_true: [ 2 4 21 23 24 26 29 35 36]

Y\_pred: [10 21 23 24 26 29 36 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation chronic renal insufficiency, score: 0.26625028  
atrial fibrillation and sinus node, score: 0.12965816  
atrial fibrillation now p w, score: 0.050840545

confidence of prediction: 0.733774  
Y\_true: [ 2 4 21 23 24 26 29 35 36]  
Y\_pred: [10 21 23 24 26 29 36 44]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
new pneumonia coronaries pt, score: 0.27544755  
and possible pneumonia ecg atrial, score: 0.15434039  
lobe pneumonia for which, score: 0.051227182

confidence of prediction: 0.930930  
Y\_true: [ 2 4 21 23 24 26 29 35 36]  
Y\_pred: [10 21 23 24 26 29 36 44]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
renal insufficiency baseline creatinine large, score: 0.1811554  
aaa ckd bl cr atrial fibrillation, score: 0.109563984  
aaa cri bl cr atrial, score: 0.087946616

confidence of prediction: 0.917571  
Y\_true: [ 4 29 30 34 35]  
Y\_pred: [ 4 9 29 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
home omeprazole hyperlipidemia we continued her home, score:  
0.12955388  
reflux disease hyperlipidemia appy hysterectomy social history,  
score: 0.017754287  
albuterol neb qid uses daily omeprazole 20mg, score: 0.0021704708

confidence of prediction: 0.709872  
Y\_true: [ 4 29 30 34 35]  
Y\_pred: [ 4 9 29 34]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
cxr as pna she received, score: 0.34226963  
exclude pneumonia probable underlying emphysema ekg, score:  
0.01648554  
her hypoxia improved gradually, score: 0.009748204

confidence of prediction: 0.885174  
Y\_true: [ 4 29 30 34 35]  
Y\_pred: [ 4 9 29 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gastroesophageal reflux disease we continued her, score: 0.038572524  
disease gastroesophageal reflux disease hyperlipidemia appy  
hysterectomy, score: 0.03713948



heterogeneous opacification in the right, score: 0.0069592576

confidence of prediction: 0.844003

Y\_true: [ 5 11 26 35 37]

Y\_pred: [ 5 26 35]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

the future hyponatremia was on admission with, score: 0.6036141

breakfast she eats lunch, score: 0.16763432

in the future to, score: 0.002735581

confidence of prediction: 0.587629

Y\_true: [ 5 11 26 35 37]

Y\_pred: [ 5 26 35]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib with rvr normal, score: 0.27234155

afib with rvr and, score: 0.17559703

was a pleasure to, score: 0.03781293

confidence of prediction: 0.931727

Y\_true: [ 5 11 26 35 37]

Y\_pred: [ 5 26 35]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

stabilization acute renal failure pre renal in nature responded,  
score: 0.016429333

breakfast she eats lunch, score: 0.013243876

the renal veins impression, score: 0.0070174746

confidence of prediction: 0.854172

Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]

Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

medical history dyslipidemia hypertension diabetes cabg svg, score:  
0.046354532

hypertension hyperlipidemia gerd basal cell cancer, score:  
0.026455857

cabg des to svg, score: 0.025638705

confidence of prediction: 0.984749

Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]

Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

incisions gently with mild soap, score: 0.50438577

bypass grafting x3 with reverse, score: 0.02260304

bypass grafting x3 reverse saphenous vein grafts, score: 0.02260304

confidence of prediction: 0.703431

Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]

Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)  
on cbi urology planned, score: 0.08098775  
hypertension hyperlipidemia gerd basal cell, score: 0.066103905  
hydrochlorothiazide mg daily clopidogrel, score: 0.036818508

confidence of prediction: 0.595790  
Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]  
Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
non st elevation myocardial infarction thrombocytopenia, score:  
0.017272372  
urology planned to remove, score: 0.016519595  
cad the lmca had, score: 0.013774731

confidence of prediction: 0.906491  
Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]  
Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad disease totally occluded, score: 0.1852402  
cad patent lima lad, score: 0.066426955  
s p cabg des, score: 0.054510113

confidence of prediction: 0.769484  
Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]  
Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
acl gerd s p appendectomy basal, score: 0.09058752  
stones with placement of, score: 0.03698078  
kidney stones s p lithotripsy, score: 0.036819775

confidence of prediction: 0.637186  
Y\_true: [ 2 4 8 14 18 20 22 24 34 38 49]  
Y\_pred: [ 4 9 13 18 20 22 24 34 37 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
catheterization comments selective coronary angiography of this,  
score: 0.09080727  
catheterization integrillin gtt and, score: 0.084140845  
which was switched to, score: 0.026734255

confidence of prediction: 0.835552  
Y\_true: [ 4 10 12 20 34 37 39 41 43]  
Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
including htn hld emphysema l suppl, score: 0.12512727  
gallstones htn hld gerd emphysema on l, score: 0.111322396  
of hypertension hyperlipidemia and emphysema on, score: 0.06902524

confidence of prediction: 0.542374  
Y\_true: [ 4 10 12 20 34 37 39 41 43]

Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
so tracheostomy performed he, score: 0.052294653  
and mini bal performed on the, score: 0.035666253  
from bal indicative infection, score: 0.027653921

confidence of prediction: 0.991187  
Y\_true: [ 4 10 12 20 34 37 39 41 43]  
Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
sbo gallstones htn hld gerd emphysema on, score: 0.20374386  
pmh including htn hld emphysema l suppl, score: 0.19600992  
hyperlipidemia and emphysema on, score: 0.03325154

confidence of prediction: 0.844354  
Y\_true: [ 4 10 12 20 34 37 39 41 43]  
Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
amyloid vs htn for the, score: 0.037949223  
htn hld gerd emphysema on l suppl, score: 0.0074635274  
toe purple ecchymotic neurologic, score: 0.005599504

confidence of prediction: 0.649655  
Y\_true: [ 4 10 12 20 34 37 39 41 43]  
Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
tee no evidence for, score: 0.38830084  
infrarenal abdominal aorta measuring, score: 0.01878964  
infrarenal aortic aneurysm no, score: 0.0091664875

confidence of prediction: 0.874315  
Y\_true: [ 4 10 12 20 34 37 39 41 43]  
Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
on tube feeds had peg placed, score: 0.10676712  
feeds via peg has, score: 0.0982058  
associated pneumonia treated though, score: 0.07518893

confidence of prediction: 0.937854  
Y\_true: [ 4 10 12 20 34 37 39 41 43]  
Y\_pred: [ 4 12 20 27 34 39 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
tracheostomy peg tube placement history, score: 0.047027964  
vent so tracheostomy performed he, score: 0.026942119  
ml commensal respiratory flora, score: 0.018891498

confidence of prediction: 0.849215

Y\_true: [ 4 11 17 20 26 27 29 34 48 49]  
Y\_pred: [ 4 21 26 27 34 36 48 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
c11 hypertension hyperlipidemia gerd depression vit b12, score:  
0.055337127  
cabg transferred for year, score: 0.01790818  
barking cough stridor crackles, score: 0.0149307195

confidence of prediction: 0.878259  
Y\_true: [ 4 11 17 20 26 27 29 34 48 49]  
Y\_pred: [ 4 21 26 27 34 36 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf cad and other, score: 0.258711  
paf cad s p, score: 0.19106668  
atrial fibrillation currently in sinus, score: 0.0927518

confidence of prediction: 0.948723  
Y\_true: [ 4 11 17 20 26 27 29 34 48 49]  
Y\_pred: [ 4 21 26 27 34 36 48 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
his admission dchf ef in repeat echo, score: 0.024901364  
paf cad and other, score: 0.009423123  
paf cad s p, score: 0.0072784633

confidence of prediction: 0.760560  
Y\_true: [ 4 11 17 20 26 27 29 34 48 49]  
Y\_pred: [ 4 21 26 27 34 36 48 49]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
in extremity picc intact, score: 0.023154149  
hypertension hyperlipidemia gerd depression vit b12 defic, score:  
0.017160228  
multiple bronchs s p, score: 0.0116039235

confidence of prediction: 0.859649  
Y\_true: [ 4 11 17 20 26 27 29 34 48 49]  
Y\_pred: [ 4 21 26 27 34 36 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg ckd baseline, score: 0.28189868  
s p cabg transferred, score: 0.28189868  
s p cabg and then stent, score: 0.12601915

confidence of prediction: 0.510563  
Y\_true: [ 4 11 17 20 26 27 29 34 48 49]  
Y\_pred: [ 4 21 26 27 34 36 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
neb q4h warfarin mg, score: 0.46306753  
hospital1 and warfarin 1mg, score: 0.2086178  
discharge medications warfarin mg tablet sig, score: 0.040059257

confidence of prediction: 0.838535  
Y\_true: [ 4 8 20 23 24 26 35 47 49]  
Y\_pred: [20 24 26 27 35 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pacemaker placement hypertension dyslipidemia discharge condition  
mental, score: 0.46565711  
24pm hct 24pm digoxin, score: 0.07476827  
coronary interventions ptca stenting, score: 0.058624435

confidence of prediction: 0.897293  
Y\_true: [ 4 8 20 23 24 26 35 47 49]  
Y\_pred: [20 24 26 27 35 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p pci to, score: 0.25998423  
last cath in showed, score: 0.07187104  
s per daughter name, score: 0.055818208

confidence of prediction: 0.989960  
Y\_true: [ 4 8 20 23 24 26 35 47 49]  
Y\_pred: [20 24 26 27 35 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf on coumadin s p, score: 0.40775046  
atrial fibrillation cva residual aphasia, score: 0.05432024  
af patient with paf remained paced during, score: 0.028849095

confidence of prediction: 0.887255  
Y\_true: [ 4 8 20 23 24 26 35 47 49]  
Y\_pred: [20 24 26 27 35 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
likely pre renal in setting of, score: 0.32688487  
his renal failure and a, score: 0.02058559  
acute kidney injury patient with creatinine of, score: 0.009204417

confidence of prediction: 0.509649  
Y\_true: [ 4 8 20 23 24 26 35 47 49]  
Y\_pred: [20 24 26 27 35 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
paf on coumadin s, score: 0.30148977  
of on coumadin inr, score: 0.116863824  
mg qd warfarin 6mg, score: 0.113351665

confidence of prediction: 0.727773  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
30mg daily glyburide 20mg daily discharge, score: 0.06318908

home actos glyburide and placed on, score: 0.042622957  
with dm htn and hld presents, score: 0.014680683

confidence of prediction: 0.871332  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors diabetes dyslipidemia hypertension cardiac history, score:  
0.12075576  
and hld presents more than, score: 0.09138616  
hypertension and hyperlipidemia also with valvular, score:  
0.05091345

confidence of prediction: 0.507181  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
circulation was regained with, score: 0.08547053  
shock as bp was, score: 0.05323526  
of his sepsis respiratory, score: 0.04579769

confidence of prediction: 0.796891  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic dysfunction cannot exclude lv, score: 0.27272236  
systolic heart failure likely to recent, score: 0.083885  
valvular heart disease which was, score: 0.02776973

confidence of prediction: 0.563047  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
and pea arrest protocol, score: 0.13243312  
and was flown from, score: 0.1218075  
patient stayed intubated for rest, score: 0.07888279

confidence of prediction: 0.803265  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
patient stayed intubated for rest, score: 0.28810272  
pt was intubated at bedside by, score: 0.05443253  
and was intubated for the, score: 0.027326485

confidence of prediction: 0.551270  
Y\_true: [ 0 2 4 17 20 27 33 35 40 42 46]  
Y\_pred: [ 2 4 17 27 33 40 46]  
top three important windows for true positive code 46 (995.92:

Severe sepsis)

septic shock as bp was, score: 0.0731234

tazobactam and id consult, score: 0.06529554

cmo and extubated pt, score: 0.04505611

confidence of prediction: 0.829009

Y\_true: [ 4 5 7 9 13 14 18 21 22 24 27 36]

Y\_pred: [ 2 4 13 18 21 24 38]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

hypertension hyperlipidemia transferred from osh, score: 0.17277378

factors diabetes dyslipidemia hypertension cardiac history, score: 0.12262337

gout hld social history married with, score: 0.041183423

confidence of prediction: 0.968710

Y\_true: [ 4 5 7 9 13 14 18 21 22 24 27 36]

Y\_pred: [ 2 4 13 18 21 24 38]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery bypass graft, score: 0.43393046

saphenous vein grafts to, score: 0.12282718

coronary artery bypass grafting to five, score: 0.085003585

confidence of prediction: 0.941582

Y\_true: [ 4 5 7 9 13 14 18 21 22 24 27 36]

Y\_pred: [ 2 4 13 18 21 24 38]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed towards his preoperative, score: 0.55362606

thrombocytopenia on postoperative day, score: 0.19372022

cardiothoracic allergies no known, score: 0.025453152

confidence of prediction: 0.695289

Y\_true: [ 4 5 7 9 13 14 18 21 22 24 27 36]

Y\_pred: [ 2 4 13 18 21 24 38]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

his creatinine trended upward following surgery, score: 0.04706473

chronic kidney disease patient instead underwent, score: 0.03478272  
to 35u qam and, score: 0.024132792

confidence of prediction: 0.982258

Y\_true: [ 4 5 7 9 13 14 18 21 22 24 27 36]

Y\_pred: [ 2 4 13 18 21 24 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

saphenous vein grafts to, score: 0.07405645

urgent coronary artery bypass graft, score: 0.070157245

three vessel cad normal, score: 0.040138427

confidence of prediction: 0.632296

Y\_true: [ 9 15 21 25 27 35 36 38 47]

Y\_pred: [ 6 21 23 24 25 27 35 36]  
top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
chronic renal failure discharge condition, score: 0.14775746  
chronic renal dysfunction on, score: 0.09064434  
chronic renal insufficiency history of, score: 0.08573418

confidence of prediction: 0.699672  
Y\_true: [ 9 15 21 25 27 35 36 38 47]  
Y\_pred: [ 6 21 23 24 25 27 35 36]  
top three important windows for true positive code 25 (424.0: Mitral valve disorders)  
severe mitral regurgitation is seen, score: 0.09987787  
severe mitral regurgitation mild pulmonary, score: 0.09987787  
severe mitral regurgitation mild regional, score: 0.09987787

confidence of prediction: 0.912183  
Y\_true: [ 9 15 21 25 27 35 36 38 47]  
Y\_pred: [ 6 21 23 24 25 27 35 36]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diastolic heart failure to the, score: 0.19759965  
heart failure mitral valve regurgitation, score: 0.12730853  
pacemaker for lbbb syncope, score: 0.09862844

confidence of prediction: 0.810453  
Y\_true: [ 9 15 21 25 27 35 36 38 47]  
Y\_pred: [ 6 21 23 24 25 27 35 36]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
be pre renal elevated creatinine above, score: 0.11553523  
on chronic renal dysfunction, score: 0.06614401  
on chronic renal insufficiency, score: 0.06614401

confidence of prediction: 0.710093  
Y\_true: [ 9 15 21 25 27 35 36 38 47]  
Y\_pred: [ 6 21 23 24 25 27 35 36]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
chronic renal failure discharge condition, score: 0.11501179  
chronic renal insufficiency history of, score: 0.107022755  
chronic renal insufficiency tolerated with creatinine increase, score: 0.107022755

confidence of prediction: 0.885770  
Y\_true: [ 3 6 7 17 20 33 40 41 43 44 45 48 49]  
Y\_pred: [17 41 43 44 48 49]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
central line placed patient remained, score: 0.0572763  
temp pan cultured elevated, score: 0.041852448  
zosyn fluconazole tube feeds, score: 0.041120067



confidence of prediction: 0.933866  
Y\_true: [ 3 6 7 17 20 33 40 41 43 44 45 48 49]  
Y\_pred: [17 41 43 44 48 49]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
dobhoff tube feeds resumed after, score: 0.100089125  
fluconazole tube feeds started stooling, score: 0.06986674  
fluc tube feeds on hold, score: 0.06269041

confidence of prediction: 0.858802  
Y\_true: [ 3 6 7 17 20 33 40 41 43 44 45 48 49]  
Y\_pred: [17 41 43 44 48 49]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
patient remained intubated and sedate, score: 0.121001445  
febrile remain intubated hypertensive managed, score: 0.08876431  
fluconazole tube feeds started, score: 0.039501358

confidence of prediction: 0.521271  
Y\_true: [ 3 6 7 17 20 33 40 41 43 44 45 48 49]  
Y\_pred: [17 41 43 44 48 49]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
requiring blood transfusion postoperative, score: 0.077658355  
ligation of bleeding vessel, score: 0.07315413  
rectal bleeding noted in, score: 0.04402006

confidence of prediction: 0.875820  
Y\_true: [ 3 6 7 17 20 33 40 41 43 44 45 48 49]  
Y\_pred: [17 41 43 44 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg history of l, score: 0.47580627  
myocardial infarction a q, score: 0.0012354646  
v2 v6 which is, score: 0.0012009173

confidence of prediction: 0.566438  
Y\_true: [ 3 6 7 17 20 33 40 41 43 44 45 48 49]  
Y\_pred: [17 41 43 44 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
dvt on coumadin pvd, score: 0.3851541  
is on coumadin for, score: 0.15737134  
mg qd coumadin mg qd discharge, score: 0.14795482

confidence of prediction: 0.945711  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
anemia hypothyroidism memory loss, score: 0.52481246  
levothyroxine levoxyl mcg oral tablet, score: 0.068915956  
hyperlipidemia hypothyroidism discharge condition, score: 0.06036299

confidence of prediction: 0.858640  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
central line placed and started, score: 0.04183434  
an erythematous maculopapular rash, score: 0.028603977  
central line placement started on, score: 0.018686267

confidence of prediction: 0.997100  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib on coumadin history of, score: 0.53537023  
afib on coumadin history of, score: 0.316537  
afib with lbbb her rate, score: 0.029586077

confidence of prediction: 0.989895  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
chf and cardiogenic shock were, score: 0.20019524  
chf her cr remained, score: 0.038942568  
congestive heart failure pneumonia, score: 0.03364238

confidence of prediction: 0.532974  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
on chronic renal failure thought to, score: 0.28440264  
chronic renal failure baseline cr dyspnea, score: 0.09419926  
and potential infection which, score: 0.04161391

confidence of prediction: 0.740252  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
incorrectly most recent bp, score: 0.011196202  
having continous cognitive decline, score: 0.0059054582  
on chronic renal failure thought to, score: 0.0033147223

confidence of prediction: 0.816030  
Y\_true: [ 1 8 17 26 27 29 35 36 47 49]  
Y\_pred: [ 0 1 17 21 26 27 35 36 37 46 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on coumadin history, score: 0.6033378  
afib on coumadin history, score: 0.24846305  
fibrillation on coumadin anemia, score: 0.090998404

confidence of prediction: 0.949005  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
coronary artery bypass graft, score: 0.13227497  
descending saphenous vein graft ramus, score: 0.0923732  
saphenous vein harvest site, score: 0.08444858

confidence of prediction: 0.512096  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 14 (37.22: Left  
heart cardiac catheterization)  
cardiac catheterization coronary artery bypass, score: 0.70179003  
cardiac catheterization revealed a right, score: 0.011322888  
cardiac catheterization there was noted, score: 0.008283496

confidence of prediction: 0.678005  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line flush picc heparin, score: 0.10307103  
allergies mannitol soy [UNK] attending first, score: 0.09718946  
a colonic ileus transplant surgery, score: 0.08188023

confidence of prediction: 0.974064  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic doctor first name, score: 0.16377607  
saphenous vein harvest site, score: 0.01703008  
bypass graft x4 left, score: 0.011986663

confidence of prediction: 0.967319  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension social history mr known, score:  
0.1436354  
hypertension who was transferred, score: 0.07173569  
surgery dyslipidemia hypertension discharge condition alert, score:  
0.03327033

confidence of prediction: 0.811536  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
an nstemi he was treated, score: 0.09576567

for nstemi and was significantly, score: 0.043716308  
the lmca lcx including, score: 0.00912304

confidence of prediction: 0.982688  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg non st, score: 0.22935012  
cardiac catheterization coronary artery bypass graft x4 left, score:  
0.11865932  
coronary artery bypass graft, score: 0.046268005

confidence of prediction: 0.978031  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib and dvt dr, score: 0.27431345  
fibrillation and dvt goal, score: 0.21523884  
atrial fibrillation abdominal aortic aneurysm, score: 0.06196721

confidence of prediction: 0.768915  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute kidney injury with peak cr on and bun, score: 0.048073344  
troponin acute kidney injury post operative, score: 0.023326838  
had bun cr monitored, score: 0.005629048

confidence of prediction: 0.861927  
Y\_true: [ 4 13 14 17 18 20 22 24 26 35 38 47]  
Y\_pred: [13 14 17 18 20 22 24 26 35 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization coronary artery bypass, score: 0.8253724  
marginal saphenous vein graft, score: 0.019083116  
cardiac catheterization revealed a right, score: 0.007839886

confidence of prediction: 0.828812  
Y\_true: [ 2 10 15 20 27 30 38 40 42]  
Y\_pred: [ 2 4 27 29 30 33 38 40 42]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
with dm htn copd and chf, score: 0.09021922  
discharge medications metformin mg tablet sig, score: 0.033470094  
hypertension diabetes mellitus chronic obstructive pulmonary, score:  
0.031590614

confidence of prediction: 0.966376  
Y\_true: [ 2 10 15 20 27 30 38 40 42]  
Y\_pred: [ 2 4 27 29 30 33 38 40 42]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf exacerbation patient initially, score: 0.547021  
congestive heart failure strep, score: 0.21125689  
chf cardiac history no, score: 0.020737967

confidence of prediction: 0.653448  
Y\_true: [ 2 10 15 20 27 30 38 40 42]  
Y\_pred: [ 2 4 27 29 30 33 38 40 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
chronic obstructive pulmonary disease diverticulosis, score:  
0.02259979  
chf exacerbation patient initially, score: 0.013084184  
regardless we would not, score: 0.012915887

confidence of prediction: 0.583252  
Y\_true: [ 2 10 15 20 27 30 38 40 42]  
Y\_pred: [ 2 4 27 29 30 33 38 40 42]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
sided cardiac catheterization history of present, score: 0.011525848  
comments selective coronary angiography of this right, score:  
0.011486411  
daughter this morning the, score: 0.007843884

confidence of prediction: 0.735900  
Y\_true: [ 2 10 15 20 27 30 38 40 42]  
Y\_pred: [ 2 4 27 29 30 33 38 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was electively intubated she had, score: 0.21519388  
bp and intubated with unchanged, score: 0.15285385  
despite intubation and sedation, score: 0.048733104

confidence of prediction: 0.592229  
Y\_true: [ 2 10 15 20 27 30 38 40 42]  
Y\_pred: [ 2 4 27 29 30 33 38 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was electively intubated she had, score: 0.14638129  
sputum source endotracheal final report, score: 0.06078707  
despite intubation and sedation and, score: 0.043380544

confidence of prediction: 0.882241  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
midaz weaning of his, score: 0.013414619  
pressors on favored sepsis given low cvp and, score: 0.009169584  
line with placement of, score: 0.009022921

confidence of prediction: 0.870662  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line with placement of, score: 0.18888944  
cvl was placed he was, score: 0.109816276  
venous line arterial line, score: 0.035676017

confidence of prediction: 0.998289  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
rca both stented with des, score: 0.52924705  
coronary artery disease healthcare, score: 0.070713334  
coronary artery disease resulting, score: 0.05729463

confidence of prediction: 0.518506  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
implanted cardiac defibrillator please keep, score: 0.38793617  
cardiac arrest heart stopped requiring, score: 0.021705763  
dysfunction consistent with multi, score: 0.009956329

confidence of prediction: 0.881727  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
healthcare associated pneumonia discharge condition mental, score: 0.030393085  
for pneumonia otherwise aeration, score: 0.017962584  
for a pneumonia and should, score: 0.0077802935

confidence of prediction: 0.815511  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
intubated to protect your, score: 0.03875465  
and recent intubation a, score: 0.028497534  
discharge hypoxic respiratory failure the patient was intubated in the, score: 0.026175434

confidence of prediction: 0.503941  
Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]  
Y\_pred: [ 0 17 24 27 29 33 38 41 46]  
top three important windows for true positive code 38 (88.56: Coronary arteriography using two catheters)  
rca both stented with, score: 0.14369258  
lad and stenosis of, score: 0.10276824

cath lab he was found, score: 0.088797174

confidence of prediction: 0.620108

Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]

Y\_pred: [ 0 17 24 27 29 33 38 41 46]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

from tube feeds hct stabilized, score: 0.12999302

old blood bal showing, score: 0.040952247

a ventilator associated pneumonia hcap most, score: 0.030917848

confidence of prediction: 0.889024

Y\_true: [ 0 7 12 17 24 27 29 33 38 41 43 46]

Y\_pred: [ 0 17 24 27 29 33 38 41 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

midaz weaning of his, score: 0.03280189

pressors on favored sepsis given low cvp and, score: 0.024846416

central line after peripheral, score: 0.018089024

confidence of prediction: 0.621897

Y\_true: [ 0 7 9 16 17 20 32 35 40 41 43 46]

Y\_pred: [ 0 5 17 41 43 46]

top three important windows for true positive code 0 (038.9: Unspecified septicemia)

shock from a life, score: 0.13308482

shock and required aggressive, score: 0.08288541

spectrum antibiotics vanc zosyn clinda, score: 0.048677083

confidence of prediction: 0.758064

Y\_true: [ 0 7 9 16 17 20 32 35 40 41 43 46]

Y\_pred: [ 0 5 17 41 43 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

weaned off pressors the, score: 0.075915694

vanc zosyn clinda upon admission intraoperative, score: 0.057693284

allergies penicillins zosyn attending, score: 0.04745234

confidence of prediction: 0.933577

Y\_true: [ 0 7 9 16 17 20 32 35 40 41 43 46]

Y\_pred: [ 0 5 17 41 43 46]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

and tube feeds were started, score: 0.18690208

dobhoff tube once the patient, score: 0.08874145

high tube feed residuals and was, score: 0.044540923

confidence of prediction: 0.704486

Y\_true: [ 0 7 9 16 17 20 32 35 40 41 43 46]

Y\_pred: [ 0 5 17 41 43 46]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours or more)

dobhoff tube once the, score: 0.058823977

and tube feeds were, score: 0.042048693  
high tube feed residuals and was, score: 0.026766028

confidence of prediction: 0.926493  
Y\_true: [ 0 7 9 16 17 20 32 35 40 41 43 46]  
Y\_pred: [ 0 5 17 41 43 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
shock the left atrium, score: 0.04968495  
septic shock from a life, score: 0.02392708  
septic shock and after he, score: 0.023861367

confidence of prediction: 0.914973  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
were started hyponatremia patient had an episode of hyponatremia for  
a few days, score: 0.5060041  
venti mask 8l he, score: 0.014522296  
the renal team l, score: 0.008332332

confidence of prediction: 0.923187  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on hd copd, score: 0.09838748  
esrd on hd hd on, score: 0.09156477  
percutaneous technique hemodialysis history of, score: 0.036678236

confidence of prediction: 0.598715  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
o2 cad chf a fib, score: 0.024623346  
o2 cad chf h o borderline, score: 0.024623346  
copd on 2l home, score: 0.018750757

confidence of prediction: 0.990885  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin with pacemaker, score: 0.33603674  
atrial fibrillation on coumadin s, score: 0.053716626  
atrial fibrillation patient restarted coumadin, score: 0.0019581285

confidence of prediction: 0.943331  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)



chf an echo was, score: 0.13000754  
congestive heart failure exacerbation from volume, score:  
0.055140946  
chf likely secondary to, score: 0.035722867

confidence of prediction: 0.585916  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
obstructive pulmonary disease delirium, score: 0.20818065  
medical history copd on home o2 during, score: 0.08000974  
copd on 2l home o2, score: 0.02184943

confidence of prediction: 0.831157  
Y\_true: [ 5 19 24 26 27 30 49]  
Y\_pred: [ 2 5 19 24 26 27 29 30 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fib on coumadin with pacemaker, score: 0.73987347  
afib on coumadin with pacemaker who, score: 0.081983075  
for pain coumadin inr, score: 0.003357831

confidence of prediction: 0.736212  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
of htn hyperlipidemia gerd and ckd, score: 0.1449631  
history hypertension hyperlipidemia gerd ckd, score: 0.12400613  
in place hyperlipidemia high dose statin as, score: 0.054299902

confidence of prediction: 0.725856  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease resolved on, score: 0.21016216  
ckd with baseline cr stable, score: 0.011885272  
and ckd presents from home today, score: 0.010384188

confidence of prediction: 0.613662  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
non st elevation myocardial infact vs demand ischemia secondary,  
score: 0.041783724  
indx ctropnt 30am blood, score: 0.03355731  
inversions and st segment depressions had, score: 0.015010784

confidence of prediction: 0.832945  
Y\_true: [ 4 5 21 22 34 35 36 40 42]

Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
hyperlipidemia gerd and ckd presents from, score: 0.058084022  
as above gerd continue home ppi, score: 0.031980526  
gerd ckd with baseline, score: 0.024410134  
  
confidence of prediction: 0.670673  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
on chronic kidney disease, score: 0.12752022  
identified arf acute on chronic with, score: 0.08171571  
sepsis infection acute intracranial, score: 0.0359055  
  
confidence of prediction: 0.625447  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
chronic kidney disease resolved on, score: 0.19137494  
ckd presents from home today, score: 0.022951588  
ckd with baseline cr stable angina, score: 0.010749896  
  
confidence of prediction: 0.858543  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
neuro intubated and sedated, score: 0.20518035  
pt initially intubated for tachypnea airway protection, score: 0.15208063  
and intubated for agitation, score: 0.05160253  
  
confidence of prediction: 0.772501  
Y\_true: [ 4 5 21 22 34 35 36 40 42]  
Y\_pred: [ 0 4 21 22 29 34 35 36 40 42]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
neuro intubated and sedated pupils, score: 0.33634362  
was intubated for tachypnea, score: 0.14797828  
sedated intubated bilateral ue, score: 0.06656032  
  
confidence of prediction: 0.578714  
Y\_true: [ 2 4 6 9 10 15 20 24 25 31 33 38 41 42 46]  
Y\_pred: [15 24 25 31 38]  
top three important windows for true positive code 15 (37.23: Combined right and left heart cardiac catheterization)  
lab revealed large circ, score: 0.05329696  
cardiac cath selective coronary angiography of this, score: 0.023126153  
mid vessel with collaterals, score: 0.021281945

confidence of prediction: 0.975799

Y\_true: [ 2 4 6 9 10 15 20 24 25 31 33 38 41 42 46]

Y\_pred: [15 24 25 31 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease the, score: 0.15804374

coronary artery disease severe, score: 0.15804374

circ lesion stent placed concern, score: 0.08330648

confidence of prediction: 0.720722

Y\_true: [ 2 4 6 9 10 15 20 24 25 31 33 38 41 42 46]

Y\_pred: [15 24 25 31 38]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

severe mitral regurgitation severe systolic ventricular, score: 0.24274382

visualized portions of the, score: 0.009377517

also mitral regurgitation cardiac index was, score: 0.0079083685

confidence of prediction: 0.919882

Y\_true: [ 2 4 6 9 10 15 20 24 25 31 33 38 41 42 46]

Y\_pred: [15 24 25 31 38]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

aspiration pneumonia with [UNK] sensitive, score: 0.07151119

most likely aspiration pneumonia is stable, score: 0.022218468

hap v aspiration he was initially put, score: 0.019512594

confidence of prediction: 0.805206

Y\_true: [ 2 4 6 9 10 15 20 24 25 31 33 38 41 42 46]

Y\_pred: [15 24 25 31 38]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

iabp placement cardiac catheterization, score: 0.44407558

lab revealed large circ, score: 0.07242528

cardiac cath selective coronary angiography of this, score:

0.050600693

confidence of prediction: 0.931488

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

atorvastatin hypothyroidism continued home dose levothyroxine

allergies chlorpheniramine prn transitional, score: 0.7259679

fibrillation hypothyroid psoriasis remote kidney, score: 0.044830527

daily levothyroxine mcg capsule, score: 0.010543501

confidence of prediction: 0.733764

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

as above hld continued on atorvastatin hypothyroidism, score:  
0.08199618

warfarin mg tablet sig, score: 0.016109431  
meq by mouth once, score: 0.013657816

confidence of prediction: 0.804911

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

psoriasis remote kidney stones, score: 0.013699818

acute renal failure creatinine increased, score: 0.0073418627

on chronic kidney injury discharge condition vs, score: 0.007317439

confidence of prediction: 0.914348

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation pt remained ventricularly, score: 0.48949385

was a pleasure taking care, score: 0.013460427

irregularly irregular rhtyhm rate in, score: 0.0109084835

confidence of prediction: 0.976448

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

chf patient has low, score: 0.29082605

chronic systolic chf coronary artery disease acute, score:

0.14509864

systolic heart failure with poor forward, score: 0.039743815

confidence of prediction: 0.958713

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

and creatinine bump post procedure, score: 0.108434975

on chronic kidney injury discharge condition, score: 0.08973032

am renal failure is likely, score: 0.019915236

confidence of prediction: 0.785480

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

acute renal failure creatinine increased, score: 0.010495076

on chronic kidney injury discharge condition vs, score: 0.008716382

psoriasis remote kidney stones, score: 0.0083113825

confidence of prediction: 0.752688

Y\_true: [ 1 4 7 21 26 27 35 36 48]

Y\_pred: [ 1 4 18 21 26 27 35 36 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg in, score: 0.8080201  
patient s cabg in, score: 0.048014365  
his pacemaker was interrogated, score: 0.024152258  
  
confidence of prediction: 0.911476  
Y\_true: [ 4 10 20 26 30 37 39 49]  
Y\_pred: [ 4 20 26 37 39]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
x3 dyslipidemia copd pmr mild, score: 0.08507307  
x3 dyslipidemia copd pmr, score: 0.08507307  
inactive issues dyslipidemia continued home pravastatin copd, score:  
0.07192125  
  
confidence of prediction: 0.995279  
Y\_true: [ 4 10 20 26 30 37 39 49]  
Y\_pred: [ 4 20 26 37 39]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ar htn dvt x3, score: 0.24606122  
s atenolol hctz lisinopril low dose, score: 0.14349173  
irregularly irregular iii vi, score: 0.030775843  
  
confidence of prediction: 0.980618  
Y\_true: [ 4 10 20 26 30 37 39 49]  
Y\_pred: [ 4 20 26 37 39]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib fevers cough dysuria, score: 0.40154538  
afib prior to this, score: 0.16949949  
afib given her valvular, score: 0.15582699  
  
confidence of prediction: 0.933578  
Y\_true: [ 4 10 20 26 30 37 39 49]  
Y\_pred: [ 4 20 26 37 39]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
coli organisms ml piperacillin, score: 0.12455944  
urinary tract infection that was, score: 0.0804  
her uti and in, score: 0.0680811  
  
confidence of prediction: 0.898471  
Y\_true: [ 4 10 20 26 30 37 39 49]  
Y\_pred: [ 4 20 26 37 39]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
tee and cardioversion once, score: 0.39753252  
tee cardioversion for hypotension in, score: 0.28118017  
tee and cardioversion she says, score: 0.26462644  
  
confidence of prediction: 0.674611

Y\_true: [ 6 7 9 17 20 29 32]

Y\_pred: [ 9 17 29]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

was resumed thrombocytopenia most likely, score: 0.2659133

anticoagulation and thrombocytopenia no evidence, score: 0.22806041

cancer secondary thrombocytopenia low platelets discharge condition,  
score: 0.19598317

confidence of prediction: 0.797901

Y\_true: [ 6 7 9 17 20 29 32]

Y\_pred: [ 9 17 29]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

line was placed given, score: 0.17228974

the picc line you, score: 0.04879408

and a picc line was placed so, score: 0.04314468

confidence of prediction: 0.863620

Y\_true: [ 6 7 9 17 20 29 32]

Y\_pred: [ 9 17 29]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

healthcare associated pneumonia prostate cancer, score: 0.04077035

myelos promyelo nuc rbcs, score: 0.018769009

to have pneumonia you underwent tests, score: 0.011955242

confidence of prediction: 0.956988

Y\_true: [ 5 7 17 35 41]

Y\_pred: [ 5 7 9 17 33 37 41]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

was also hyponatremic to her inr was, score: 0.106902845

the 50s hyponatremia patient was hyponatremic on admission likely  
secondary, score: 0.0505102

cmo with morphine iv, score: 0.0075697647

confidence of prediction: 0.513476

Y\_true: [ 5 7 17 35 41]

Y\_pred: [ 5 7 9 17 33 37 41]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

from intraperitoneal bleed likely, score: 0.18484697

possible bleeding vessel on, score: 0.080454096

had intraperitoneal bleed platelets, score: 0.06321205

confidence of prediction: 0.885386

Y\_true: [ 5 7 17 35 41]

Y\_pred: [ 5 7 9 17 33 37 41]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

placement dobhoff placement paracentesis history of, score:  
0.4387567

question s 42pm blood, score: 0.0854166

on smear with elevated, score: 0.02009605

confidence of prediction: 0.861307

Y\_true: [ 5 7 17 35 41]

Y\_pred: [ 5 7 9 17 33 37 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

once tube feeds were started the, score: 0.07057106

syndrome creatinine normalized after, score: 0.035758927

salmonella shigella campylobacter no c, score: 0.017264495

confidence of prediction: 0.568385

Y\_true: [ 9 26]

Y\_pred: [ 9 19 26]

top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)

her stay thrombocytopenia likely related, score: 0.40275088

virus infection thrombocytopenia discharge condition, score: 0.103022896

lamivudine norvir renvela bactrim ds, score: 0.02505319

confidence of prediction: 0.978612

Y\_true: [ 9 26]

Y\_pred: [ 9 19 26]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation with rapid ventricular, score: 0.10868423

hypotension major surgical or, score: 0.0010076519

to be certain of, score: 0.0008633939

confidence of prediction: 0.961859

Y\_true: [19 46]

Y\_pred: [17 19]

top three important windows for true positive code 19 (39.95: Hemodialysis)

to hemodialysis catheter infection, score: 0.07593427

temporary hemodialysis catheter to tunneled hemodialysis catheter the, score: 0.057574034

temporary hemodialysis catheter with, score: 0.0446246

confidence of prediction: 0.675764

Y\_true: [ 0 8 9 17 20 27 29 37]

Y\_pred: [ 0 9 20 37 46]

top three important windows for true positive code 0 (038.9: Unspecified septicemia)

and broad spectrum antibiotics, score: 0.12468997

she received fluid resuscitation, score: 0.100573674

received 3u prbcs at, score: 0.04537759

confidence of prediction: 0.862154

Y\_true: [ 0 8 9 17 20 27 29 37]

Y\_pred: [ 0 9 20 37 46]

top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)

to have thrombocytopenia after receiving lovenox, score: 0.26342735  
thrombus anemia thrombocytopenia ischemic cardiomyopathy, score:  
0.17551686  
rehab anemia thrombocytopenia this was, score: 0.1448255

confidence of prediction: 0.896269  
Y\_true: [ 0 8 9 17 20 27 29 37]  
Y\_pred: [ 0 9 20 37 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
osh records htn osteoporosis uterine, score: 0.23319149  
subsequently thr htn and osteoporosis who, score: 0.096080236  
and thr htn and osteoporosis who, score: 0.034100402

confidence of prediction: 0.962855  
Y\_true: [ 0 8 9 17 20 27 29 37]  
Y\_pred: [ 0 9 20 37 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks mod 51am urine rbc, score: 0.5070967  
a proteus uti at the osh, score: 0.060898192  
her coagulopathy uti found to have, score: 0.015631864

confidence of prediction: 0.783610  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic meeting sirs criteria with tachycardia, score: 0.11786245  
myelos 25pm hypochrom anisocyt, score: 0.06627644  
support with levophed intubated, score: 0.0500586

confidence of prediction: 0.914251  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous line placement x2 peg, score: 0.25839895  
line placement picc placement and removal, score: 0.14008115  
line in the left, score: 0.020117205

confidence of prediction: 0.918772  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib pt was in, score: 0.37121192  
fib most likely secondary to, score: 0.115373254  
atrial fibrillation discharge condition fair, score: 0.09137048

confidence of prediction: 0.702066  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 33 (518.81: Acute



respiratory failure)  
respiratory failure secondary metastatic, score: 0.16670336  
intubated imaging cxr infectious, score: 0.086480506  
initially intubated through his, score: 0.07003303

confidence of prediction: 0.607034  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
acute renal failure pt s, score: 0.16833195  
to be pre renal most likely secondary, score: 0.012773827  
recorded as having no, score: 0.01114212

confidence of prediction: 0.842803  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
was intubated through his, score: 0.0899819  
was initially intubated through his, score: 0.062009193  
was intubated and septic, score: 0.033624034

confidence of prediction: 0.700538  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
and tube feeds were ordered, score: 0.2145176  
on tube feeds via ngt, score: 0.113613375  
trach requiring [UNK] after, score: 0.019972855

confidence of prediction: 0.713926  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 44 (99.04: Transfusion of packed cells)  
and was transfused 2u of prbcs and then another, score: 0.039937403  
addition unit prbc for a, score: 0.030571641  
and finally pressure support, score: 0.01612632

confidence of prediction: 0.955517  
Y\_true: [ 0 1 16 17 26 32 33 35 39 40 41 43 44 46]  
Y\_pred: [ 0 17 26 29 33 35 40 41 42 44 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
myelos 25pm hypochrom anisocyt, score: 0.09215624  
support with levophed intubated, score: 0.063650444  
septic meeting sirs criteria with tachycardia, score: 0.05408404

confidence of prediction: 0.951577  
Y\_true: [ 4 14 20 24 27 34 38]  
Y\_pred: [ 4 20 24 34 38]  
top three important windows for true positive code 4 (272.4: Other

and unspecified hyperlipidemia)  
hyperlipidemia cholesterol level cad died, score: 0.23934327  
factors hyperlipidemia hypertension no history, score: 0.08418486  
hyperlipidemia admitted s p, score: 0.055965036

confidence of prediction: 0.880275  
Y\_true: [ 4 14 20 24 27 34 38]  
Y\_pred: [ 4 20 24 34 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
and hyperlipidemia admitted s, score: 0.07155232  
lad in htn and hyperlipidemia who presents, score: 0.051006436  
arterial systolic hypertension with, score: 0.0318045

confidence of prediction: 0.997329  
Y\_true: [ 4 14 20 24 27 34 38]  
Y\_pred: [ 4 20 24 34 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad cad s p emergent cardiac, score: 0.22254501  
s p pci with, score: 0.114651546  
cardiac catheterization with bare metal stent to, score: 0.07490404

confidence of prediction: 0.715463  
Y\_true: [ 4 14 20 24 27 34 38]  
Y\_pred: [ 4 20 24 34 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
for acid reflux valsartan mg tablet sig, score: 0.0775768  
gerd h o spinal, score: 0.017894756  
prn sob singulair 10mg, score: 0.017020052

confidence of prediction: 0.840127  
Y\_true: [ 4 14 20 24 27 34 38]  
Y\_pred: [ 4 20 24 34 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with bare metal stent, score: 0.3706414  
cath lab she was on, score: 0.024963493  
lad she was loaded, score: 0.024770122

confidence of prediction: 0.890327  
Y\_true: [ 1 2 3 30 34]  
Y\_pred: [ 1 2 30 34]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
neurontin levothyroxine [UNK] prn prilosec [UNK], score: 0.039312553  
diet hypothyroidism continue levothyroxine gerd omeprazole f, score:  
0.028935147  
autoimmune hypothyroidism s p gastric, score: 0.024164015

confidence of prediction: 0.926874  
Y\_true: [ 1 2 3 30 34]  
Y\_pred: [ 1 2 30 34]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
issues niddm continue metformin insulin sliding scale, score:  
0.06481404  
of niddm copd autoimmune hypothyroidism, score: 0.03917704  
number metformin neurontin levothyroxine, score: 0.016409868

confidence of prediction: 0.757867

Y\_true: [ 1 2 3 30 34]

Y\_pred: [ 1 2 30 34]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
morbid obesity copd and hypogammaglobulinemia who was, score:  
0.5982771  
mg prn copd continue albuterol singulair prednisone, score:  
0.08142393  
djd back psh s, score: 0.001571998

confidence of prediction: 0.788757

Y\_true: [ 1 2 3 30 34]

Y\_pred: [ 1 2 30 34]

top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
levothyroxine gerd omeprazole f e, score: 0.1792802  
orthopaedics allergies sulfa sulfonamides, score: 0.024739275  
[UNK] prn prilosec [UNK], score: 0.0157445

confidence of prediction: 0.857561

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes type ii hypertension back, score: 0.58916044  
lantus 38units amitriptyline 150mg qhs, score: 0.0728106  
home diabetes htn hyperlipidemia pulmonary htn, score: 0.023890562

confidence of prediction: 0.684497

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
diabetes htn hyperlipidemia pulmonary htn h o, score: 0.13480024  
dm htn hl h o dvt not, score: 0.08628667  
38units amitriptyline 150mg qhs soma 350mg, score: 0.055409893

confidence of prediction: 0.936214

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
with hypoxemia hyponatremia uti bacterial, score: 0.38902697  
sodium levels hyponatremia and breathign difficulties the, score:

0.36660582

had gained 4lbs over, score: 0.005374509

confidence of prediction: 0.862138

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

38units amitriptyline 150mg qhs, score: 0.09075028

ethacrynic acid 50mg po, score: 0.06477655

dm htn hl h o, score: 0.055489495

confidence of prediction: 0.846973

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation one episode of, score: 0.12148714

af after diuresis in, score: 0.10815413

atrial fibrillation diabetes type, score: 0.060305215

confidence of prediction: 0.944647

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

congestive heart failure diastolic acute on chronic, score:

0.034772564

of chf copd on 2l nc, score: 0.01763843

history chf copd on 2l nc, score: 0.012579689

confidence of prediction: 0.936661

Y\_true: [ 2 4 5 8 17 20 26 27 37]

Y\_pred: [ 2 4 5 20 26 27 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

[UNK] urinary tract infection [UNK] e, score: 0.035639055

final escherichia coli organisms ml presumptive, score: 0.016532404

final escherichia coli organisms ml identification, score:

0.016532404

confidence of prediction: 0.767494

Y\_true: [ 9 11 20 33 35]

Y\_pred: [11 17 26 29 33 35]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

htn depression glaucoma insomnia social history, score: 0.29173714

un depression continued on home lexapro, score: 0.12601735

issues glaucoma continued on, score: 0.010832281

confidence of prediction: 0.570622

Y\_true: [ 9 11 20 33 35]

Y\_pred: [11 17 26 29 33 35]

top three important windows for true positive code 33 (518.81: Acute

respiratory failure)  
hypoxemic respiratory failure on 4l, score: 0.4422756  
sob and hypoxia likely, score: 0.06569264  
pneumonia aveolar hemorrhage or, score: 0.010549377

confidence of prediction: 0.829601  
Y\_true: [ 9 11 20 33 35]  
Y\_pred: [11 17 26 29 33 35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
pre renal etiology cr trended over, score: 0.07141813  
ovalocy occasional ellipto occasional 50am, score: 0.049432665  
course renal consult as above, score: 0.0257175

confidence of prediction: 0.984671  
Y\_true: [ 8 9 17 20 35]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
above osteoporosis hypertension social history originally, score: 0.08158464  
hypotensive while she was, score: 0.04084831  
aorta interpretation baseline images, score: 0.023733286

confidence of prediction: 0.528621  
Y\_true: [ 2 20 26 37 49]  
Y\_pred: [ 2 20 26 49]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
type ii iddm htn atrial fibrillation, score: 0.117883146  
novolin nph units hospital1 riss warfarin, score: 0.0704893  
diabetes who was admitted, score: 0.03089417

confidence of prediction: 0.931407  
Y\_true: [ 2 20 26 37 49]  
Y\_pred: [ 2 20 26 49]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
coumadin hypertension diabetes who was admitted, score: 0.11430088  
ii iddm htn atrial fibrillation with, score: 0.06401716  
on coumadin hypertension diabetes who was admitted, score: 0.025282811

confidence of prediction: 0.956109  
Y\_true: [ 2 20 26 37 49]  
Y\_pred: [ 2 20 26 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation remained well controlled, score: 0.3792958  
fibrillation pulmonary embolism hypertension, score: 0.11153722  
atrial fibrillation with h o, score: 0.08120838

confidence of prediction: 0.676324

Y\_true: [ 2 20 26 37 49]  
Y\_pred: [ 2 20 26 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
pe on coumadin hypertension, score: 0.09270384  
was held coumadin 3mg, score: 0.086533174  
it work warfarin changes, score: 0.08040703

confidence of prediction: 0.864704  
Y\_true: [ 2 4 8 17 20 31 34 48]  
Y\_pred: [ 2 4 20 31 34 48]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
ef dm maintained on insulin sliding, score: 0.051859494  
cabg diabetes recently stopped glyburide and metformin per his, score: 0.044705704  
cad dm hx of, score: 0.039256588

confidence of prediction: 0.888514  
Y\_true: [ 2 4 8 17 20 31 34 48]  
Y\_pred: [ 2 4 20 31 34 48]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
metop hospital1 hl continued rosuvastatin 5mg, score: 0.12436544  
10g 15ml [UNK] as, score: 0.08650372  
pvd nos hl social history social history, score: 0.07367458

confidence of prediction: 0.816859  
Y\_true: [ 2 4 8 17 20 31 34 48]  
Y\_pred: [ 2 4 20 31 34 48]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
secondary htn hl aortic stenosis, score: 0.13527961  
non coronary study date, score: 0.08709186  
controlled htn continued lasix 20mg, score: 0.079954006

confidence of prediction: 0.932515  
Y\_true: [ 2 4 8 17 20 31 34 48]  
Y\_pred: [ 2 4 20 31 34 48]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
pneumonia aspiration active issues aspiration pneumonia with strep viridans, score: 0.1331011  
v aspiration pna he was, score: 0.08491124  
dislocation aspiration pneumonia demand ischemia, score: 0.080424406

confidence of prediction: 0.972004  
Y\_true: [ 2 4 8 17 20 31 34 48]  
Y\_pred: [ 2 4 20 31 34 48]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
5mg daily gerd continued omeprazole 20mg daily, score: 0.01746893  
with with fent versed hip successfully, score: 0.007744348

line insertion history of, score: 0.0052275397

confidence of prediction: 0.803881

Y\_true: [ 2 4 8 17 20 31 34 48]

Y\_pred: [ 2 4 20 31 34 48]

top three important windows for true positive code 48 (V45.81: Aortocoronary bypass status)

s p cabg l tha, score: 0.6555701

status post cabg with stable size, score: 0.22084036

hx of cabg in cad dm, score: 0.036982372

confidence of prediction: 0.887589

Y\_true: [15 24 25 26 29 31 33 38 41 43]

Y\_pred: [26 31 41]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib per report and patient, score: 0.7560949

afib his trop i, score: 0.045971174

atrial fibrillation per ems report, score: 0.022537846

confidence of prediction: 0.847022

Y\_true: [15 24 25 26 29 31 33 38 41 43]

Y\_pred: [26 31 41]

top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)

pna vs aspiration pneumonitis patient was started, score: 0.07625201

abnormal video eeg study due to, score: 0.022082249

confidence of prediction: 0.543008

Y\_true: [15 24 25 26 29 31 33 38 41 43]

Y\_pred: [26 31 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

of trach peg placement patient, score: 0.04749173

all sedation anoxic brain, score: 0.045598753

routine eeg due to, score: 0.030647764

confidence of prediction: 0.691781

Y\_true: [ 1 4 7 20 26 37]

Y\_pred: [ 1 4 7 20 26 49]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

fibrillation hypothyroidism arthritis hyperlipidemia osteopenia, score: 0.32233325

daily hypothyroidism stable she was, score: 0.16630433

mondays levoxyl mcg a day, score: 0.09461953

confidence of prediction: 0.931268

Y\_true: [ 1 4 7 20 26 37]

Y\_pred: [ 1 4 7 20 26 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

hypothyroidism arthritis hyperlipidemia osteopenia hypertension psh tah social, score: 0.08772735

for pain hyperlipidemia stable she was continued, score: 0.022152891  
htn who presents with, score: 0.014751077

confidence of prediction: 0.715251

Y\_true: [ 1 4 7 20 26 37]

Y\_pred: [ 1 4 7 20 26 49]

top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

given persistent bleed hypoxemia she, score: 0.33621693

and her hematocrits were, score: 0.0444448

daily kcl meq a, score: 0.027342102

confidence of prediction: 0.995138

Y\_true: [ 1 4 7 20 26 37]

Y\_pred: [ 1 4 7 20 26 49]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

home atorvastatin hypertension normotensive she received, score:

0.21621816

hyperlipidemia osteopenia hypertension psh tah social history,

score: 0.07908231

on coumadin htn who presents with, score: 0.06646531

confidence of prediction: 0.988162

Y\_true: [ 1 4 7 20 26 37]

Y\_pred: [ 1 4 7 20 26 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

fib on coumadin htn, score: 0.41018167

afib rate controlled in, score: 0.06831226

atrial fibrillation rate controlled was, score: 0.024117464

confidence of prediction: 0.748360

Y\_true: [ 7 9 12 18 26 27 30 39 41 43 49]

Y\_pred: [12 17 18 26 33 40 41 43]

top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)

tube and percutaneous endoscopic, score: 0.030156441

staph aureus bronchoalveolar lavage gram stain final, score:

0.028670415

underwent a bronchoscopy for, score: 0.02858501

confidence of prediction: 0.958642

Y\_true: [ 7 9 12 18 26 27 30 39 41 43 49]

Y\_pred: [12 17 18 26 33 40 41 43]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

cardiothoracic allergies no known, score: 0.024434457

tee was performed in, score: 0.009269746

washing incisions gently with mild soap, score: 0.009029759

confidence of prediction: 0.975571

Y\_true: [ 7 9 12 18 26 27 30 39 41 43 49]

Y\_pred: [12 17 18 26 33 40 41 43]



top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation coumadin was restarted, score: 0.25704387  
tolerated long periods with, score: 0.0037523953  
chronic atrial fibrillation aortic stenosis dilated, score:  
0.002996097

confidence of prediction: 0.881686  
Y\_true: [ 7 9 12 18 26 27 30 39 41 43 49]  
Y\_pred: [12 17 18 26 33 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
associated pneumonia once sensitivities, score: 0.047007825  
tracheostomy tube and percutaneous endoscopic gastrostomy tube picc,  
score: 0.041073553  
tolerates trach collar for hours, score: 0.033361174

confidence of prediction: 0.947487  
Y\_true: [ 7 9 12 18 26 27 30 39 41 43 49]  
Y\_pred: [12 17 18 26 33 40 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
tube and percutaneous endoscopic, score: 0.09023446  
a sputum culture at, score: 0.03677718  
for ventilator associated pneumonia once sensitivities, score:  
0.03270345

confidence of prediction: 0.602141  
Y\_true: [ 2 4 8 17 21 27 34]  
Y\_pred: [ 4 21 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
being bedridden hyperlipidemia continue simvastatin asthma chronic  
stable continue, score: 0.05281688  
hctz hypophosphatemia neutrophos [UNK], score: 0.027098494  
unclear etiology dyslipidemia sacral decubitus ulcer, score:  
0.018515589

confidence of prediction: 0.783707  
Y\_true: [ 2 4 8 17 21 27 34]  
Y\_pred: [ 4 21 27]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease stage previous, score: 0.06807165  
obesity hypertension colostomy for, score: 0.018324515  
insulin chronic kidney disease stage baseline cr, score: 0.011481339

confidence of prediction: 0.988392  
Y\_true: [ 2 4 8 17 21 27 34]  
Y\_pred: [ 4 21 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

diastolic heart failure repeat, score: 0.2192262  
diastolic heart failure lasix diabetes mellitus, score: 0.2192262  
diastolic heart failure ef diabetes mellitus, score: 0.2192262

confidence of prediction: 0.795172  
Y\_true: [ 3 6 10 16 17 22 29 30 33 43]  
Y\_pred: [ 4 20 22 24 33 40 42]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
event cad nstemi on arrival now, score: 0.03951534  
non st elevation myocardial infarction obstructive, score: 0.03281409  
a nstemi a combination of pumunary, score: 0.014026824

confidence of prediction: 0.835394  
Y\_true: [ 3 6 10 16 17 22 29 30 33 43]  
Y\_pred: [ 4 20 22 24 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure he, score: 0.11280939  
hypercarbic respiratory failure and, score: 0.108902104  
hypercarbic respiratory failure non, score: 0.10450007

confidence of prediction: 0.849259  
Y\_true: [ 4 7 16 17 33 41 43]  
Y\_pred: [ 7 12 17 41 43]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia hospital acquired pneumonia, score: 0.6581594  
hd11 bilateral pneumothoraces [UNK] and, score: 0.024236277  
[UNK] by horses earlier today, score: 0.019552367

confidence of prediction: 0.902943  
Y\_true: [ 4 7 16 17 33 41 43]  
Y\_pred: [ 7 12 17 41 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
6k her picc line was, score: 0.047607195  
placed on hd6 for pulmonary, score: 0.043108318  
on hd3 a bronchoalveolar lavage was, score: 0.02898847

confidence of prediction: 0.930943  
Y\_true: [ 4 7 16 17 33 41 43]  
Y\_pred: [ 7 12 17 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
a dobbhoff feeding tube was placed on, score: 0.066605315  
her feeding tube has been, score: 0.029332746  
ventilator associated pneumonia and completed, score: 0.015837517

confidence of prediction: 0.709741  
Y\_true: [ 4 7 16 17 33 41 43]  
Y\_pred: [ 7 12 17 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours

or more)  
 her ventilator associated pneumonia and completed, score:  
 0.029538188  
 bone and collapsed lungs, score: 0.02880364  
 temporoparietal sah nonoperative management, score: 0.02766644  
  
 confidence of prediction: 0.932999  
 Y\_true: [ 2 4 49]  
 Y\_pred: [4]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 significant for hld mild dm and, score: 0.10191708  
 medical history hyperlipidemia [UNK] dvt in which, score:  
 0.057892162  
 simvastatin mg tablet one, score: 0.0077799  
  
 confidence of prediction: 0.667199  
 Y\_true: [12 20 31 33 40 41 42 43]  
 Y\_pred: [ 4 12 20 31 40 41 43]  
 top three important windows for true positive code 12 (33.24: Closed  
 [endoscopic] biopsy of bronchus)  
 had a bal that was, score: 0.14996994  
 aeruginosa by bal on that, score: 0.06559814  
 a tracheostomy and peg tube you, score: 0.049209137  
  
 confidence of prediction: 0.987677  
 Y\_true: [12 20 31 33 40 41 42 43]  
 Y\_pred: [ 4 12 20 31 40 41 43]  
 top three important windows for true positive code 20 (401.9:  
 Unspecified essential hypertension)  
 s disease htn hld s p right, score: 0.160498  
 history of htn hld and prior, score: 0.055013523  
  
 confidence of prediction: 0.916535  
 Y\_true: [12 20 31 33 40 41 42 43]  
 Y\_pred: [ 4 12 20 31 40 41 43]  
 top three important windows for true positive code 31 (507.0:  
 Pneumonitis due to inhalation of food or vomitus)  
 developed aspiration pna as above stop, score: 0.08520496  
 infarct aspiration pna oa s p, score: 0.031674985  
 c w aspiration pneumonitis patient then, score: 0.009625287  
  
 confidence of prediction: 0.922988  
 Y\_true: [12 20 31 33 40 41 42 43]  
 Y\_pred: [ 4 12 20 31 40 41 43]  
 top three important windows for true positive code 40 (96.04:  
 Insertion of endotracheal tube)  
 made to intubate cxr showed, score: 0.08681387  
 with prompting cranial nerves, score: 0.06391475  
 tolerate trach collar oxygen, score: 0.016774995  
  
 confidence of prediction: 0.829979  
 Y\_true: [12 20 31 33 40 41 42 43]  
 Y\_pred: [ 4 12 20 31 40 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
tolerate trach collar oxygen flow, score: 0.11726673  
tube feeds and have, score: 0.06656429  
and peg tube you, score: 0.04518936

confidence of prediction: 0.932344  
Y\_true: [12 20 31 33 40 41 42 43]  
Y\_pred: [ 4 12 20 31 40 41 43]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
tolerate trach collar oxygen, score: 0.06446299  
tracheostomy and peg tube you, score: 0.051261846  
and peg placement on, score: 0.041635476

confidence of prediction: 0.605295  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 0 (038.9: Unspecified septicemia)  
urosepsis she has mild, score: 0.017313913  
on a levophed gtt, score: 0.01383711  
concerning for sepsis in setting fever leukocytosis, score: 0.012306529

confidence of prediction: 0.824031  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
diabetes type managed with insulin, score: 0.29750034  
htn pvd dm2 diet controlled hiatal hernia, score: 0.011981252  
dm2 htn and pvd who, score: 0.011920295

confidence of prediction: 0.968656  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
x in htn pvd dm2 diet controlled, score: 0.093222454  
stable secondary hypertension discharge, score: 0.038084835  
htn dm2 htn and pvd who presented, score: 0.036895953

confidence of prediction: 0.673357  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi in w pci x, score: 0.553321  
sl mg sl prn, score: 0.015831104  
sl mg sl prn chest, score: 0.015831104

confidence of prediction: 0.876463  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p mi in w pci x plavix and, score:  
0.04096557  
cad s p pci x in, score: 0.025231142  
of cad htn dm2, score: 0.015245604

confidence of prediction: 0.830821  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
of paroxetine gerd continued home dose of, score: 0.023958398  
in depression gerd schatzki rings hiatal hernia acalculous, score:  
0.01764288  
the neurology consult recommended, score: 0.008733133

confidence of prediction: 0.876366  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection ceftriaxone started, score: 0.1857344  
urinary tract infection hyponatremia resolved, score: 0.1220941  
a urinary tract infection abnormal lab, score: 0.058033347

confidence of prediction: 0.790057  
Y\_true: [ 0 2 11 20 23 24 34 37 42]  
Y\_pred: [ 0 2 5 20 23 24 34 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
general intubated and sedated, score: 0.13611892  
and intubated with etomidate, score: 0.053320188  
and ventilation right internal, score: 0.040256828

confidence of prediction: 0.700436  
Y\_true: [ 4 17 21 28 30 35 36 47 49]  
Y\_pred: [ 2 17 20 29 35 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
rij triple lumen catheter and a 20g, score: 0.017629996  
stations 4l 4r and 11r, score: 0.016832393  
rubs gallops abdomen soft, score: 0.012447173

confidence of prediction: 0.591996  
Y\_true: [ 4 17 21 28 30 35 36 47 49]  
Y\_pred: [ 2 17 20 29 35 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute kidney injury lung adenocarcinoma, score: 0.11852535

a whiskey a month, score: 0.058493353  
hemodynamically compromising arf thought to be prerenal in the,  
score: 0.03132184

confidence of prediction: 0.601796  
Y\_true: [ 4 17 21 28 30 35 36 47 49]  
Y\_pred: [ 2 17 20 29 35 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
pt on warfarin for dx of, score: 0.64555234  
elephantiasis hyperlipidemia oncologic history presented, score: 0.038093057  
of gib warfarin held and initially, score: 0.03765308

confidence of prediction: 0.959333  
Y\_true: [ 7 12 26 27 34 47]  
Y\_pred: [26 27]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation tte at, score: 0.11406746  
fibrillation chronic cough and, score: 0.066143155  
afib presents from cardiology, score: 0.050588705

confidence of prediction: 0.965146  
Y\_true: [ 7 12 26 27 34 47]  
Y\_pred: [26 27]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
systolic heart failure with a left, score: 0.19113025  
systolic congestive heart failure discharge condition mental, score: 0.041914772  
afib daughter with breast, score: 0.0038909367

confidence of prediction: 0.501723  
Y\_true: [ 1 8 12 17 35]  
Y\_pred: [ 1 12]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
pre hypothyroidism pulmonary fibrosis, score: 0.19077966  
levothyroxine sodium mcg tabs tab, score: 0.14909737  
levothyroxine mcg tablet sig, score: 0.06597329

confidence of prediction: 0.986787  
Y\_true: [ 1 8 12 17 35]  
Y\_pred: [ 1 12]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
following bronch bal negative for pcp, score: 0.0154336495  
smear pm bronchoalveolar lavage bronchial lavage r o, score: 0.007764661  
detect cryptosporidium cyclospora or, score: 0.0024706381

confidence of prediction: 0.979523  
Y\_true: [ 5 26 27 34 47 49]

Y\_pred: [26 34]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib aflutter atrial fibrillation aflutter hemodynamically stable,  
score: 0.26866934  
afib with rates 150s, score: 0.19251628  
afib has been difficult, score: 0.090940855

confidence of prediction: 0.889415  
Y\_true: [ 5 26 27 34 47 49]  
Y\_pred: [26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
prn acid reflux diltia xt mg capsule, score: 0.10142891  
diagnosed osteopenia gerd bppv cataracts s p, score: 0.025764  
reflux toprol xl mg, score: 0.004769956

confidence of prediction: 0.676875  
Y\_true: [ 2 4 25 26 27 35 39 49]  
Y\_pred: [ 2 4 20 25 26 27 35 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
acarbose glyburide metformin and pioglitazone with, score:  
0.114404485  
pre dm patient was continued on, score: 0.113267235  
metformin was held diuresis, score: 0.075494595

confidence of prediction: 0.894018  
Y\_true: [ 2 4 25 26 27 35 39 49]  
Y\_pred: [ 2 4 20 25 26 27 35 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
clinic inactive hld patient was continued, score: 0.15693526  
daily sitagliptin januvia mg tablet tablet, score: 0.09586821  
factors diabetes dyslipidemia hypertension cardiac history, score:  
0.09414002

confidence of prediction: 0.588598  
Y\_true: [ 2 4 25 26 27 35 39 49]  
Y\_pred: [ 2 4 20 25 26 27 35 49]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
moderate mitral regurgitation is seen, score: 0.038944494  
moderate mitral regurgitation tte moderate to, score: 0.03484722  
mitral valve repair and, score: 0.034597706

confidence of prediction: 0.989592  
Y\_true: [ 2 4 25 26 27 35 39 49]  
Y\_pred: [ 2 4 20 25 26 27 35 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin pulmonary, score: 0.5519741  
atrial fibrillation on warfarin cervical, score: 0.051691595

afib patient s coumadin regimen, score: 0.05028742

confidence of prediction: 0.910170

Y\_true: [ 2 4 25 26 27 35 39 49]

Y\_pred: [ 2 4 20 25 26 27 35 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic heart failure marked elevation in, score: 0.47107056

congestive heart failure atrial fibrillation discharge, score:  
0.077935554

hypertension heart failure omeprazole, score: 0.035705186

confidence of prediction: 0.867432

Y\_true: [ 2 4 25 26 27 35 39 49]

Y\_pred: [ 2 4 20 25 26 27 35 49]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

persistant ectopy arf during diuresis cr rose, score: 0.026879555

bun cr mg discharge disposition, score: 0.00804888

thursday at 11am telephone, score: 0.0077647795

confidence of prediction: 0.741275

Y\_true: [ 2 4 25 26 27 35 39 49]

Y\_pred: [ 2 4 20 25 26 27 35 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)

afib on coumadin pulmonary, score: 0.53184456

fibrillation on warfarin cervical, score: 0.3081837

a day warfarin mg, score: 0.039464667

confidence of prediction: 0.992191

Y\_true: [19 23 24 26 32 37 42 49]

Y\_pred: [19 23 26 37 40 49]

top three important windows for true positive code 19 (39.95:  
Hemodialysis)

imaging hd esrd receives dialysis m w, score: 0.031711843

dependent esrd who initially, score: 0.016875664

initiation of hd prior, score: 0.007915003

confidence of prediction: 0.682509

Y\_true: [19 23 24 26 32 37 42 49]

Y\_pred: [19 23 26 37 40 49]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)

administered to reverse the inr, score: 0.008366675

medical history cad s p mi htn a, score: 0.0054128766

cad prior stroke esrd discharge, score: 0.0015205377

confidence of prediction: 0.983487

Y\_true: [19 23 24 26 32 37 42 49]

Y\_pred: [19 23 26 37 40 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

afib w rvr and, score: 0.14235379



afib htn cad prior, score: 0.07198834  
afib she was started, score: 0.044921562

confidence of prediction: 0.878073  
Y\_true: [19 23 24 26 32 37 42 49]  
Y\_pred: [19 23 26 37 40 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks mod 55am urine color, score: 0.18394226  
urinary tract infection which could, score: 0.1830402  
of uti is complete, score: 0.04464542

confidence of prediction: 0.837211  
Y\_true: [19 23 24 26 32 37 42 49]  
Y\_pred: [19 23 26 37 40 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fib on coumadin prior, score: 0.8737942  
on admission coumadin mg, score: 0.019869197  
a day coumadin mg, score: 0.017475657

confidence of prediction: 0.788231  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
afib chads2 psh colonoscopy, score: 0.010681792  
htn ugib h pylori gastritis s, score: 0.007552586  
pmh cva htn hl obesity depression glaucoma arf, score: 0.0047804243

confidence of prediction: 0.803239  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
hl obesity depression glaucoma arf, score: 0.09548934  
comfortable sleeping in bed neck, score: 0.00727106  
polymorphonuclear leukocytes few red, score: 0.00689107

confidence of prediction: 0.810432  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous access line indicates position, score: 0.39391539  
cvl was placed for more, score: 0.09371014  
[UNK] lij cvl in place lungs cta, score: 0.044462375

confidence of prediction: 0.997740  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pmh cva htn hl obesity depression glaucoma, score: 0.2122618

difficile secondary htn ugib h pylori, score: 0.018339995  
failure baseline creatinine was, score: 0.0106412815

confidence of prediction: 0.992435  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation was held and, score: 0.006244807  
atrial fibrillation was resumed at, score: 0.006244807  
chronic afib chads2 psh colonoscopy, score: 0.0033098473

confidence of prediction: 0.869042  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
discharge arf was resolved discharge disposition, score: 0.08240111  
depression glaucoma arf this past, score: 0.07982803  
levophed gen nads comfortable, score: 0.024042146

confidence of prediction: 0.648540  
Y\_true: [ 4 11 16 17 20 25 26 35 49]  
Y\_pred: [ 4 11 17 20 26 27 35 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib chads2 psh colonoscopy, score: 0.13808726  
a day warfarin mg, score: 0.10763784  
s home coumadin prophylaxis, score: 0.08255926

confidence of prediction: 0.995297  
Y\_true: [ 3 20]  
Y\_pred: [20]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history htn social history lives at, score: 0.15443344  
daily moexipril hctz 25mg daily simvastatin, score: 0.07227842  
history of hypertension who has been, score: 0.0618563

confidence of prediction: 0.970179  
Y\_true: [ 7 9 13 15 18 20 24 26 27 34 37 38]  
Y\_pred: [18 20 24 26 27 49]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies codeine vicodin, score: 0.14751337  
prebypass no spontaneous echo, score: 0.0097478675  
washing incisions gently with mild soap, score: 0.007964302

confidence of prediction: 0.956757  
Y\_true: [ 7 9 13 15 18 20 24 26 27 34 37 38]  
Y\_pred: [18 20 24 26 27 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
aortic endarterectomy hypertension moderate aortic stenosis, score:

0.15108454

echo in htn lvh who presents, score: 0.0467878

htn who presented with, score: 0.042437047

confidence of prediction: 0.829028

Y\_true: [ 7 9 13 15 18 20 24 26 27 34 37 38]

Y\_pred: [18 20 24 26 27 49]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

hospital1 sl nitro prn, score: 0.15707922

om3 om3 has a large, score: 0.07232942

vd on cath she, score: 0.034424953

confidence of prediction: 0.988467

Y\_true: [ 7 9 13 15 18 20 24 26 27 34 37 38]

Y\_pred: [18 20 24 26 27 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

fib on coumadin coronary artery, score: 0.7915877

afib tablet po once, score: 0.11164342

markedly decreased lvef likely, score: 0.0015611751

confidence of prediction: 0.949982

Y\_true: [ 7 9 13 15 18 20 24 26 27 34 37 38]

Y\_pred: [18 20 24 26 27 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic heart failure in setting of, score: 0.29515737

with avr chf exam cxr and, score: 0.058599405

systolic heart failure mild pulmonary arterial, score: 0.018121665

confidence of prediction: 0.968666

Y\_true: [ 5 6 10 35]

Y\_pred: [ 5 7 35 46]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

likely hypovolemic hyponatremia secondary to diarrheal losses,

score: 0.3830074

of discharge hyponatremia patient initially with sodium, score:

0.23318565

kidney injury hyponatremia anion gap acidosis, score: 0.08376504

confidence of prediction: 0.786640

Y\_true: [ 5 6 10 35]

Y\_pred: [ 5 7 35 46]

top three important windows for true positive code 35 (584.9: Acute

kidney failure, unspecified)

prerenal etiology improved with, score: 0.103577375

acute kidney injury baseline creat, score: 0.05675268

with liver function tests, score: 0.03348541

confidence of prediction: 0.629947

Y\_true: [ 4 5 8 20 35]

Y\_pred: [ 4 20 29 35]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
center hypertension hyperlipidemia stage iv lung adenocarcinoma, score: 0.11216422  
saphenous superficial vein thrombosis, score: 0.023978805  
simvastatin mg tablet sig, score: 0.016316626

confidence of prediction: 0.916026

Y\_true: [ 4 5 8 20 35]

Y\_pred: [ 4 20 29 35]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
hypertension hyperlipidemia stage iv lung, score: 0.43088967  
cushion dx stage iv, score: 0.31416544  
history of htn who, score: 0.056524184

confidence of prediction: 0.684601

Y\_true: [ 4 5 8 20 35]

Y\_pred: [ 4 20 29 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
with pre renal process resolved to, score: 0.19020942  
wearing face mask heent, score: 0.03900016  
acute kidney injury creatinine was, score: 0.036766168

confidence of prediction: 0.616729

Y\_true: [ 4 20 26 41]

Y\_pred: [ 1 4 20 26 41]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
direction instead trying to, score: 0.07861059  
simvastatin mg tablet sig, score: 0.030274367  
hematuria htn hld remote history of renal, score: 0.014910408

confidence of prediction: 0.722451

Y\_true: [ 4 20 26 41]

Y\_pred: [ 1 4 20 26 41]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
improves cvs af previously off warfarin, score: 0.15808536  
wcc ppx dvt heparin, score: 0.046451505  
a store earlier today, score: 0.030128565

confidence of prediction: 0.983393

Y\_true: [ 4 20 26 41]

Y\_pred: [ 1 4 20 26 41]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation off coumadin because, score: 0.02640472  
atrial fibrillation off coumadin because, score: 0.0051052575  
irregularly irregular abdomen soft nt, score: 0.0021011303

confidence of prediction: 0.927727

Y\_true: [ 4 20 26 41]

Y\_pred: [ 1 4 20 26 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

both tube feeds and taking po, score: 0.34878528

placed tube feeds were stopped on, score: 0.055783823

the feeding tube in your nose, score: 0.03808624

confidence of prediction: 0.814301

Y\_true: [ 1 3 5 6 16 17 19 20 27 33 40 41 43 44 45 46]

Y\_pred: [ 1 4 5 17 19 26 35 46]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

includes hypothyroidism and hld hypotension, score: 0.27595994

hyperlipidemia hypothyroidism and a, score: 0.19347513

prn levothyroxine 05mg daily discharge, score: 0.17240244

confidence of prediction: 0.746876

Y\_true: [ 1 3 5 6 16 17 19 20 27 33 40 41 43 44 45 46]

Y\_pred: [ 1 4 5 17 19 26 35 46]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

svv from vigileo suggested intravascular, score: 0.1359286

she developed hyponatremia and hyperglycemia unclear etiology but

hyponatremia may be related to, score: 0.094402656

ultrafiltrate bath having a, score: 0.0636456

confidence of prediction: 0.836035

Y\_true: [ 1 3 5 6 16 17 19 20 27 33 40 41 43 44 45 46]

Y\_pred: [ 1 4 5 17 19 26 35 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

placed on picc line left art line, score: 0.10641315

monitor picc line for signs, score: 0.07389567

access line changed over, score: 0.067801476

confidence of prediction: 0.991364

Y\_true: [ 1 3 5 6 16 17 19 20 27 33 40 41 43 44 45 46]

Y\_pred: [ 1 4 5 17 19 26 35 46]

top three important windows for true positive code 19 (39.95:

Hemodialysis)

right dialysis catheter right ij cvvh dialysis chest tube, score:

0.08836156

was started cvvh she was, score: 0.042246483

but cvvh was started, score: 0.018838137

confidence of prediction: 0.670818

Y\_true: [ 1 3 5 6 16 17 19 20 27 33 40 41 43 44 45 46]

Y\_pred: [ 1 4 5 17 19 26 35 46]

top three important windows for true positive code 46 (995.92:

Severe sepsis)

shock has required levophed for, score: 0.05493293

myelos nrbc 49am blood, score: 0.037617497

requiring pressors levophed originally, score: 0.032542314

confidence of prediction: 0.812834  
Y\_true: [ 1 3 8 16 20 25 27 33 34 37 40 43]  
Y\_pred: [ 0 1 17 33 34 37 40 41 42 43 46]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
support hypothyroidism continued on levothyroxine mcg daily gerd,  
score: 0.28631333  
issues hypothyroidism chronic anemia mitral, score: 0.21490462  
hospital1 levothyroxine sodium mcg po, score: 0.10092632

confidence of prediction: 0.907390  
Y\_true: [ 1 3 8 16 20 25 27 33 34 37 40 43]  
Y\_pred: [ 0 1 17 33 34 37 40 41 42 43 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypercarbic respiratory failure major, score: 0.11199692  
hypercarbic respiratory failure was, score: 0.094537206  
hypercarbic respiratory failure sepsis, score: 0.0752069

confidence of prediction: 0.551017  
Y\_true: [ 1 3 8 16 20 25 27 33 34 37 40 43]  
Y\_pred: [ 0 1 17 33 34 37 40 41 42 43 46]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
mcg daily gerd patient previously on omeprazole, score: 0.046712227  
bin lipase and lactate a, score: 0.0098817  
terminates in the axilla, score: 0.009454495

confidence of prediction: 0.941180  
Y\_true: [ 1 3 8 16 20 25 27 33 34 37 40 43]  
Y\_pred: [ 0 1 17 33 34 37 40 41 42 43 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection hypercarbic respiratory, score: 0.051502682  
uti patient grew out, score: 0.037532594  
a urinary tract infection causing sepsis, score: 0.028632712

confidence of prediction: 0.561990  
Y\_true: [ 1 3 8 16 20 25 27 33 34 37 40 43]  
Y\_pred: [ 0 1 17 33 34 37 40 41 42 43 46]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was intubated an initial, score: 0.26845056  
fio2 general intubated unresponsive pale, score: 0.06006588  
post intubation her bp, score: 0.0574001

confidence of prediction: 0.606004  
Y\_true: [ 1 3 8 16 20 25 27 33 34 37 40 43]  
Y\_pred: [ 0 1 17 33 34 37 40 41 42 43 46]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
she remained intubated for most, score: 0.03958507  
vent settings were fio2 rr, score: 0.025419438

sputum culture endotracheal source gram, score: 0.021021128

confidence of prediction: 0.727116

Y\_true: [11 20 34 41 42]

Y\_pred: [19 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

when tube feeds on consistently, score: 0.041486975

tracheostomy tube was sutured, score: 0.03405471

g tube intact gu, score: 0.020048862

confidence of prediction: 0.974451

Y\_true: [24]

Y\_pred: [15 24 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

lad for occlusion with hospital, score: 0.054395143

cardiac catheterization with drug, score: 0.045353286

lad and stenosis at, score: 0.044840854

confidence of prediction: 0.734558

Y\_true: [ 4 20 24 27 34]

Y\_pred: [ 4 20 27 34]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

htn and hyperlipidemia who presented with ams, score: 0.13460156

htn and hyperlipidemia presenting with ams, score: 0.13460156

for gerd htn the, score: 0.026657172

confidence of prediction: 0.768522

Y\_true: [ 4 20 24 27 34]

Y\_pred: [ 4 20 27 34]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

for gerd htn the, score: 0.27415004

lung disease htn and hyperlipidemia who, score: 0.08934089

lung disease htn and hyperlipidemia presenting, score: 0.08934089

confidence of prediction: 0.965901

Y\_true: [ 4 20 24 27 34]

Y\_pred: [ 4 20 27 34]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diastolic chf nonspecific interstitial pneumonia, score: 0.15665883

diastolic chf despite unimpressive chest, score: 0.12325727

chf see below interstitial, score: 0.047840163

confidence of prediction: 0.849427

Y\_true: [ 4 20 24 27 34]

Y\_pred: [ 4 20 27 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

for gerd htn the patient s, score: 0.111438125

gerd osteoarthritis pulmonary nodules, score: 0.08898813

diagnoses gerd osteoarthritis discharge condition mental, score:  
0.083026394

confidence of prediction: 0.957426

Y\_true: [14 24 31 38 42]

Y\_pred: [15 17 20 24 31 33 38 40 42]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
vessel coronary artery disease the lmca, score: 0.1923104  
cardiac catheterization intubation and, score: 0.024761623  
s p resuscitation hypoxia, score: 0.017190328

confidence of prediction: 0.913929

Y\_true: [14 24 31 38 42]

Y\_pred: [15 17 20 24 31 33 38 40 42]

top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
an aspiration pneumonia for which, score: 0.24295466  
to aspiration so she initially received, score: 0.1638426  
from aspiration was treated with levo, score: 0.031146111

confidence of prediction: 0.882479

Y\_true: [14 24 31 38 42]

Y\_pred: [15 17 20 24 31 33 38 40 42]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cath lab cath lab findings included no, score: 0.109063685  
cath lab the patient, score: 0.07784729  
cath comments selective coronary angiography demonstrated, score:  
0.044245902

confidence of prediction: 0.787656

Y\_true: [14 24 31 38 42]

Y\_pred: [15 17 20 24 31 33 38 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated during the, score: 0.09183988  
and was intubated hypoxia pulmonary the, score: 0.044664435  
and extubation ngst placement, score: 0.043799087

confidence of prediction: 0.844396

Y\_true: [ 4 14 21 22 24 27 36 38 48]

Y\_pred: [ 4 20 22 24 26 27 29 36 38]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
avm hypertension hyperlipidemia aspirin allergy asthma, score:  
0.13038132  
factors diabetes dyslipidemia hypertension cardiac history, score:  
0.10499653  
copd htn hyperlipidemia and allergy, score: 0.10253057

confidence of prediction: 0.794064

Y\_true: [ 4 14 21 22 24 27 36 38 48]



Y\_pred: [ 4 20 22 24 26 27 29 36 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
diagnosis nstemi s p cardiac cath, score: 0.03826163  
may represents nstemi v demand ischemia in the setting, score:  
0.02464776  
disease the lmca was, score: 0.0058369203

confidence of prediction: 0.791898  
Y\_true: [ 4 14 21 22 24 27 36 38 48]  
Y\_pred: [ 4 20 22 24 26 27 29 36 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p cabg in, score: 0.09020146  
metal stent was performed, score: 0.042240042  
coronary artery disease the, score: 0.04175623

confidence of prediction: 0.682825  
Y\_true: [ 4 14 21 22 24 27 36 38 48]  
Y\_pred: [ 4 20 22 24 26 27 29 36 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic dysfunction ef on tte from, score: 0.046908937  
ntg on admission to, score: 0.03892949  
nstemi v demand ischemia, score: 0.03458736

confidence of prediction: 0.648566  
Y\_true: [ 4 14 21 22 24 27 36 38 48]  
Y\_pred: [ 4 20 22 24 26 27 29 36 38]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal insufficiency she also, score: 0.06575063  
history of cri with baseline cr to her cr at, score: 0.019062992  
gerd cri baseline cr depression nasal, score: 0.017798923

confidence of prediction: 0.842492  
Y\_true: [ 4 14 21 22 24 27 36 38 48]  
Y\_pred: [ 4 20 22 24 26 27 29 36 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization drug eluting, score: 0.6810883  
coronary angiography of this, score: 0.04716076  
catheterization and was transferred, score: 0.019431936

confidence of prediction: 0.650158  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
[UNK] haemophilus grew out, score: 0.09049326  
central line placement and removal, score: 0.053013835  
he developed hypertensive urgency, score: 0.042831037

confidence of prediction: 0.681598

Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
ckd stage iii per note, score: 0.34733173  
chronic renal failure non [UNK], score: 0.11678575  
chronic renal failure with hyperkalemia the, score: 0.11678575

confidence of prediction: 0.985641  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation patient in afib with lbbb at, score: 0.24634853  
atrial fibrillation left bundle branch, score: 0.11477737  
atrial fibrillation likely permanent managed, score: 0.018856663

confidence of prediction: 0.720068  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf who presented to osh, score: 0.061108164  
afib with lbbb at, score: 0.031584486  
possibly chf cad who presented to, score: 0.008601662

confidence of prediction: 0.822967  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxemic respiratory failure with pna, score: 0.21936896  
hypoxemic respiratory failure with severe, score: 0.20708348  
administrations of digibind there, score: 0.032563

confidence of prediction: 0.660463  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure non, score: 0.13145836  
on chronic renal failure with hyperkalemia the, score: 0.13145836  
acute kidney injury may have, score: 0.055899024

confidence of prediction: 0.922449  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
effusion tee no spontaneous echo, score: 0.008372252  
descending thoracic aorta no, score: 0.0031785755  
tee with bubble study, score: 0.0015877979

confidence of prediction: 0.776210  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
received vials of [UNK], score: 0.025936265  
acute hypoxemic respiratory failure, score: 0.025137695  
develop an ileus tube feeding had been, score: 0.01555032

confidence of prediction: 0.531279  
Y\_true: [ 0 4 8 17 21 24 26 27 31 33 35 39 41 43 46 47 49]  
Y\_pred: [17 21 26 27 33 35 36 39 40 41 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
developed ards on review of, score: 0.059369497  
chains respiratory culture final, score: 0.05191444  
was electively intubated difficult, score: 0.03747502

confidence of prediction: 0.688636  
Y\_true: [ 4 23 26 27 30 35 47 48 49]  
Y\_pred: [ 4 26 27 35 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
factors diabetes dyslipidemia hypertension cardiac history cabg,  
score: 0.21045923  
radical prostatectomy hyperlipidemia s p aaa repair, score:  
0.20723243  
valsartan mg tablet sig, score: 0.020619657

confidence of prediction: 0.949914  
Y\_true: [ 4 23 26 27 30 35 47 48 49]  
Y\_pred: [ 4 26 27 35 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation s p icd, score: 0.13045885  
atrial fibrillation s p aicd, score: 0.027823217  
cardiomyopathy ejection fraction s, score: 0.0088121835

confidence of prediction: 0.938489  
Y\_true: [ 4 23 26 27 30 35 47 48 49]  
Y\_pred: [ 4 26 27 35 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
sided pacemaker defibrillator lead terminates, score: 0.12940757  
failure decrease valsartan to, score: 0.11685537  
cardiomyopathy ef copd amiodarone lung toxicity rheumatoid, score:  
0.028802535

confidence of prediction: 0.506006  
Y\_true: [ 4 23 26 27 30 35 47 48 49]  
Y\_pred: [ 4 26 27 35 48]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

and acute renal failure and was found, score: 0.038142875  
started on spironalactone in house and, score: 0.010692803  
to multiple medications and, score: 0.00795494

confidence of prediction: 0.681652  
Y\_true: [ 4 23 26 27 30 35 47 48 49]  
Y\_pred: [ 4 26 27 35 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg in, score: 0.2575472  
due to cabg cardiomegaly, score: 0.072187066  
s p cabg in, score: 0.033545878

confidence of prediction: 0.719439  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
x full rom x chest, score: 0.0026597183  
rheumatoid arthritis hypertension hypercholesterolemia pmr history  
of, score: 0.0021619047  
rheumatoid arthritis hypertension hypercholesterolemia chronic  
obstructive pulmonary, score: 0.0021619047

confidence of prediction: 0.971208  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies no known, score: 0.024065048  
bypass grafting times with a, score: 0.011032975  
tee was performed in, score: 0.009129602

confidence of prediction: 0.943801  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
rheumatoid arthritis hypertension hypercholesterolemia pmr history  
of, score: 0.2531868  
rheumatoid arthritis hypertension hypercholesterolemia chronic  
obstructive pulmonary, score: 0.2531868  
parenchyma is homogeneous with, score: 0.2011419

confidence of prediction: 0.974843  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation rheumatoid arthritis hypertension, score:  
0.062075026  
fibrillation she was started, score: 0.035335973  
atrial fibrillation rheumatoid arthritis hypertension, score:  
0.01750541

confidence of prediction: 0.984730  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
unexplained heart failure or, score: 0.026237968  
for heart failure but was weaned, score: 0.009475473  
chronic diastolic heart failure acute kidney injury, score:  
0.0030168842

confidence of prediction: 0.660840  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
of dvt copd hyperthyroidism osteopenia large ventral, score:  
0.16363046  
chronic obstructive pulmonary disease hyperthyroidism osteopenia,  
score: 0.0007667727  
right ventricular chamber size, score: 0.0007136789

confidence of prediction: 0.810774  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
peak acute kidney injury and has, score: 0.043332506  
mobile the peak gradient, score: 0.029587967  
failure acute kidney injury peak cr atrial fibrillation, score:  
0.01540635

confidence of prediction: 0.646910  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization aortic valve replacement, score: 0.76130456  
cardiac catheterization see report, score: 0.03827202  
mitral leaflet mild mitral, score: 0.012970929

confidence of prediction: 0.870315  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
and was reintubated on additionally, score: 0.0056242147  
adverse drug reactions attending first, score: 0.0054241377  
minerals lutein centrum silver, score: 0.0043861307

confidence of prediction: 0.576823  
Y\_true: [ 3 15 16 18 20 24 26 27 30 35 38 40 42 49]  
Y\_pred: [ 3 10 17 18 20 26 27 30 35 38 40 42]  
top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

developed respiratory distress not, score: 0.015153202

omega fatty acids fish oil otc mg, score: 0.008560723

right central venous catheter, score: 0.0068633184

confidence of prediction: 0.905457

Y\_true: [ 5 8 17 20 37 39]

Y\_pred: [ 5 20 39]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

follow up hyponatremia she became hyponatremic to her thiazide was,

score: 0.45676884

of the hyponatremia medications on admission medications, score:

0.091672294

anemia hypertension delirium discharge, score: 0.014120653

confidence of prediction: 0.760362

Y\_true: [ 5 8 17 20 37 39]

Y\_pred: [ 5 20 39]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

hydrochlorothiazide we started nafcillin, score: 0.05303254

medical history htn bilateral tkr thr she, score: 0.04693896

reduced rectal sphincter tone, score: 0.03594239

confidence of prediction: 0.656092

Y\_true: [ 5 8 17 20 37 39]

Y\_pred: [ 5 20 39]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

transesophageal echo done and, score: 0.16637377

endocarditis tee conclusions no spontaneous echo, score: 0.059158668

tee with normal lv, score: 0.034850363

confidence of prediction: 0.903361

Y\_true: [11 17 39]

Y\_pred: [11 17]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

parkinson s depression prostatism social history quit, score:

0.037410446

sought medical advice while at, score: 0.0043784576

etoh investment attorney family, score: 0.0016019619

confidence of prediction: 0.823125

Y\_true: [11 17 39]

Y\_pred: [11 17]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

emboli with effusions he, score: 0.13767436

emboli the patient was, score: 0.12049064

emboli cellulitis secondary parkinson, score: 0.09153027

confidence of prediction: 0.970145

Y\_true: [ 8 10 20 23 24 26 49]

Y\_pred: [20 22 23 26]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

and stable htn stable continued on home, score: 0.3493445

vein dvt htn gold stage severe, score: 0.1777343

10l he albuterol nebs, score: 0.020127317

confidence of prediction: 0.632859

Y\_true: [ 8 10 20 23 24 26 49]

Y\_pred: [20 22 23 26]

top three important windows for true positive code 23 (412: Old myocardial infarction)

hx of mi physical, score: 0.6598103

by an nstemi which was medically managed without [UNK] patient, score: 0.015088681

inferior inferolateral inferoseptal akinesis hypokinesis, score: 0.01166943

confidence of prediction: 0.724874

Y\_true: [ 8 10 20 23 24 26 49]

Y\_pred: [20 22 23 26]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib with rvr hour prior, score: 0.48841467

atrial fibrillation secondary diagnosis pulmonary, score: 0.06036079

it was pleasure taking care, score: 0.048130102

confidence of prediction: 0.946549

Y\_true: [ 6 7 9 20 35 43]

Y\_pred: [20 40 42]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

medical history htn cva years ago left, score: 0.13012098

pressors post operatively and, score: 0.011690051

piriformis and obturator w, score: 0.009188712

confidence of prediction: 0.579533

Y\_true: [ 6 8 9 32]

Y\_pred: [ 9 35]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

abnormalities including thrombocytopenia to acute renal failure, score: 0.2957497

sepsis marrow suppression in, score: 0.038094036

week thrombocytopenia platelets initially [UNK] from, score: 0.036733456

confidence of prediction: 0.520971

Y\_true: [ 6 14 17 20 24 38 42]

Y\_pred: [14 17 20 24 31 38 40 42]

top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)

catheterization comments coronary angiography in this, score:  
0.08919483

lab at cath a tortuous lad, score: 0.029094454

cardiac catheterization was done to, score: 0.02058873

confidence of prediction: 0.592607

Y\_true: [ 6 14 17 20 24 38 42]

Y\_pred: [14 17 20 24 31 38 40 42]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

venous line in right, score: 0.10569339

extubated after rewarming on [UNK] anion gap, score: 0.09034654

and upon rewarming patient, score: 0.077384815

confidence of prediction: 0.920191

Y\_true: [ 6 14 17 20 24 38 42]

Y\_pred: [14 17 20 24 31 38 40 42]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

htn patient had ef on, score: 0.15315251

pmhx of htn found, score: 0.053061005

pmhx of htn found unresponsive at, score: 0.053061005

confidence of prediction: 0.978151

Y\_true: [ 6 14 17 20 24 38 42]

Y\_pred: [14 17 20 24 31 38 40 42]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

lad lesion was found, score: 0.14735045

lad lesion that was, score: 0.07946361

lad lesion which could, score: 0.0401615

confidence of prediction: 0.731929

Y\_true: [ 6 14 17 20 24 38 42]

Y\_pred: [14 17 20 24 31 38 40 42]

top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)

cardiac catheterization history of present, score: 0.086791195

catheterization comments coronary angiography in this, score:  
0.07718552

lab at cath a tortuous lad, score: 0.05416275

confidence of prediction: 0.764400

Y\_true: [ 6 14 17 20 24 38 42]

Y\_pred: [14 17 20 24 31 38 40 42]

top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

intubation central venous line in, score: 0.5352182

patient was intubated in the, score: 0.050867427

protocol and upon rewarming, score: 0.007689114

confidence of prediction: 0.957659

Y\_true: [17 20 27 34]



Y\_pred: [20 22]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension raynauds esophageal dysmotility, score:  
0.11757845  
moderate pulmonary hypertension brief, score: 0.11690021  
hypertension given elevated ra pressures, score: 0.059284557

confidence of prediction: 0.910543  
Y\_true: [16 17 20 26 30 32 33 41 43]  
Y\_pred: [20 26 30 33 40 41 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history copd htn glaucoma arthritis social history, score:  
0.05750085  
on hd patient became, score: 0.022658363  
by grocery store manager, score: 0.021048252

confidence of prediction: 0.856966  
Y\_true: [16 17 20 26 30 32 33 41 43]  
Y\_pred: [20 26 30 33 40 41 42]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation he required a, score: 0.20312656  
atrial fibrillation and blood pressures, score: 0.14090604  
atrial fibrillation and [UNK] to, score: 0.13141568

confidence of prediction: 0.877407  
Y\_true: [16 17 20 26 30 32 33 41 43]  
Y\_pred: [20 26 30 33 40 41 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd htn glaucoma arthritis social history, score:  
0.2160127  
cervical stenosis patient s, score: 0.008912586  
systolic function lvef due, score: 0.0013895826

confidence of prediction: 0.534710  
Y\_true: [16 17 20 26 30 32 33 41 43]  
Y\_pred: [20 26 30 33 40 41 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
patient was intubated exam was, score: 0.061386354  
he was intubated for airway protection, score: 0.044966325  
leukocytosis respiratory failure discharge condition, score:  
0.030192807

confidence of prediction: 0.645566  
Y\_true: [16 17 20 26 30 32 33 41 43]  
Y\_pred: [20 26 30 33 40 41 42]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
the feeding tube which terminates, score: 0.08671133  
cord syndrome patient was, score: 0.029596519

cord syndrome mri c, score: 0.028832197

confidence of prediction: 0.855105

Y\_true: [19 20 42 46]

Y\_pred: [17 19]

top three important windows for true positive code 19 (39.95: Hemodialysis)

venous cannulization hemodialysis history of, score: 0.10579956

last hd schedule to, score: 0.036834326

became hd depended for, score: 0.028340885

confidence of prediction: 0.639498

Y\_true: [25]

Y\_pred: [20 25]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

mitral valve prolapse anxiety and depression, score: 0.58473533

was a pleasure taking care, score: 0.008729589

a result of her, score: 0.0034116807

confidence of prediction: 0.778297

Y\_true: [20 27 33 40 42]

Y\_pred: [20 27 33 40 42]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

asthma t2dm htn osa dementia who presents, score: 0.16646627

hydrochlorothiazide medications on admission, score: 0.14203648

hydrochlorothiazide mg tablet sig, score: 0.07708752

confidence of prediction: 0.934450

Y\_true: [20 27 33 40 42]

Y\_pred: [20 27 33 40 42]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

diastolic heart failure active issues, score: 0.22571416

diastolic heart failure patient was diuresed, score: 0.22571416

diastolic heart failure and was discharged, score: 0.22571416

confidence of prediction: 0.835129

Y\_true: [20 27 33 40 42]

Y\_pred: [20 27 33 40 42]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

hypercarbic respiratory failure secondary diagnoses, score: 0.23623934

hypercarbic respiratory failure obstructive, score: 0.14131474

hypercarbic respiratory failure due to, score: 0.13585036

confidence of prediction: 0.660416

Y\_true: [20 27 33 40 42]

Y\_pred: [20 27 33 40 42]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

was intubated for apnea, score: 0.18294786

was initially intubated and admitted, score: 0.15374434  
intubated general intubated sedated comfortable, score: 0.09616836

confidence of prediction: 0.873937  
Y\_true: [20 27 33 40 42]  
Y\_pred: [20 27 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated for apnea, score: 0.096342176  
briefly intubated and kept, score: 0.09301266  
after intubation and echo, score: 0.042225555

confidence of prediction: 0.635781  
Y\_true: [ 3 21 24 26 27 36 49]  
Y\_pred: [ 3 21 26 36 49]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
medical history htn hypercholesterolemia bph obesity atrial  
fibrillation, score: 0.006776394  
gastritis erosive duodenitis hiatal hernia and, score: 0.0033532756  
gastritis erosive duodenitis hiatal, score: 0.0033532756

confidence of prediction: 0.736788  
Y\_true: [ 3 21 24 26 27 36 49]  
Y\_pred: [ 3 21 26 36 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease k, score: 0.1976352  
ckd the patient has, score: 0.044688597  
chronic kidney disease who had, score: 0.027924843

confidence of prediction: 0.986844  
Y\_true: [ 3 21 24 26 27 36 49]  
Y\_pred: [ 3 21 26 36 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib he reports that, score: 0.25060672  
afib on coumadin pud, score: 0.23141398  
atrial fibrillation on coumadin gi, score: 0.036286544

confidence of prediction: 0.616104  
Y\_true: [ 3 21 24 26 27 36 49]  
Y\_pred: [ 3 21 26 36 49]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic kidney disease k, score: 0.17370585  
ckd the patient has, score: 0.069707066  
of ckd baseline creat on day, score: 0.044854928

confidence of prediction: 0.868030  
Y\_true: [ 3 21 24 26 27 36 49]  
Y\_pred: [ 3 21 26 36 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on coumadin pud, score: 0.36909768  
fibrillation on coumadin gi, score: 0.11035111  
mg qhs warfarin mg, score: 0.10102269

confidence of prediction: 0.925862  
Y\_true: [ 1 4 6 20]  
Y\_pred: [ 1 4 5 20 29 30]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
and hypothyroidism who presented, score: 0.2713659  
hypertension hypothyroidism hyperlipidemia osteoporosis, score: 0.20947017  
hypertension hypothyroidism nhl s p, score: 0.20809616

confidence of prediction: 0.711513  
Y\_true: [ 1 4 6 20]  
Y\_pred: [ 1 4 5 20 29 30]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hypertension hypothyroidism hyperlipidemia osteoporosis based on compression, score: 0.057289038  
social history retired teacher, score: 0.009302727  
prisoner of war during wwii was, score: 0.008575652

confidence of prediction: 0.544700  
Y\_true: [ 1 4 6 20]  
Y\_pred: [ 1 4 5 20 29 30]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
removed on hypertension hypothyroidism hyperlipidemia osteoporosis based, score: 0.15887244  
mirtazapine was stopped as, score: 0.08407235  
social history retired teacher, score: 0.08154955

confidence of prediction: 0.628554  
Y\_true: [ 0 6 9 19 20 27 40 42 46]  
Y\_pred: [19 35 45 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
s pressor requirement increased, score: 0.06901804  
failure became dialysis dependent but, score: 0.050925065  
requiring hemodialysis for weeks, score: 0.0405214

confidence of prediction: 0.589233  
Y\_true: [ 0 6 9 19 20 27 40 42 46]  
Y\_pred: [19 35 45 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
metas myelos hypochr normal anisocy, score: 0.052387483  
pressors and she was, score: 0.051589984  
with basilar vv septic, score: 0.038066603

confidence of prediction: 0.664976  
Y\_true: [12 16 33 41 43]  
Y\_pred: [12 33 37 41 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
of continuous eeg showed, score: 0.1373546  
eventually a bal grew out gram cocci, score: 0.021852406  
pupils 2mm nonreactive bilaterally corneal reflex, score:  
0.011431465

confidence of prediction: 0.539176  
Y\_true: [12 16 33 41 43]  
Y\_pred: [12 33 37 41 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
she was intubated and, score: 0.08651078  
with high peep requirments cta, score: 0.04188114  
ventilator aquired pneumonia malnutrition, score: 0.040766813

confidence of prediction: 0.913577  
Y\_true: [12 16 33 41 43]  
Y\_pred: [12 33 37 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
of continuous eeg showed a, score: 0.47557297  
placement evd catheter exchange cerebral, score: 0.08188178  
video eeg telemetry due to, score: 0.05684613

confidence of prediction: 0.861809  
Y\_true: [12 16 33 41 43]  
Y\_pred: [12 33 37 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
of continuous eeg showed, score: 0.13894811  
resolved ventilator aquired pneumonia malnutrition, score:  
0.055265844  
a bal grew out, score: 0.047059413

confidence of prediction: 0.914515  
Y\_true: [11 16 19 35 40 41 43]  
Y\_pred: [ 5 17 19 21 35 36]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
patient received dialysis on a, score: 0.076361164  
now off hemodialysis htn depression, score: 0.0678945  
that dialysis probably would, score: 0.05254595

confidence of prediction: 0.648175  
Y\_true: [11 16 19 35 40 41 43]  
Y\_pred: [ 5 17 19 21 35 36]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
per renal now on, score: 0.017342128

tapered acute kidney injury superimposed on chronic, score:  
0.015257399

her renal failure pt with, score: 0.014397804

confidence of prediction: 0.869555

Y\_true: [ 5 10 11 20 24 28 45]

Y\_pred: [11 20 24]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

fluticasone propionate depression continued home celexa

transitional, score: 0.004666624

adenocarcinoma with bronchioalveolar features well, score:

0.003185674

lobe nodule brain mri at, score: 0.0026305108

confidence of prediction: 0.556550

Y\_true: [ 5 10 11 20 24 28 45]

Y\_pred: [11 20 24]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

active htn patient was admitted with recurrent htn episodes to sbp,  
score: 0.2502149

below baseline htn was thought to, score: 0.13317727

htn urgency patient found, score: 0.048003785

confidence of prediction: 0.903226

Y\_true: [ 5 10 11 20 24 28 45]

Y\_pred: [11 20 24]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

csf immunophenotyping non diagnostic study clonality could, score:  
0.016894285

history cad s p stemi during paclitaxel, score: 0.014885249

htn emergency w iph, score: 0.012773104

confidence of prediction: 0.706577

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

was held hyperlipidemia patient was continued on, score: 0.24292794

factors diabetes dyslipidemia hypertension cardiac history coronary,  
score: 0.19269678

simvastatin mg tablet sig, score: 0.016169185

confidence of prediction: 0.663005

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

chronic kidney disease anemia discharge, score: 0.11799001

history chronic kidney disease stage cva obstructive, score:

0.01237242

disease gout s p, score: 0.01156914

confidence of prediction: 0.907514

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)

atrial fibrillation pt was found, score: 0.40942666

atrial fibrillation with rapid heart, score: 0.10979011

cabg unknown anatomy percutaneous, score: 0.0018654538

confidence of prediction: 0.953305

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

congestive heart failure chronic ejection fraction, score:  
0.45894882

chf obstructive sleep apnea, score: 0.06680169

with worsening chf and elevated troponins thought, score:  
0.018227628

confidence of prediction: 0.886928

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

primary diagnosis pneumonia systoli chf, score: 0.116758294

healthcare associated pneumonia with vancomycin, score: 0.03826096

healthcare associated pneumonia for an, score: 0.015643872

confidence of prediction: 0.572126

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

acute kidney injury or, score: 0.22302379

after renal function improved with, score: 0.07984334

vs crt patient was, score: 0.066321224

confidence of prediction: 0.674864

Y\_true: [ 2 4 21 26 27 29 35 36 48]

Y\_pred: [ 4 21 24 26 27 29 35 37 48]

top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)

coronary artery disease s p cabg and, score: 0.01658122

coronary artery disease ischemic cardiomyopathy ef, score:  
0.013527023

history coronary artery disease ischemic cardiomyopathy ef cabg  
unknown, score: 0.0078009516

confidence of prediction: 0.549372

Y\_true: [ 2 4 8 14 20 27 33 38 48]

Y\_pred: [ 2 4 20 24 25 27 33 38]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
patient was maintained on, score: 0.2912792  
hypertension diabetes social history lives, score: 0.081132874  
artery disease diabetes mellitus hypertension dyslipidemia  
discharge, score: 0.015162785

confidence of prediction: 0.935262  
Y\_true: [ 2 4 8 14 20 27 33 38 48]  
Y\_pred: [ 2 4 20 24 25 27 33 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
p cabg hyperlipidemia hypertension diabetes social history, score:  
0.26614702  
mellitus hypertension dyslipidemia discharge condition mental,  
score: 0.030267106  
chronic diagnoses hld patient was continued on, score: 0.022155913

confidence of prediction: 0.807387  
Y\_true: [ 2 4 8 14 20 27 33 38 48]  
Y\_pred: [ 2 4 20 24 25 27 33 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn emergency patient initially presented, score: 0.38316143  
diabetes mellitus hypertension dyslipidemia discharge condition,  
score: 0.14045888  
hypertension which added to, score: 0.046272434

confidence of prediction: 0.969830  
Y\_true: [ 2 4 8 14 20 27 33 38 48]  
Y\_pred: [ 2 4 20 24 25 27 33 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf he was placed, score: 0.1511482  
systolic heart failure cad w mi, score: 0.09963892  
systolic congestive heart failure etiology is, score: 0.008857248

confidence of prediction: 0.828585  
Y\_true: [ 2 4 8 14 20 27 33 38 48]  
Y\_pred: [ 2 4 20 24 25 27 33 38]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure on exam, score: 0.13842714  
he required intubation pressors iabp, score: 0.037900526  
became hypoxic and then, score: 0.035205796

confidence of prediction: 0.772243  
Y\_true: [ 2 4 8 14 20 27 33 38 48]  
Y\_pred: [ 2 4 20 24 25 27 33 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization history of present, score: 0.5630554  
for his cardiogenic shock, score: 0.07570473



cardiac catheterization was performed that, score: 0.02371637

confidence of prediction: 0.714055

Y\_true: [ 0 3 11 20 24 25 27 35 46]

Y\_pred: [ 0 20 24 27 48]

top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)

toes missing skin psoriasis, score: 0.020258052

was initially sepsis osteomyelitis, score: 0.015512042

she was changed to meropenem empirically to, score: 0.009622143

confidence of prediction: 0.922737

Y\_true: [ 0 3 11 20 24 25 27 35 46]

Y\_pred: [ 0 20 24 27 48]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

htn hypercholesterolemia psoriasis cad, score: 0.16112046

dmii neuropathy htn hypercholesterolemia psoriasis cad, score:  
0.14034538

afterload her baseline blood, score: 0.06671837

confidence of prediction: 0.535188

Y\_true: [ 0 3 11 20 24 25 27 35 46]

Y\_pred: [ 0 20 24 27 48]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)

dm cad 3v cabg x2 ceas, score: 0.33733577

psoriasis cad chf and multiple podiatric, score: 0.076732315

psoriasis cad diastolic chf followed by, score: 0.027833465

confidence of prediction: 0.965675

Y\_true: [ 0 3 11 20 24 25 27 35 46]

Y\_pred: [ 0 20 24 27 48]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

heart failure systolic heart failure the patient initially, score:  
0.18508573

cad diastolic chf followed by cardiologist, score: 0.026314756

failure medications acei beta, score: 0.012273911

confidence of prediction: 0.736869

Y\_true: [ 2 3 10 21 36 37]

Y\_pred: [21 35 36 37]

top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)

chronic renal failure and recommended, score: 0.1054186

chronic kidney disease and now, score: 0.0637148

on chronic kidney disease urinary tract, score: 0.019160442

confidence of prediction: 0.623485

Y\_true: [ 2 3 10 21 36 37]

Y\_pred: [21 35 36 37]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)  
chronic renal failure and recommended, score: 0.13071346  
chronic kidney disease and now, score: 0.04383208  
baseline ckd cr despite ivf and, score: 0.032132745

confidence of prediction: 0.914155  
Y\_true: [ 2 3 10 21 36 37]  
Y\_pred: [21 35 36 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection klebsiella pan sensitive hypertension,  
score: 0.2732477  
male uti fever defervesced rapidly, score: 0.064153455  
negative uti initially he was, score: 0.049772598

confidence of prediction: 0.794956  
Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
lvef chronic kidney disease stage hyperlipidemia on, score:  
0.057508074  
bump to in the, score: 0.01552407  
patient had elevated lfts, score: 0.0058762147

confidence of prediction: 0.625284  
Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi in and, score: 0.72715694  
h o mi isosorbide mononitrate er 30mg, score: 0.03122413  
svg rpda rpl svg lcw, score: 0.0191679

confidence of prediction: 0.977557  
Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
irregularly irregular no murmurs gallops, score: 0.16320713  
afib patient was rate, score: 0.10340207  
atrial fibrillation on coumadin presented, score: 0.0878566

confidence of prediction: 0.945022  
Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
heart failure lvef chronic kidney, score: 0.21666253  
ef per tte done, score: 0.16936296  
cad chf who was admitted, score: 0.03731034

confidence of prediction: 0.878812

Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
an aspiration pneumonia patient was evaluated, score: 0.21504812  
previous aspiration pneumonia right middle lobe, score: 0.076432094  
aspiration alone he was also, score: 0.044528205

confidence of prediction: 0.689859  
Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
ams respiratory failure worsened, score: 0.11847422  
diagnosis respiratory failure discharge condition, score: 0.10193436  
was made cmo and terminally extubated, score: 0.028835895

confidence of prediction: 0.755385  
Y\_true: [ 4 11 12 16 21 23 25 26 27 31 33 35 40 41 42 45 47 48 49]  
Y\_pred: [ 5 21 23 24 26 27 31 33 36 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin presented, score: 0.46893334  
on admission warfarin mg, score: 0.08964993  
down and coumadin was, score: 0.010674252

confidence of prediction: 0.962406  
Y\_true: [20 34]  
Y\_pred: [20 26 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
s disease htn and macular degeneration, score: 0.15386331  
s disease htn gerd macular degeneration, score: 0.15386331  
blinked to threat bilaterally, score: 0.04367204

confidence of prediction: 0.893449  
Y\_true: [20 34]  
Y\_pred: [20 26 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
disease htn gerd macular degeneration social history, score:  
0.08916979  
counting mistakes in rlq, score: 0.009999025  
cr was slightly increased, score: 0.0056384862

confidence of prediction: 0.543748  
Y\_true: [ 0 5 9 16 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
metas myelos source line central red, score: 0.049214818  
probably coming from your, score: 0.03600207  
diagnosis sepsis cellulitis cirrhosis complicated by, score:  
0.030884936

confidence of prediction: 0.620891  
Y\_true: [ 0 5 9 16 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
complicated by thrombocytopenia coagulopathy splenomegaly, score:  
0.49605748  
was stable hyponatremic to abdominal, score: 0.0471614  
indbili source line [UNK], score: 0.029419612

confidence of prediction: 0.898336  
Y\_true: [ 0 5 9 16 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous catheter history of, score: 0.2126306  
line was placed and, score: 0.0920595  
antibiotics picc line was placed for, score: 0.07570771

confidence of prediction: 0.581615  
Y\_true: [ 0 5 9 16 17 46]  
Y\_pred: [ 0 9 17 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
metas myelos source line central red, score: 0.041921552  
diagnosis sepsis cellulitis cirrhosis complicated by, score:  
0.022708839  
probably coming from your, score: 0.020515794

confidence of prediction: 0.671486  
Y\_true: [ 3 4 11 34 40 42]  
Y\_pred: [ 4 8 34 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
age gerd hld possible sleep apnea depression, score: 0.50642323  
keppra 2500mg hospital1 felbatol, score: 0.013914611  
p traumatic amputation social history the, score: 0.0108535765

confidence of prediction: 0.835966  
Y\_true: [ 3 4 11 34 40 42]  
Y\_pred: [ 4 8 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
at age gerd hld possible sleep apnea, score: 0.02744371  
kidney stones thought to be, score: 0.009857915  
placement with vns replacement left, score: 0.008791938

confidence of prediction: 0.769224  
Y\_true: [ 3 4 11 34 40 42]  
Y\_pred: [ 4 8 34 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
generator replacement intubation history of, score: 0.22831348

generator settings as an, score: 0.016092984  
sensation vibratory sense proprioception throughout, score:  
0.012486962

confidence of prediction: 0.538762  
Y\_true: [ 3 4 11 34 40 42]  
Y\_pred: [ 4 8 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
generator replacement intubation history of, score: 0.46052396  
was intubated pre op, score: 0.036883663  
sensation vibratory sense proprioception throughout, score:  
0.0080478275

confidence of prediction: 0.790018  
Y\_true: [ 0 4 6 16 17 20 29 33 37 40 41 42 45 46]  
Y\_pred: [ 4 17 37 40 41 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
42pm blood cea 59pm, score: 0.03352741  
trend metastatic adenocarcinoma pt, score: 0.013900123  
every weeks htn hyperlipidemia recent hospitalization at hospital6,  
score: 0.013153443

confidence of prediction: 0.961549  
Y\_true: [ 0 4 6 16 17 20 29 33 37 40 41 42 45 46]  
Y\_pred: [ 4 17 37 40 41 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement aterial line placement intubation extubation, score:  
0.38370642  
to trend downwards towards, score: 0.019958101  
sicu and resuscitated with 4l, score: 0.012268921

confidence of prediction: 0.877716  
Y\_true: [ 0 4 6 16 17 20 29 33 37 40 41 42 45 46]  
Y\_pred: [ 4 17 37 40 41 42]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
final escherichia coli organisms ml warning this, score: 0.036069915  
picture as patient has, score: 0.011008621  
had difficulty drawing breath, score: 0.007896604

confidence of prediction: 0.831460  
Y\_true: [ 0 4 6 16 17 20 29 33 37 40 41 42 45 46]  
Y\_pred: [ 4 17 37 40 41 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
nutrition while intubated patient received, score: 0.046989627  
distress while intubated pt continued, score: 0.034574077  
sent patient reintubated on as, score: 0.020802483

confidence of prediction: 0.880516

Y\_true: [ 0 4 6 16 17 20 29 33 37 40 41 42 45 46]

Y\_pred: [ 4 17 37 40 41 42]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

received tube feeds through the og, score: 0.068241134

nutrition while intubated patient, score: 0.023674138

tube for nutrition hospice, score: 0.014262273

confidence of prediction: 0.520786

Y\_true: [ 0 4 6 16 17 20 29 33 37 40 41 42 45 46]

Y\_pred: [ 4 17 37 40 41 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

patient reintubated on as, score: 0.179902

was intubated for respiratory distress while intubated pt continued, score: 0.099260874

tube feeds through the, score: 0.08026578

confidence of prediction: 0.831288

Y\_true: [ 4 11 18 20 26 30 47]

Y\_pred: [ 4 18 20 26 30]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

copd and dyslipidemia who has been, score: 0.106669605

copd hyperlipidemia prior etoh abuse, score: 0.023228815

confidence of prediction: 0.985008

Y\_true: [ 4 11 18 20 26 30 47]

Y\_pred: [ 4 18 20 26 30]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

wires were removed without, score: 0.53269356

incisions gently with mild soap, score: 0.15512529

diuresed towards his preoperative, score: 0.104079574

confidence of prediction: 0.990144

Y\_true: [ 4 11 18 20 26 30 47]

Y\_pred: [ 4 18 20 26 30]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

valsartan hydrochlorothiazide diovan hct prescribed by, score: 0.085210286

medical history hypertension history of tia, score: 0.08466787

hypertension history of tia, score: 0.07441594

confidence of prediction: 0.980602

Y\_true: [ 4 11 18 20 26 30 47]

Y\_pred: [ 4 18 20 26 30]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation his lopressor was, score: 0.06569819

atrial fibrillation that resolved with, score: 0.045522086

amiodarone mg tablet s, score: 0.02109887

confidence of prediction: 0.828201

Y\_true: [ 4 11 18 20 26 30 47]

Y\_pred: [ 4 18 20 26 30]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

hyperlipidemia prior etoh abuse, score: 0.19681421

of cva copd and dyslipidemia who has, score: 0.07752648

copd hyperlipidemia prior etoh abuse, score: 0.012496552

confidence of prediction: 0.735208

Y\_true: [ 2 7 17 20]

Y\_pred: [ 2 17 20]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

htn t2 dm diagnosed yrs ago, score: 0.022279972

every hours glipizide mg tablet extended, score: 0.006809019

xl norvasc glipizide xl discharge medications senna, score: 0.005134821

confidence of prediction: 0.546243

Y\_true: [ 2 7 17 20]

Y\_pred: [ 2 17 20]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous line venous dup, score: 0.07374473

artery bifurcations bilaterally abdominal, score: 0.07015334

venous line echo shows, score: 0.06365263

confidence of prediction: 0.901850

Y\_true: [ 2 7 17 20]

Y\_pred: [ 2 17 20]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

medical history htn t2 dm diagnosed yrs, score: 0.0583408

hypertension ep consult month, score: 0.032955006

continued to trend down, score: 0.013784578

confidence of prediction: 0.874840

Y\_true: [ 0 8 17 20 26 27 29 31 41 47 49]

Y\_pred: [17 26 27 31 49]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

placement picc line placement history of, score: 0.27367434

she tried treating with honey for, score: 0.016380528

a widespread encephalopathy medications metabolic disturbances, score: 0.013138879

confidence of prediction: 0.985675

Y\_true: [ 0 8 17 20 26 27 29 31 41 47 49]

Y\_pred: [17 26 27 31 49]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib with rvr and, score: 0.05174679  
fibrillation on anticoagulation target, score: 0.038601153  
atrial fibrillation on coumadin recurrent, score: 0.023769882

confidence of prediction: 0.958425  
Y\_true: [ 0 8 17 20 26 27 29 31 41 47 49]  
Y\_pred: [17 26 27 31 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf may be given, score: 0.12869073  
diastolic congestive heart failure secondary diagnoses, score:  
0.12447455  
fibrillation diastolic chf the patient was diuresed, score:  
0.02737299

confidence of prediction: 0.947957  
Y\_true: [ 0 8 17 20 26 27 29 31 41 47 49]  
Y\_pred: [17 26 27 31 49]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
possible aspiration pneumonia on the final, score: 0.055920444  
aspiration pneumonia persistent bibasilar opacities, score:  
0.023686618  
acquired pneumonia aspiration pneumonia acute on chronic, score:  
0.0081734555

confidence of prediction: 0.693699  
Y\_true: [ 0 8 17 20 26 27 29 31 41 47 49]  
Y\_pred: [17 26 27 31 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin recurrent, score: 0.45655102  
po daily coumadin mg, score: 0.01072316  
irreg irreg no m, score: 0.0048357733

confidence of prediction: 0.843572  
Y\_true: [16 17 19 26 31 34 39 40 41 43 47]  
Y\_pred: [ 0 19 26 40]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on hd qmwf who, score: 0.10238142  
dependent esrd who initially, score: 0.04613297  
patient with esrd and hd given stability, score: 0.038073316

confidence of prediction: 0.885982  
Y\_true: [16 17 19 26 31 34 39 40 41 43 47]  
Y\_pred: [ 0 19 26 40]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
ai on coumadin esrd, score: 0.0041701104  
developed atrial fibrillation requiring initiation of, score:  
0.0037825482  
to sternal rub and, score: 0.002835276



confidence of prediction: 0.529027  
Y\_true: [16 17 19 26 31 34 39 40 41 43 47]  
Y\_pred: [ 0 19 26 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
non invasive ventilation there, score: 0.07391217  
she was intubated to protect her airway, score: 0.070513055  
pain epogen per hospital, score: 0.047921997

confidence of prediction: 0.532152  
Y\_true: [ 2 4 17 20 26 27]  
Y\_pred: [ 2 4 17 20 26 27 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus type ii previous, score: 0.0839237  
dmii and colon cancer, score: 0.07615729  
metformin at home which, score: 0.06659652

confidence of prediction: 0.979118  
Y\_true: [ 2 4 17 20 26 27]  
Y\_pred: [ 2 4 17 20 26 27 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
her admission hld her simvastatin was continued, score: 0.03518721  
hld and dmii with a, score: 0.018062333  
htn hld dmii and colon, score: 0.009350665

confidence of prediction: 0.824283  
Y\_true: [ 2 4 17 20 26 27]  
Y\_pred: [ 2 4 17 20 26 27 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
venous line pacemaker placement, score: 0.12254286  
with pan sensitive e, score: 0.10176033  
the central catheter has been, score: 0.024850683

confidence of prediction: 0.786392  
Y\_true: [ 2 4 17 20 26 27]  
Y\_pred: [ 2 4 17 20 26 27 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
closely managed with an, score: 0.052224208  
amiodarone was stopped upon, score: 0.034663834  
a fib htn hld dmii and colon, score: 0.026549608

confidence of prediction: 0.955200  
Y\_true: [ 2 4 17 20 26 27]  
Y\_pred: [ 2 4 17 20 26 27 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib bradycardia pt had, score: 0.21803643  
atrial fibrillation pt was on, score: 0.1327949  
fib on admission coumadin, score: 0.07652967

confidence of prediction: 0.910608  
Y\_true: [ 2 4 17 20 26 27]  
Y\_pred: [ 2 4 17 20 26 27 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic congestive heart failure discharge condition mental,  
score: 0.31221086  
diastolic dysfunction cxr showed, score: 0.018889064  
flash pulmonary edema in combination, score: 0.011860572

confidence of prediction: 0.635759  
Y\_true: [ 2 24]  
Y\_pred: [ 2 4 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
in diabetes mellitus hypertension hyperlipidemia, score: 0.1475523  
diabetes mellitus discharge condition mental, score: 0.11527453  
htn dm ii no insulin, score: 0.08801834

confidence of prediction: 0.935009  
Y\_true: [ 2 24]  
Y\_pred: [ 2 4 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stenting of, score: 0.14520817  
in cad s p cath with, score: 0.14117499  
inferior stemi chronic renal, score: 0.08889867

confidence of prediction: 0.790389  
Y\_true: [ 2 4 7 20 23 27 35 48 49]  
Y\_pred: [ 4 7 20 27 48 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
obesity osteoporosis hyperlipidemia eczema essential htn social,  
score: 0.0657277  
sitagliptin januvia mg oral tablet, score: 0.037214123  
at baseline hld stable reduced to simvastatin, score: 0.036649168

confidence of prediction: 0.899464  
Y\_true: [ 2 4 7 20 23 27 35 48 49]  
Y\_pred: [ 4 7 20 27 48 49]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia hct baseline and, score: 0.3117316  
anemia lower gi bleeding, score: 0.060312226  
u prbc getting slowly given, score: 0.060155865

confidence of prediction: 0.949822  
Y\_true: [ 2 4 7 20 23 27 35 48 49]  
Y\_pred: [ 4 7 20 27 48 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

hypertension obesity osteoporosis hyperlipidemia eczema essential  
htn social history no, score: 0.16875759  
managed with cbi given, score: 0.026162323  
un cr baseline up, score: 0.023827003

confidence of prediction: 0.974168  
Y\_true: [ 2 4 7 20 23 27 35 48 49]  
Y\_pred: [ 4 7 20 27 48 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure takes lasix am, score: 0.14790782  
systolic heart failure ef in, score: 0.057435222  
chronic systolic chf type diabetes mellitus, score: 0.035036348

confidence of prediction: 0.529086  
Y\_true: [ 2 4 7 20 23 27 35 48 49]  
Y\_pred: [ 4 7 20 27 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
cad sp cabg in cellulitis, score: 0.87514526  
in echo cabg and first name8, score: 0.062755406  
cad with cabg st male, score: 0.029126087

confidence of prediction: 0.707343  
Y\_true: [ 2 4 7 20 23 27 35 48 49]  
Y\_pred: [ 4 7 20 27 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
replacement on coumadin yesterday, score: 0.2407446  
replacement on coumadin who, score: 0.2407446  
afterwards his warfarin was resumed on, score: 0.17415175

confidence of prediction: 0.947085  
Y\_true: [ 1 4 6 8 11 20 34 35 42]  
Y\_pred: [ 1 4 20 28 35 40 42]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
htn hypothyroidism seizure disorder dementia, score: 0.11941558  
admission levothyroxine 88mcg daily dorzolamide, score: 0.08642248  
cholangitis hypothyroidism constipation htn, score: 0.05129023

confidence of prediction: 0.906089  
Y\_true: [ 1 4 6 8 11 20 34 35 42]  
Y\_pred: [ 1 4 20 28 35 40 42]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
constipation htn hl seizure disorder who was, score: 0.14587113  
inactive gastritis duodenum biopsy, score: 0.007485364  
history gerd constipation hypothyroidism hyperlipidemia htn  
hypothyroidism back pain, score: 0.005139588

confidence of prediction: 0.953870  
Y\_true: [ 1 4 6 8 11 20 34 35 42]  
Y\_pred: [ 1 4 20 28 35 40 42]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
as above htn stable dementia continued aricept, score: 0.14026965  
prompting morphine administration which assisted, score: 0.09892597  
htn hl seizure disorder who, score: 0.06842034

confidence of prediction: 0.575012  
Y\_true: [ 1 4 6 8 11 20 34 35 42]  
Y\_pred: [ 1 4 20 28 35 40 42]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure weight loss, score: 0.08564337  
equivocal prompting morphine administration which assisted, score:  
0.011213105  
acute pancreatitis unclear etiology pt, score: 0.0106765935

confidence of prediction: 0.615822  
Y\_true: [ 1 4 6 8 11 20 34 35 42]  
Y\_pred: [ 1 4 20 28 35 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
equivocal prompting morphine administration, score: 0.025176112  
recommendation for hida scan, score: 0.016201263  
toxic mentating clearly eyes, score: 0.015482606

confidence of prediction: 0.525741  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
pneumonia a bronchoscopy revealed gram, score: 0.064093955  
extubation bronchoscopy lumbar puncture placement removal, score:  
0.043698564  
your parents were concerned, score: 0.02000231

confidence of prediction: 0.714999  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
bilateral gynecomastia eeg impression, score: 0.078847125  
line picc line central venous line history of, score: 0.07156664  
the picc line team was paged, score: 0.058074772

confidence of prediction: 0.879508  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
diastolic htn social history, score: 0.12758344  
primitive neuroectodermal tumor dx d, score: 0.06735008  
appendectomy panhypopituitarism blindness some, score: 0.0599206

confidence of prediction: 0.762996  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
multifocal pneumonia predominantly in the, score: 0.14061822  
diagnosis primary pneumonia seizure disorder, score: 0.047471255  
issues pneumonia on admission, score: 0.04185122

confidence of prediction: 0.775715  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
abnormal video eeg due to, score: 0.027349086  
abnormal video eeg due to the, score: 0.027349086  
active issues pneumonia on, score: 0.025523776

confidence of prediction: 0.799772  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
intubation for airway protection, score: 0.08405274  
intubation eeg impression this is, score: 0.0677869  
bronchoscopy lumbar puncture placement, score: 0.04115435

confidence of prediction: 0.828565  
Y\_true: [ 5 8 11 12 16 17 20 29 31 33 40 41 43]  
Y\_pred: [ 4 12 17 20 29 31 33 34 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
ultimately intubation for airway protection, score: 0.26448628  
to intubation eeg impression, score: 0.21775104  
extubation bronchoscopy lumbar puncture, score: 0.022937335

confidence of prediction: 0.915704  
Y\_true: [ 4 11 19 26 27 29 30 33 48]  
Y\_pred: [19 22 26 27 29 48]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
weekly dialysis sessions in, score: 0.16571467  
several dialysis sessions to, score: 0.14735861  
esrd on dialysis presents acutely, score: 0.083291724

confidence of prediction: 0.836381  
Y\_true: [ 4 11 19 26 27 29 30 33 48]  
Y\_pred: [19 22 26 27 29 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation she should discuss, score: 0.20020722  
atrial fibrillation on ekg after, score: 0.14757174  
atrial fibrillation while in the, score: 0.10642938

confidence of prediction: 0.974340  
 Y\_true: [ 4 11 19 26 27 29 30 33 48]  
 Y\_pred: [19 22 26 27 29 48]  
 top three important windows for true positive code 27 (428.0:  
 Congestive heart failure, unspecified)  
 diastolic chf tte performed showed, score: 0.22816667  
 chf exacerbation patient also, score: 0.21638945  
 chf exacerbation demand ischemia, score: 0.049558047

confidence of prediction: 0.710520  
 Y\_true: [ 4 11 19 26 27 29 30 33 48]  
 Y\_pred: [19 22 26 27 29 48]  
 top three important windows for true positive code 29 (486:  
 Pneumonia, organism unspecified)  
 to pneumonia and volume, score: 0.05914595  
 influenced by pna and acute on, score: 0.032045603  
 diagnosis primary pneumonia acute on, score: 0.03101273

confidence of prediction: 0.854276  
 Y\_true: [ 4 11 19 26 27 29 30 33 48]  
 Y\_pred: [19 22 26 27 29 48]  
 top three important windows for true positive code 48 (V45.81:  
 Aortocoronary bypass status)  
 s p bypass in, score: 0.019445166  
 s p 5v cabg copd esrd, score: 0.0050002155  
 cad s p 5v cabg echo cath showed 3v disease cath, score: 0.0038842

confidence of prediction: 0.580975  
 Y\_true: [16 17 33 40 42]  
 Y\_pred: [ 0 5 17 41]  
 top three important windows for true positive code 17 (38.93: Venous  
 catheterization, not elsewhere classified)  
 to clinda vanc cefepime, score: 0.11270718  
 an a line was, score: 0.07471711  
 patient spiking fevers to, score: 0.072867244

confidence of prediction: 0.513656  
 Y\_true: [ 2 4 5 11 21 22 26 27 35 36]  
 Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]  
 top three important windows for true positive code 2 (250.00:  
 Diabetes mellitus without mention of complication, type II or  
 unspecified type, not stated as uncontrolled)  
 cri htn carotid stenosis, score: 0.24682787  
 lantus units subcutaneously at bedtime, score: 0.083702296  
 standpoint dmii continued long acting, score: 0.03903577

confidence of prediction: 0.821494  
 Y\_true: [ 2 4 5 11 21 22 26 27 35 36]  
 Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 hypertension hyperlipidemia depression discharge condition, score:  
 0.16638902  
 factors diabetes dyslipidemia hypertension cardiac history, score:

0.10866676

added amlodipine hld continued pravastatin muscle, score: 0.10522329

confidence of prediction: 0.571560

Y\_true: [ 2 4 5 11 21 22 26 27 35 36]

Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

with bun hyponatremia patient was with a, score: 0.39626405

of nephrotoxins were held, score: 0.014100894

sedation depression continued on citalopram transitional, score:

0.004874077

confidence of prediction: 0.681801

Y\_true: [ 2 4 5 11 21 22 26 27 35 36]

Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic

kidney disease stage I through stage IV, or unspecified)

chronic renal failure from baseline, score: 0.14637685

fib dm cri htn carotid, score: 0.107475445

on ckd patient was transferred with, score: 0.067447826

confidence of prediction: 0.759634

Y\_true: [ 2 4 5 11 21 22 26 27 35 36]

Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

st elevation myocardial infarction you, score: 0.2650776

with nstemi to hospital3 he, score: 0.09473534

non st elevation myocardial infarction healthcare, score:

0.010556128

confidence of prediction: 0.990722

Y\_true: [ 2 4 5 11 21 22 26 27 35 36]

Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

sev septal hypokinesia no, score: 0.0019412282

pna patient had radiographic, score: 0.0015438788

wheeze and advair was continued, score: 0.0014597265

confidence of prediction: 0.950548

Y\_true: [ 2 4 5 11 21 22 26 27 35 36]

Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

lasix for chf last name un warfarin, score: 0.057593174

chf ef afib s p, score: 0.056293238

systolic congestive heart failure chronic obstructive pulmonary,

score: 0.015256916

confidence of prediction: 0.820626

Y\_true: [ 2 4 5 11 21 22 26 27 35 36]

Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
on chronic renal failure from baseline he, score: 0.18909565  
he had arf with cr elevated to, score: 0.035987075  
on ckd patient was, score: 0.022127517

confidence of prediction: 0.723865  
Y\_true: [ 2 4 5 11 21 22 26 27 35 36]  
Y\_pred: [ 2 4 5 15 21 22 26 27 29 35 36 38 48 49]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
chronic renal failure from baseline, score: 0.14824072  
fib dm cri htn carotid, score: 0.13014482  
on ckd patient was transferred with, score: 0.07909116

confidence of prediction: 0.654081  
Y\_true: [ 7 9 26]  
Y\_pred: [ 9 20 31]  
top three important windows for true positive code 9 (287.5: Thrombocytopenia, unspecified)  
and ischium thrombocytopenia anemia secondary developmental delay, score: 0.33871028  
for bleeding thrombocytopenia unclear etiology four, score: 0.19190413  
last, score: 0.08245227

confidence of prediction: 0.875299  
Y\_true: [ 1 3 16 17 26 33 39 40 42 48 49]  
Y\_pred: [ 1 4 5 17 26 41 43 48 49]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
discharge hypothyroidism held levothyroxine initially given npo, score: 0.43787676  
fibrillation hypothyroidism cad s p, score: 0.029174957  
colace levothyroxine multaq aspirin mg, score: 0.02253489

confidence of prediction: 0.910639  
Y\_true: [ 1 3 16 17 26 33 39 40 42 48 49]  
Y\_pred: [ 1 4 5 17 26 41 43 48 49]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
abx were peeled back, score: 0.3952954  
fluid collection diffuse leptomeningitis, score: 0.04399463  
grew strep pneumo and, score: 0.03953838

confidence of prediction: 0.978733  
Y\_true: [ 1 3 16 17 26 33 39 40 42 48 49]  
Y\_pred: [ 1 4 5 17 26 41 43 48 49]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
fibrillation on warfarin and, score: 0.40090257  
atrial fibrillation bioprosthetic aortic valve, score: 0.21259108  
atrial fibrillation he has known, score: 0.07069659



confidence of prediction: 0.648274  
Y\_true: [ 1 3 16 17 26 33 39 40 42 48 49]  
Y\_pred: [ 1 4 5 17 26 41 43 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
in and cabg with porcine avr, score: 0.75761354  
of coronary artery disease small chronic microhemorrhage, score:  
0.014197954  
medical history hyperlipidemia atrial, score: 0.0087780915

confidence of prediction: 0.806591  
Y\_true: [ 1 3 16 17 26 33 39 40 42 48 49]  
Y\_pred: [ 1 4 5 17 26 41 43 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on warfarin and, score: 0.6223585  
on admission warfarin gemfibrozil, score: 0.077067494  
a day warfarin mg, score: 0.03285893

confidence of prediction: 0.597769  
Y\_true: [10 11 20 29 40 41 42]  
Y\_pred: [10 20 29 30 40 42]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
is retired smokes pack of cigarettes a, score: 0.007903138  
from lnc hypertension hyperlipidemia dementia depression  
osteoporosis psh, score: 0.0052514826  
t6 t7 t9 t12 patient, score: 0.002014722

confidence of prediction: 0.551453  
Y\_true: [10 11 20 29 40 41 42]  
Y\_pred: [10 20 29 30 40 42]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
moderate pulmonary hypertension cxr, score: 0.10212438  
from lnc hypertension hyperlipidemia dementia depression  
osteoporosis, score: 0.10097628  
eventually tolerated clamping and, score: 0.036151215

confidence of prediction: 0.550559  
Y\_true: [10 11 20 29 40 41 42]  
Y\_pred: [10 20 29 30 40 42]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
for presumed pneumonia stool was sent, score: 0.26535007  
for presumed pneumonia patient s respiratory, score: 0.12053082  
her respiratory status was, score: 0.017940033

confidence of prediction: 0.623153  
Y\_true: [10 11 20 29 40 41 42]  
Y\_pred: [10 20 29 30 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

patient was intubated in the, score: 0.086045794  
were routinely followed and repleted when, score: 0.02810738  
was examined routinely no transfusions were, score: 0.017458847

confidence of prediction: 0.720104  
Y\_true: [10 11 20 29 40 41 42]  
Y\_pred: [10 20 29 30 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
patient was intubated in the, score: 0.06128112  
was tolerating a regular, score: 0.021819158  
were routinely followed and repleted when, score: 0.016868243

confidence of prediction: 0.935442  
Y\_true: [ 5 7 17 37]  
Y\_pred: [ 5 17 28]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
versus hypovolemic hyponatremia started, score: 0.4230958  
depletion hypovolemic hyponatremia with 3rd spacing, score:  
0.26333264  
variceal bleed hyponatremia discharge condition mental, score:  
0.033087935

confidence of prediction: 0.526981  
Y\_true: [ 5 7 17 37]  
Y\_pred: [ 5 17 28]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
for picc placement findings, score: 0.08159384  
suggesting that despite the, score: 0.0635914  
right subclavian picc line that appears, score: 0.051575385

confidence of prediction: 0.502127  
Y\_true: [11 12 16 20 28 31 33 41 43 49]  
Y\_pred: [20 31 40 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
extremtiy on mr known, score: 0.45915976  
failure malnutrition hypertension discharge condition [UNK], score:  
0.13757375  
stitle interventional neuroradiology attending via telephone, score:  
0.025011325

confidence of prediction: 0.944156  
Y\_true: [11 12 16 20 28 31 33 41 43 49]  
Y\_pred: [20 31 40 41]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
vomiting aspiration pneumonia seizures respiratory failure, score:  
0.32676783  
right hemisectomy cerebral angiogram, score: 0.009793863  
ich and he was, score: 0.0037578263

confidence of prediction: 0.687425

Y\_true: [11 12 16 20 28 31 33 41 43 49]

Y\_pred: [20 31 40 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

on tube feedings at cc, score: 0.09795504

falcine herniation hydrocephalus left, score: 0.04923096

and aggressive icp management, score: 0.03386385

confidence of prediction: 0.782417

Y\_true: [ 1 9 11 17 23 24 27 37 45]

Y\_pred: [ 1 9 17 23 27 37 45]

top three important windows for true positive code 1 (244.9:

Unspecified acquired hypothyroidism)

malnutrition hypothyroidism discharge condition demented at, score: 0.2130903

be hypothyroid with tsh levothyroxine 50mcg started please, score: 0.046869114

repletion hypothyroidism the patient was, score: 0.014744292

confidence of prediction: 0.700780

Y\_true: [ 1 9 11 17 23 24 27 37 45]

Y\_pred: [ 1 9 17 23 27 37 45]

top three important windows for true positive code 9 (287.5:

Thrombocytopenia, unspecified)

hypoalbumenia and thrombocytopenia with concern, score: 0.2723077

per day thrombocytopenia lfts coags, score: 0.25444624

scan showed pancolitis surgery, score: 0.03645059

confidence of prediction: 0.798032

Y\_true: [ 1 9 11 17 23 24 27 37 45]

Y\_pred: [ 1 9 17 23 27 37 45]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

line care picc line care per protocol, score: 0.07228659

picc r picc removed l picc reinserted, score: 0.057392567

for cdiff culture and, score: 0.04604669

confidence of prediction: 0.563414

Y\_true: [ 1 9 11 17 23 24 27 37 45]

Y\_pred: [ 1 9 17 23 27 37 45]

top three important windows for true positive code 23 (412: Old myocardial infarction)

baseline is functionally independent, score: 0.01802434

coronary artery disease at, score: 0.00510433

25pm alt sgpt ast sgot ld, score: 0.004549841

confidence of prediction: 0.917742

Y\_true: [ 1 9 11 17 23 24 27 37 45]

Y\_pred: [ 1 9 17 23 27 37 45]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

diuresed with lasix 20mg iv, score: 0.047172304

regurgitation lue u s, score: 0.010643803  
chronic systolic heart failure urinary tract, score: 0.00925185

confidence of prediction: 0.882447  
Y\_true: [ 1 9 11 17 23 24 27 37 45]  
Y\_pred: [ 1 9 17 23 27 37 45]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection vre urinary retention coronary, score:  
0.21301392  
for uti culture negative, score: 0.20786722  
uti repeat ua ucx, score: 0.10049671

confidence of prediction: 0.930573  
Y\_true: [ 1 9 11 17 23 24 27 37 45]  
Y\_pred: [ 1 9 17 23 27 37 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
providing kcal tpn volume amino acid, score: 0.81930774  
received tpn delirium was bad, score: 0.03243483  
of tpn within weeks, score: 0.017032398

confidence of prediction: 0.812971  
Y\_true: [ 4 15 18 21 22 24 27 38]  
Y\_pred: [ 2 4 13 18 24 27]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
diabetes hypertension dyslipidemia lad stent cypher at, score:  
0.03356418  
factors diabetes hypertension dyslipidemia cardiac history cabg  
none, score: 0.019443575  
insulin tamsulosin mg po, score: 0.013092745

confidence of prediction: 0.972282  
Y\_true: [ 4 15 18 21 22 24 27 38]  
Y\_pred: [ 2 4 13 18 24 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.6309778  
wires and chest tubes, score: 0.10086204  
grafting x1 saphenous obtuse marginal on history, score: 0.021275222

confidence of prediction: 0.972478  
Y\_true: [ 4 15 18 21 22 24 27 38]  
Y\_pred: [ 2 4 13 18 24 27]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cad ischemic cardiomyopathy with ef, score: 0.106347576  
vessel coronary artery disease the, score: 0.056611896  
coronary artery disease left, score: 0.05512556

confidence of prediction: 0.634247  
Y\_true: [ 4 15 18 21 22 24 27 38]  
Y\_pred: [ 2 4 13 18 24 27]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cabg evaluation ecg sinus, score: 0.13751803  
with heart failure he was diuresis, score: 0.09055548  
dysfunction severely depressed lvef right, score: 0.08360705

confidence of prediction: 0.833324  
Y\_true: [10 11 17 34 42]  
Y\_pred: [ 4 20 31 33 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hyperlipidemia depression gerd social history his is, score:  
0.06986069  
hypertension and depression who, score: 0.013298147  
virus encephalitis was performed, score: 0.005358501

confidence of prediction: 0.785019  
Y\_true: [10 11 17 34 42]  
Y\_pred: [ 4 20 31 33 34 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
micu intubated and sedated as, score: 0.2501678  
was intubated for airway protection, score: 0.16451544  
was intubated and sedated, score: 0.12937309

confidence of prediction: 0.771148  
Y\_true: [17 21 26 36 41 43]  
Y\_pred: [17 21 29 33 35 36 37 41 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
oxacillin resistant staphylococci must, score: 0.3826254  
line associated thrombus patient, score: 0.03647262  
from vent major surgical, score: 0.027843345

confidence of prediction: 0.766572  
Y\_true: [17 21 26 36 41 43]  
Y\_pred: [17 21 29 33 35 36 37 41 43]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
failure enterobacter bacteremia ventilator associated, score:  
0.046710372  
chronic kidney disease baseline cr reportedly diabetic and, score:  
0.041603632  
arf with hyperkalemia requiring, score: 0.010195937

confidence of prediction: 0.676516  
Y\_true: [17 21 26 36 41 43]  
Y\_pred: [17 21 29 33 35 36 37 41 43]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
failure enterobacter bacteremia ventilator associated, score:  
0.0803334

arf with hyperkalemia requiring, score: 0.018997444  
chronic kidney disease baseline cr reportedly diabetic, score:  
0.017496075

confidence of prediction: 0.794439  
Y\_true: [17 21 26 36 41 43]  
Y\_pred: [17 21 29 33 35 36 37 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tolerating trach collar mask for, score: 0.07713121  
trach collar during the, score: 0.0758844  
your tracheostomy tube while, score: 0.055650473

confidence of prediction: 0.856415  
Y\_true: [17 21 26 36 41 43]  
Y\_pred: [17 21 29 33 35 36 37 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
associated pneumonia multifocal atrial, score: 0.041415166  
tolerating trach collar mask for, score: 0.030292585  
positional trach leak in, score: 0.029766731

confidence of prediction: 0.959609  
Y\_true: [ 7 13 15 18 20 22 24 27 33 34 38 42 49]  
Y\_pred: [ 4 13 18 20 22 24 34]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
descending saphenous vein grafted to, score: 0.07853849  
mammary artery grafted to, score: 0.06576803  
coronary artery bypass grafting x left, score: 0.026101317

confidence of prediction: 0.969397  
Y\_true: [ 7 13 15 18 20 22 24 27 33 34 38 42 49]  
Y\_pred: [ 4 13 18 20 22 24 34]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
incisions gently with mild soap, score: 0.6279867  
bypass grafting x left internal, score: 0.029771222  
saphenous vein grafted to, score: 0.021234168

confidence of prediction: 0.958628  
Y\_true: [ 7 13 15 18 20 22 24 27 33 34 38 42 49]  
Y\_pred: [ 4 13 18 20 22 24 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
stenosis secondary htn gerd severe aortic, score: 0.037311155  
avr paravalvular leak critical, score: 0.02004781  
cholecystostomy tube was placed, score: 0.0125066135

confidence of prediction: 0.932573  
Y\_true: [ 7 13 15 18 20 22 24 27 33 34 38 42 49]  
Y\_pred: [ 4 13 18 20 22 24 34]  
top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)  
having demand ischemia in the setting, score: 0.0038553954  
indx ctropnt 45pm blood, score: 0.0024638493  
non tender non distended, score: 0.0015997842

confidence of prediction: 0.976834  
Y\_true: [ 7 13 15 18 20 22 24 27 33 34 38 42 49]  
Y\_pred: [ 4 13 18 20 22 24 34]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease severe, score: 0.2967337  
descending saphenous vein grafted, score: 0.062375486  
coronary artery bypass grafting, score: 0.027117927

confidence of prediction: 0.802074  
Y\_true: [ 7 13 15 18 20 22 24 27 33 34 38 42 49]  
Y\_pred: [ 4 13 18 20 22 24 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
secondary htn gerd severe aortic stenosis pe, score: 0.047721796  
tape 2012aw machine p2 echocardiographic measurements, score:  
0.025019633  
htn hld gerd h o left, score: 0.012103015

confidence of prediction: 0.884251  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
hyperlipidemia diabetes mellitus type previous left, score:  
0.035048816  
of htn dm hld and previous left, score: 0.027428392  
hyperlipidemia dm and previous stroke, score: 0.023906905

confidence of prediction: 0.811025  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
history hypertension hyperlipidemia diabetes mellitus type previous,  
score: 0.13369536  
of hypertension hyperlipidemia dm and previous, score: 0.079744115  
htn dm hld and previous left, score: 0.04349432

confidence of prediction: 0.908923  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension mri brain mra, score: 0.082391575  
hypertension hyperlipidemia dm and previous, score: 0.06964791  
history of htn dm hld and previous, score: 0.06153096

confidence of prediction: 0.805637  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with controlled rate, score: 0.5217407  
chronic infarct tte the, score: 0.026906168  
every hours warfarin mg, score: 0.009955212

confidence of prediction: 0.899387  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks sm 20pm urine blood, score: 0.3013494  
a urinary tract infection on and, score: 0.09390198  
leuks tr 36am urine, score: 0.017974135

confidence of prediction: 0.835668  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
was then intubated for airway protection and, score: 0.13047762  
had hematuria upon arrival, score: 0.0038781224  
icu after intubation in the, score: 0.0035306816

confidence of prediction: 0.893932  
Y\_true: [ 2 4 17 20 26 37 40 41 42]  
Y\_pred: [ 2 4 20 26 37 39 40 42 49]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was then intubated for airway protection and, score: 0.05478485  
icu after intubation in the, score: 0.0057791835  
and fingersticks were treated, score: 0.00447597

confidence of prediction: 0.656460  
Y\_true: [ 4 12 19 33 40 42]  
Y\_pred: [ 4 11 12 19 33]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia restless leg syndrome h, score: 0.2108815  
abno igg iga igm, score: 0.08145542  
hld cad patient has somewhat, score: 0.07413022

confidence of prediction: 0.957239  
Y\_true: [ 4 12 19 33 40 42]  
Y\_pred: [ 4 11 12 19 33]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
inpatient bronchoalveolar lavage gram stain pmn, score: 0.63637984  
including a bronchoscopy a camera, score: 0.023575636  
2mg 2ml fentanyl citrate, score: 0.013028295



confidence of prediction: 0.637827  
Y\_true: [ 4 12 19 33 40 42]  
Y\_pred: [ 4 11 12 19 33]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
on dialysis during initial, score: 0.08734688  
with his dialysis his last dialysis was performed, score:  
0.072407514  
resolved with dialysis afterwards the, score: 0.05285435

confidence of prediction: 0.792532  
Y\_true: [ 4 12 19 33 40 42]  
Y\_pred: [ 4 11 12 19 33]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
rr peep abg on, score: 0.17240536  
due to hypoxia and, score: 0.16330414  
alveolar ground glass opacities, score: 0.11604305

confidence of prediction: 0.668495  
Y\_true: [ 1 2 7 20 27 30 37 41]  
Y\_pred: [ 1 7 20 27 30 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
and hypothyroidism his behavior, score: 0.14772342  
cirrhosis hypothyroidism on synthroid on transfer, score: 0.08113674  
q72hr levothyroxine 25mg po daily, score: 0.0477397

confidence of prediction: 0.673334  
Y\_true: [ 1 2 7 20 27 30 37 41]  
Y\_pred: [ 1 7 20 27 30 37]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
performing biopsy stabilization procedure, score: 0.3072982  
t10 fusion t12 kyphoplasty history of present illness, score:  
0.1266912  
t10 fusion t12 kyphoplasty at, score: 0.1266912

confidence of prediction: 0.844265  
Y\_true: [ 1 2 7 20 27 30 37 41]  
Y\_pred: [ 1 7 20 27 30 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
obesity anxiety hypertension osteoarthritis cirrhosis lfts noted,  
score: 0.35769907  
ss morphine mg iv, score: 0.04207452  
showed enterococcus last name, score: 0.02628924

confidence of prediction: 0.923540  
Y\_true: [ 1 2 7 20 27 30 37 41]  
Y\_pred: [ 1 7 20 27 30 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

chf anemia see below, score: 0.21415631  
diastolic chf upon admission patient, score: 0.065245315  
heart failure ef unknown peripheral, score: 0.056858778

confidence of prediction: 0.663478  
Y\_true: [ 1 2 7 20 27 30 37 41]  
Y\_pred: [ 1 7 20 27 30 37]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
cancer chf copd dm new diagnosis, score: 0.10702744  
vascular disease copd obesity anxiety hypertension osteoarthritis,  
score: 0.053579617

confidence of prediction: 0.928373  
Y\_true: [ 1 2 7 20 27 30 37 41]  
Y\_pred: [ 1 7 20 27 30 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
alone uti patient reported dysuria, score: 0.30494827  
[UNK] urinary retention discharge, score: 0.037808344  
for uti started haldol, score: 0.03653702

confidence of prediction: 0.524040  
Y\_true: [ 3 20 26 27]  
Y\_pred: [ 9 17 20 26 27 35 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
decreased renal perfusion pre renal based, score: 0.16407779  
hypercholesterolemia labile hypertension migraines pneumonia in,  
score: 0.10747279  
febrile neutropenia patient was, score: 0.06919036

confidence of prediction: 0.870255  
Y\_true: [ 3 20 26 27]  
Y\_pred: [ 9 17 20 26 27 35 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib she was loaded, score: 0.29271376  
af with year digits and, score: 0.052141998  
af with year digits, score: 0.04154572

confidence of prediction: 0.567230  
Y\_true: [ 3 20 26 27]  
Y\_pred: [ 9 17 20 26 27 35 37]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
probnp numeric identifier imaging ct, score: 0.09631087  
failure the cta could, score: 0.065291606  
failure tachycardia on the, score: 0.052413624

confidence of prediction: 0.703979  
Y\_true: [ 4 11 17 34]  
Y\_pred: [ 4 8 34]  
top three important windows for true positive code 4 (272.4: Other

and unspecified hyperlipidemia)  
age gerd hld possible sleep apnea depression, score: 0.48353934  
p traumatic amputation social history the, score: 0.010363133  
daily ezetimibe mg tablet sig, score: 0.009836242

confidence of prediction: 0.819399  
Y\_true: [ 4 11 17 34]  
Y\_pred: [ 4 8 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
w known gerd so we continued his, score: 0.031055884  
at age gerd hld possible sleep apnea, score: 0.020642992  
kidney stones thought to be, score: 0.0074150637

confidence of prediction: 0.836170  
Y\_true: [ 4 14 20 24 38]  
Y\_pred: [ 4 10 15 20 24 38]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
25mg hospital1 hld was on simvastatin 5mg, score: 0.19052392  
h o hld nash sleep apnea, score: 0.06462513  
infarction hypertension dyslipidemia discharge condition, score:  
0.051079676

confidence of prediction: 0.979170  
Y\_true: [ 4 14 20 24 38]  
Y\_pred: [ 4 10 15 20 24 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
ef of htn pt was put, score: 0.15541919  
htn pulmonary htn bph he, score: 0.1421753  
htn hld nash sleep apnea, score: 0.08584757

confidence of prediction: 0.990237  
Y\_true: [ 4 14 20 24 38]  
Y\_pred: [ 4 10 15 20 24 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
vessel coronary artery disease the, score: 0.08690839  
single vessel coronary artery disease persistent, score: 0.037493832  
w cad distal lad distribution, score: 0.0331954

confidence of prediction: 0.864489  
Y\_true: [ 4 14 20 24 38]  
Y\_pred: [ 4 10 15 20 24 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with drug, score: 0.41515517  
lad diffusely diseased mid vessel, score: 0.05250173  
cardiac catheterization comments selective coronary angiography of  
this, score: 0.03688822

confidence of prediction: 0.874919  
Y\_true: [11 46]

Y\_pred: [ 9 11 17 27 33 44]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
years depression panic disorder colonic polyps adenoma, score:  
0.01843061  
for comfort depression panic disorder held nortriptyline, score:  
0.016725618  
for microbiological analysis it, score: 0.011493218

confidence of prediction: 0.875566  
Y\_true: [ 4 7 14 20 22 24 35 38 44 47]  
Y\_pred: [ 2 20 22 24 35 38]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
hypertension patient maintained on hctz and lisinopril as, score:  
0.16852973  
metformin hospital1 ibuprofen prn, score: 0.15093681  
with dm2 htn hyperlipidemia who, score: 0.045914117

confidence of prediction: 0.677978  
Y\_true: [ 4 7 14 20 22 24 35 38 44 47]  
Y\_pred: [ 2 20 22 24 35 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
was stented nstemi cad patient with vessel, score: 0.037558015  
non st elevation myocardial infarction acute blood, score:  
0.01769336  
catherization revealed lcx s, score: 0.014414257

confidence of prediction: 0.964709  
Y\_true: [ 4 7 14 20 22 24 35 38 44 47]  
Y\_pred: [ 2 20 22 24 35 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad with mid vessel stenosis lcx with, score: 0.07846624  
xience stent then transferred, score: 0.069126256  
stented nstemi cad patient with vessel disease, score: 0.052066103

confidence of prediction: 0.735739  
Y\_true: [ 4 7 14 20 22 24 35 38 44 47]  
Y\_pred: [ 2 20 22 24 35 38]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure resolved cr on, score: 0.11885485  
insulin a short acting, score: 0.022469385  
acute renal failure diabetes mellitus, score: 0.01456053

confidence of prediction: 0.781675  
Y\_true: [ 4 7 14 20 22 24 35 38 44 47]  
Y\_pred: [ 2 20 22 24 35 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cath comments successful precordial thump, score: 0.10876314  
catherization revealed lcx s, score: 0.0908744

cath to assess for, score: 0.06824305

confidence of prediction: 0.786261

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 2 (250.00:

Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

type diabetes patient on metformin at home which, score: 0.14896813

metformin mg er hospital1 metoprolol, score: 0.10145913

chol pvd dm diet controlled location, score: 0.020802483

confidence of prediction: 0.809706

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

dementia pvd ckd aaa h o pe, score: 0.02079484

disease chronic kidney disease aaa history of, score: 0.019921986

discontinued home cilostazol since, score: 0.009064256

confidence of prediction: 0.987619

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib s p ppm on, score: 0.4792435

fibrillation s p dual, score: 0.0037949802

atrial pacemaker lead perforation, score: 0.002270535

confidence of prediction: 0.929810

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

heart function and likely, score: 0.02802205

with iv lasix mg, score: 0.009156197

aaa h o pe, score: 0.007408313

confidence of prediction: 0.715180

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

on coumadin copd critical as location un, score: 0.26000276

from admission copd continued on home tiotropium, score: 0.07385279

confidence of prediction: 0.770648

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

dementia pvd ckd aaa h o pe, score: 0.019800138

disease chronic kidney disease aaa history of, score: 0.016543925  
discontinued home cilostazol since, score: 0.00930647

confidence of prediction: 0.682833

Y\_true: [ 2 6 9 15 21 26 27 30 35 36 38 49]

Y\_pred: [ 2 21 26 27 30 36 49]

top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)

ppm on coumadin inr, score: 0.41893733

to on coumadin was, score: 0.042237572

afib s p ppm on coumadin copd critical, score: 0.03400093

confidence of prediction: 0.950391

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 13 (36.15: Single internal mammary-coronary artery bypass)

coronary artery reverse saphenous vein single, score: 0.16013841

coronary artery reverse saphenous vein single, score: 0.097395815

coronary artery bypass x, score: 0.08264409

confidence of prediction: 0.977916

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 18 (39.61:

Extracorporeal circulation auxiliary to open heart surgery)

diuresed towards his pre, score: 0.22864115

cardiothoracic allergies penicillins attending, score: 0.0069844457

bypass graft x4 with, score: 0.0064414307

confidence of prediction: 0.723609

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 22 (410.71:

Subendocardial infarction, initial episode of care)

nstemi and decompensated heart failure, score: 0.25242373

have nstemi and decompensated heart failure, score: 0.039859824

syndrome nstemi evaluation for avr, score: 0.03249165

confidence of prediction: 0.976915

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery reverse saphenous, score: 0.12610795

coronary artery reverse saphenous, score: 0.10415079

coronary artery disease aortic, score: 0.102517985

confidence of prediction: 0.978518

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

afib tablet po daily, score: 0.055393085

atrial fibrillation mitral regurgitation acute, score: 0.037097167  
atrial fibrillation resected squamous cell, score: 0.014465964

confidence of prediction: 0.960505

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

systolic heart failure he initially, score: 0.114093065

systolic heart failure past medical, score: 0.114093065

systolic heart failure community acquired, score: 0.114093065

confidence of prediction: 0.679258

Y\_true: [ 3 7 13 18 21 22 24 26 27 29 35 36 40 42 47 49]

Y\_pred: [ 4 13 18 20 22 24 26 27 29]

top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

community acquired pneumonia hypertension hypercholesterolemia,  
score: 0.6098203

avoid rubbing on lower, score: 0.010082096

a second examiner the, score: 0.008663182

confidence of prediction: 0.966547

Y\_true: [ 5 8 20]

Y\_pred: [ 5 6 24 37]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)

have hypovolemic hyponatremia given her, score: 0.551124

discharge diagnosis hyponatremia left humerus, score: 0.11812947

complaint hypotension hyponatremia anemia major surgical or, score:  
0.0844133

confidence of prediction: 0.742952

Y\_true: [ 0 3 8 11 31 33 35 43 46]

Y\_pred: [ 0 3 29 33 40 42 46]

top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)

shock the patient had, score: 0.066867456

septic shock respiratory failure pneumonia, score: 0.045784205

septic shock likely secondary to, score: 0.02776624

confidence of prediction: 0.755582

Y\_true: [ 0 3 8 11 31 33 35 43 46]

Y\_pred: [ 0 3 29 33 40 42 46]

top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)

yeast inpatient mrsa screen mrsa, score: 0.008784746

favoring bibasilar atelectasis although, score: 0.0064773113

110s then became hypotensive to, score: 0.003573812

confidence of prediction: 0.662933

Y\_true: [ 0 3 8 11 31 33 35 43 46]

Y\_pred: [ 0 3 29 33 40 42 46]

top three important windows for true positive code 33 (518.81: Acute

respiratory failure)  
she was intubated in, score: 0.09958779  
sedated and intubated cv, score: 0.06321213  
therapy respiratory failure secondary to, score: 0.05796868

confidence of prediction: 0.979049  
Y\_true: [ 0 3 8 11 31 33 35 43 46]  
Y\_pred: [ 0 3 29 33 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
shock the patient had, score: 0.0681414  
septic shock respiratory failure pneumonia, score: 0.04382756  
septic shock likely secondary to, score: 0.04263466

confidence of prediction: 0.921201  
Y\_true: [ 8 12 20 27 33 41 43 49]  
Y\_pred: [ 4 17 35 41 43 49]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
on tube feeds were started, score: 0.09304289  
on tube feedings through a, score: 0.07986931  
her tube feeds near goal, score: 0.07762149

confidence of prediction: 0.905165  
Y\_true: [ 8 12 20 27 33 41 43 49]  
Y\_pred: [ 4 17 35 41 43 49]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
trach wean trials on trach mask, score: 0.054829724  
herniation eeg this is, score: 0.04793458  
matrix percutaneous tracheostomy and placement of, score:  
0.031846512

confidence of prediction: 0.790297  
Y\_true: [ 8 12 20 27 33 41 43 49]  
Y\_pred: [ 4 17 35 41 43 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
dvt on coumadin visiting, score: 0.57811934  
vicodin qhs coumadin 5mg, score: 0.111245506  
dvt on coumadin which, score: 0.07036671

confidence of prediction: 0.703346  
Y\_true: [11 17 20 34 45]  
Y\_pred: [11 24 34 45]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
history pmhx depression peptic ulcer, score: 0.40470114  
post endoscopy depression gerd pud discharge condition, score:  
0.008462638  
recorded as having no, score: 0.006046703

confidence of prediction: 0.946280



Y\_true: [11 17 20 34 45]  
Y\_pred: [11 24 34 45]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
gerd pud discharge condition mental, score: 0.10624389  
disease gastroesophageal reflux pshx carpal tunnel release, score:  
0.007781689

confidence of prediction: 0.966001  
Y\_true: [11 17 20 34 45]  
Y\_pred: [11 24 34 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
and tpn was discontinued and patient, score: 0.14460592  
on and tpn started a foley, score: 0.02734445  
while on tpn the patient, score: 0.0052957134

confidence of prediction: 0.883971  
Y\_true: [ 0 6 20 24 29 30 32]  
Y\_pred: [17 29 30 40]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
a pneumonia and fluid, score: 0.055782314  
diagnosis primary pneumonia pleural effusion, score: 0.0196191  
of pneumonia for evaluation, score: 0.019430116

confidence of prediction: 0.542457  
Y\_true: [ 0 6 20 24 29 30 32]  
Y\_pred: [17 29 30 40]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
medical history copd rll lung mass found, score: 0.34434798  
prednisone possible copd and recent workup for, score: 0.08592885  
chronic rhinitis osteoarthritis s, score: 0.024342258

confidence of prediction: 0.922720  
Y\_true: [ 5 8 27 35 37 41 42]  
Y\_pred: [17 27 29 33 37 40 42 43]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure ef went from to, score: 0.051981848  
disease cardiac catheterization report, score: 0.017777937  
pad compared with the, score: 0.0060710814

confidence of prediction: 0.863463  
Y\_true: [ 5 8 27 35 37 41 42]  
Y\_pred: [17 27 29 33 37 40 42 43]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
resolved urinary tract infection ventilator associated, score:  
0.063263185  
escherichia coli proteus mirabilis ampicillin s, score: 0.045319933  
culture grew citrobacter that, score: 0.017318908

confidence of prediction: 0.513445  
Y\_true: [ 5 8 27 35 37 41 42]  
Y\_pred: [17 27 29 33 37 40 42 43]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated and sedated, score: 0.20729758  
to intubated status past, score: 0.13851914  
general intubated sedated and paralyzed, score: 0.076967195

confidence of prediction: 0.676847  
Y\_true: [ 4 12 17 20 37 45]  
Y\_pred: [ 2 4 20 30 34 37 45]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
diabetes hypertension hyperlipidemia gout asthma copd spinal, score:  
0.11215843  
discharge medications simvastatin mg tablet sig, score: 0.021829933  
iv q12 simvastatin 20mg, score: 0.019610718

confidence of prediction: 0.806341  
Y\_true: [ 4 12 17 20 37 45]  
Y\_pred: [ 2 4 20 30 34 37 45]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
of simvastatin hypertension he was normotensive, score: 0.12421274  
dm2 htn gout transferred from, score: 0.072940394  
secondary hypertension diabetes mellitus gout asthma, score:  
0.051050413

confidence of prediction: 0.911806  
Y\_true: [ 4 12 17 20 37 45]  
Y\_pred: [ 2 4 20 30 34 37 45]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection the pt, score: 0.12149701  
a uti and c, score: 0.11736979  
a uti was treated with, score: 0.082262866

confidence of prediction: 0.980793  
Y\_true: [ 4 12 17 20 37 45]  
Y\_pred: [ 2 4 20 30 34 37 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
ox3 cns ii xii grossly, score: 0.0057168496  
started on tpn to optimize wound healing, score: 0.005204997  
calcitonin nasal spray delirium after, score: 0.0008420259

confidence of prediction: 0.763314  
Y\_true: [ 1 8 10 11 27 29 35]  
Y\_pred: [ 1 17]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
repair hypothyroidism pw report of, score: 0.25146472

abscess hypothyroidism hypertriglyceridemia spinal stenosis, score: 0.05393275

downtime 1min groggy afterwards, score: 0.00382663

confidence of prediction: 0.548100

Y\_true: [ 4 5 9 20 26 27 49]

Y\_pred: [ 4 5 20 26 27 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

history hypertension hyperlipidemia atrial fibrillation glaucoma cataracts, score: 0.14617108

carvedilol mg po q, score: 0.03806918

valsartan mg po bid, score: 0.019186808

confidence of prediction: 0.900426

Y\_true: [ 4 5 9 20 26 27 49]

Y\_pred: [ 4 5 20 26 27 49]

top three important windows for true positive code 5 (276.1: Hyposmolality and/or hyponatremia)

sodium concentration hyponatremia in your, score: 0.2649399

sodium concentration hyponatremia in, score: 0.2649399

to be hyponatremic to pt had an, score: 0.07574145

confidence of prediction: 0.996821

Y\_true: [ 4 5 9 20 26 27 49]

Y\_pred: [ 4 5 20 26 27 49]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

swelling stopped hctz given, score: 0.060199246

htn management guided by, score: 0.053459

medical history hypertension hyperlipidemia atrial fibrillation, score: 0.037370343

confidence of prediction: 0.994429

Y\_true: [ 4 5 9 20 26 27 49]

Y\_pred: [ 4 5 20 26 27 49]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib on coumadin was, score: 0.46012193

afib on warfarin chads2, score: 0.24943046

fibrillation glaucoma cataracts h, score: 0.014735503

confidence of prediction: 0.946530

Y\_true: [ 4 5 9 20 26 27 49]

Y\_pred: [ 4 5 20 26 27 49]

top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)

chf followed by dr, score: 0.09893668

diastolic chf anti htn management, score: 0.07941257

diastolic congestive heart failure chronic thrombocytopenia, score: 0.016965955

confidence of prediction: 0.760552

Y\_true: [ 4 5 9 20 26 27 49]

Y\_pred: [ 4 5 20 26 27 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on coumadin was, score: 0.2552635  
afib on warfarin chads2, score: 0.20826869  
fibrillation on warfarin hypertension, score: 0.20562138

confidence of prediction: 0.912095  
Y\_true: [ 1 20 27 35 37]  
Y\_pred: [ 1 27 31 34 35 37]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
edema hypothyroidism continued home levothyroxine tsh wnl, score: 0.2574173  
dementia hypothyroidism hyperlipidemia hypertension fatty, score: 0.18672702  
day levothyroxine mcg tablet sig, score: 0.0106575405

confidence of prediction: 0.958295  
Y\_true: [ 1 20 27 35 37]  
Y\_pred: [ 1 27 31 34 35 37]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
dchf exacerbation sent home, score: 0.3117093  
congestive heart failure ef, score: 0.16707031  
diastolic heart failure most recently in, score: 0.079312734

confidence of prediction: 0.703614  
Y\_true: [ 1 20 27 35 37]  
Y\_pred: [ 1 27 31 34 35 37]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
secondary acute kidney injury discharge condition mental, score: 0.16248634  
decreased renal function pt s, score: 0.06493882  
kidney injury which may, score: 0.06455337

confidence of prediction: 0.870361  
Y\_true: [ 1 20 27 35 37]  
Y\_pred: [ 1 27 31 34 35 37]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
ua uti noted in the, score: 0.104680814  
have uti and elevated lithium level, score: 0.10465532  
with uti see below vs, score: 0.067213714

confidence of prediction: 0.922020  
Y\_true: [ 2 3 6 11 27 28 29 30 35 37 40 43]  
Y\_pred: [ 4 7 20 27 28 30 35 40 42 44]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diastolic heart failure obstructive sleep apnea, score: 0.37597883  
including heart failure osa and copd, score: 0.09727529  
failure patient with enlarged, score: 0.045538735

confidence of prediction: 0.755314  
Y\_true: [ 2 3 6 11 27 28 29 30 35 37 40 43]  
Y\_pred: [ 4 7 20 27 28 30 35 40 42 44]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
otherwise normal egd to third part of, score: 0.6721856  
performed egd report very, score: 0.046395224  
lower endoscopy performed which did, score: 0.03960804

confidence of prediction: 0.692374  
Y\_true: [ 2 3 6 11 27 28 29 30 35 37 40 43]  
Y\_pred: [ 4 7 20 27 28 30 35 40 42 44]  
top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)  
obstructive pulmonary disease acute, score: 0.24908142  
copd and obesity hypoventilation syndrome, score: 0.19794461  
medical history copd w home o2 at, score: 0.09572907

confidence of prediction: 0.565987  
Y\_true: [ 2 3 6 11 27 28 29 30 35 37 40 43]  
Y\_pred: [ 4 7 20 27 28 30 35 40 42 44]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
dhf elevated bnp respiratory difficulty, score: 0.19755808  
more severe hypercapnia with pco2, score: 0.03268165  
most likely pre renal lisinopril and, score: 0.027806988

confidence of prediction: 0.825322  
Y\_true: [ 2 3 6 11 27 28 29 30 35 37 40 43]  
Y\_pred: [ 4 7 20 27 28 30 35 40 42 44]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
was emergently intubated and transferred, score: 0.37925953  
she was intubated and transferred, score: 0.14197326  
to be intubated and sent, score: 0.032670993

confidence of prediction: 0.955702  
Y\_true: [ 2 4 20 24 37 39]  
Y\_pred: [20 30 37 39]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
bleed dm htn copd macular degeneration anemia, score: 0.06366788  
albuterol and ipratroprium nebulization, score: 0.032093294  
metastatic rcc patient will, score: 0.031556156

confidence of prediction: 0.794425  
Y\_true: [ 2 4 20 24 37 39]  
Y\_pred: [20 30 37 39]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
thromobosis uti secondary diabetes, score: 0.09735005  
a urinary tract infection probably because, score: 0.07246095  
asa urinary retention patient with urinary retention following

bronchoscopy foley catheter was, score: 0.01603001

confidence of prediction: 0.568945

Y\_true: [ 2 4 20 24 37 39]

Y\_pred: [20 30 37 39]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

tee no mass thrombus, score: 0.8589199

effusion without evidence of, score: 0.00691047

bacteri none yeast none epi transe, score: 0.0038785636

confidence of prediction: 0.805654

Y\_true: [ 4 12 26 31 32 33 41 43 47]

Y\_pred: [ 2 17 31 33 35 40 42 43]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

aspiration pneumonitis pneumonia ventilator associated, score:  
0.20649526

to aspiration as her wbc, score: 0.0742097

future aspiration on a dysphagia diet, score: 0.06537775

confidence of prediction: 0.902082

Y\_true: [ 4 12 26 31 32 33 41 43 47]

Y\_pred: [ 2 17 31 33 35 40 42 43]

top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)

hypercarbic respiratory failure resolved initial, score: 0.5031308

intubated for hypoxia thought, score: 0.07531584

of respiratory failure was, score: 0.036599293

confidence of prediction: 0.743889

Y\_true: [ 4 12 26 31 32 33 41 43 47]

Y\_pred: [ 2 17 31 33 35 40 42 43]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)

air ventilator associated pneumonia on she, score: 0.036952227

hypercarbic respiratory failure resolved, score: 0.035164524

pneumonia ventilator associated diabetes, score: 0.033408932

confidence of prediction: 0.783844

Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]

Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)

dm2 htn hl cad s p cabg, score: 0.039983038

slntg prn for chest, score: 0.017575499

ppm in htn hl dm2 h o tias, score: 0.009003492

confidence of prediction: 0.806556

Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]

Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

access floor flush with, score: 0.3389532  
omeprazole was changed to, score: 0.0506927  
for picc line please, score: 0.049559563

confidence of prediction: 0.904957  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
pacemaker stroke ckd stage ii iii pvd, score: 0.026730016  
copd ckd stage creatinine s p, score: 0.023630995  
imi and cabg atrial fibrillation sss status, score: 0.0097367205

confidence of prediction: 0.989952  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf on home coumadin sinus, score: 0.2563671  
afib who presents as, score: 0.06726613  
atrial fibrillation coumadin was initially, score: 0.063765846

confidence of prediction: 0.958490  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf ef in paf on, score: 0.2635489  
chf the patient was, score: 0.12851651  
systolic heart failure secondary cad status, score: 0.10227513

confidence of prediction: 0.720149  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
stenosis gout copd ckd stage creatinine s, score: 0.2611935  
type ii copd hypertension gout s p, score: 0.15654962  
numeric identifier 56pm blood, score: 0.012233939

confidence of prediction: 0.980467  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuks lg 04am urine rbc, score: 0.74606115  
leuks sm 08am urine rbc, score: 0.019549282  
interactions with omeprazole and, score: 0.007578435

confidence of prediction: 0.975593  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 45 (99.15:

Parenteral infusion of concentrated nutritional substances)  
solids on tpn was briefly initiated from, score: 0.0067096516  
to lie flat her abdominal, score: 0.0035217018  
was repaired using interrupted prolene sutures without difficulty  
cxr, score: 0.00090843375

confidence of prediction: 0.602420  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg [UNK] known celiac, score: 0.77280676  
stenting of sma and, score: 0.072066456  
patient after cabg there, score: 0.036755975

confidence of prediction: 0.776493  
Y\_true: [ 4 6 17 21 23 26 27 30 34 35 37 45 47 48 49]  
Y\_pred: [ 2 4 17 21 24 26 27 30 33 36 37 40 45 48 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
for constipation warfarin mg, score: 0.36068934  
paf on home coumadin sinus, score: 0.08907693  
days and coumadin dose, score: 0.076468

confidence of prediction: 0.971667  
Y\_true: [ 0 26 27 31 47]  
Y\_pred: [ 7 20 24 26 27 44 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation long standing coumadin stopped, score:  
0.12774396  
atrial fibrillation noted during hospitalization, score: 0.09838517  
irregularly irregular normal s1 s2, score: 0.0031216997

confidence of prediction: 0.888654  
Y\_true: [ 0 26 27 31 47]  
Y\_pred: [ 7 20 24 26 27 44 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
ef past surgical history, score: 0.42864892  
ef social history he, score: 0.0767499  
pvd chf colon cancer s, score: 0.028917126

confidence of prediction: 0.814497  
Y\_true: [ 8 15 24 25 26 27 33 35 36 38 40 42]  
Y\_pred: [21 24 25 27 29 33 36 40 43 44]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease mild, score: 0.17865036  
s p cabg in, score: 0.11151755  
coronary artery disease ventilator, score: 0.103977114

confidence of prediction: 0.719398  
Y\_true: [ 8 15 24 25 26 27 33 35 36 38 40 42]



Y\_pred: [21 24 25 27 29 33 36 40 43 44]  
top three important windows for true positive code 25 (424.0: Mitral valve disorders)  
failure mitral regurgitation coronary artery, score: 0.23910806  
severe mitral regurgitation is seen, score: 0.09685331  
severe mitral regurgitation moderate tricuspid, score: 0.09685331

confidence of prediction: 0.951719  
Y\_true: [ 8 15 24 25 26 27 33 35 36 38 40 42]  
Y\_pred: [21 24 25 27 29 33 36 40 43 44]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
congestive heart failure mitral regurgitation coronary artery, score: 0.26144728  
systolic heart failure mr, score: 0.10152461  
congestive heart failure you, score: 0.03994044

confidence of prediction: 0.771703  
Y\_true: [ 8 15 24 25 26 27 33 35 36 38 40 42]  
Y\_pred: [21 24 25 27 29 33 36 40 43 44]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
s respiratory failure was, score: 0.14683433  
for respiratory failure in, score: 0.07101403  
complaint respiratory failure transfer, score: 0.041929442

confidence of prediction: 0.507373  
Y\_true: [ 8 15 24 25 26 27 33 35 36 38 40 42]  
Y\_pred: [21 24 25 27 29 33 36 40 43 44]  
top three important windows for true positive code 36 (585.9: Chronic kidney disease, unspecified)  
anemia chronic kidney disease left ventricular, score: 0.03874813  
fever and leukocytosis this, score: 0.026836673  
renal failure mr known, score: 0.02294183

confidence of prediction: 0.521571  
Y\_true: [ 8 15 24 25 26 27 33 35 36 38 40 42]  
Y\_pred: [21 24 25 27 29 33 36 40 43 44]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
was reintubated later that, score: 0.53142786  
vented general intubated not, score: 0.22048625  
failure requiring intubation diuresis was, score: 0.01522191

confidence of prediction: 0.575280  
Y\_true: [12 17 18 20 31 33 41 43]  
Y\_pred: [10 17 31 39 41 43]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
the picc line is seen, score: 0.03405571  
sternotomy a picc line was placed for, score: 0.0334918  
flap dissection descending aorta, score: 0.030732568

confidence of prediction: 0.575186

Y\_true: [12 17 18 20 31 33 41 43]  
Y\_pred: [10 17 31 39 41 43]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
routine eeg due to, score: 0.014974546  
less responsive and unstable, score: 0.013732671  
bronchoscopy with aspiration open tracheostomy tube with portex,  
score: 0.010185628

confidence of prediction: 0.773646  
Y\_true: [12 17 18 20 31 33 41 43]  
Y\_pred: [10 17 31 39 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
a feeding tube without complication, score: 0.19799992  
tracheostomy tube with portex tracheostomy and french peg tube  
placement repair, score: 0.046948355  
routine eeg due to, score: 0.037893385

confidence of prediction: 0.511228  
Y\_true: [12 17 18 20 31 33 41 43]  
Y\_pred: [10 17 31 39 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
feeding tube without complication, score: 0.043330897  
tube with portex tracheostomy and french peg tube placement, score:  
0.0398307  
tracheostomy and placement of, score: 0.038519397

confidence of prediction: 0.507936  
Y\_true: [ 6 9 10 20 26 29 37]  
Y\_pred: [ 0 4 9 17 26 29 37 46]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
history of thrombocytopenia this was, score: 0.37538418  
to country thrombocytopenia the patient s platelet, score:  
0.21947257  
own consulting business and, score: 0.0313537

confidence of prediction: 0.567565  
Y\_true: [ 6 9 10 20 26 29 37]  
Y\_pred: [ 0 4 9 17 26 29 37 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation with rvr on, score: 0.2083687  
afib with rvr likely secondary, score: 0.14311345  
atrial fibrillation he immediately spontaneously, score: 0.08526747

confidence of prediction: 0.746772  
Y\_true: [ 6 9 10 20 26 29 37]  
Y\_pred: [ 0 4 9 17 26 29 37 46]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

hospital acquired pna see below blood, score: 0.12844247  
hospital acquired pna cxr on noted, score: 0.08224352  
diagnoses nosocomial pneumonia htn, score: 0.056854308

confidence of prediction: 0.943718  
Y\_true: [ 6 9 10 20 26 29 37]  
Y\_pred: [ 0 4 9 17 26 29 37 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
septicemia uti in the micu, score: 0.14518693  
leuk mod 05pm urine color, score: 0.105302  
urosepsis pt had elevated, score: 0.07437197

confidence of prediction: 0.665252  
Y\_true: [42 49]  
Y\_pred: [17 42 49]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
eeg sedated intubated findings, score: 0.24106167  
endotracheal tube ends cm above, score: 0.049282424  
eeg sedated intubated findings, score: 0.033922713

confidence of prediction: 0.908741  
Y\_true: [42 49]  
Y\_pred: [17 42 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
anticoagulant on coumadin and, score: 0.7054929  
on taking warfarin home, score: 0.12152415  
state on coumadin distal, score: 0.040312026

confidence of prediction: 0.779070  
Y\_true: [ 2 5 8 10 17 19 23 27 34]  
Y\_pred: [ 5 19 23 24 27 28 34]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
phosphorus level hyponatremia she was mildly hyponatremic on  
admission that was, score: 0.36068535  
she underwent aggressive hd, score: 0.0060527003  
had biopsies taken that, score: 0.0055546034

confidence of prediction: 0.899549  
Y\_true: [ 2 5 8 10 17 19 23 27 34]  
Y\_pred: [ 5 19 23 24 27 28 34]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on hd she is dialyzed every tues, score: 0.06901449  
esrd on hd tu th, score: 0.057099313  
esrd on hd cad who, score: 0.027229564

confidence of prediction: 0.655053  
Y\_true: [ 2 5 8 10 17 19 23 27 34]  
Y\_pred: [ 5 19 23 24 27 28 34]

top three important windows for true positive code 23 (412: Old myocardial infarction)

s p mi she was, score: 0.6663186

posterior myocardial infarction of indeterminate age, score: 0.0046623214

coronary artery disease s p mi in received stent to, score: 0.0029951013

confidence of prediction: 0.962444

Y\_true: [ 2 5 8 10 17 19 23 27 34]

Y\_pred: [ 5 19 23 24 27 28 34]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

and diastolic chf lvef in pvd, score: 0.14488043

and diastolic chf she had been, score: 0.14488043

chf and cad who presented, score: 0.07962115

confidence of prediction: 0.722468

Y\_true: [ 2 5 8 10 17 19 23 27 34]

Y\_pred: [ 5 19 23 24 27 28 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

hyperlipidemia gastroesophageal reflux gastritis egd chronic pancreatitis, score: 0.12525605

femoral grafts possible chronic, score: 0.015731148

schizoaffective disorder hypertension diabetes, score: 0.011359533

confidence of prediction: 0.551108

Y\_true: [ 2 4 9 21 26 29 32 36 47]

Y\_pred: [20 21 27 29 33 35 36]

top three important windows for true positive code 21 (403.90:

Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

chronic renal insufficiency baseline creatinine in the, score: 0.1381932

for cr baseline bnp numeric identifier, score: 0.011129378

renal insufficiency in the setting, score: 0.010996639

confidence of prediction: 0.605651

Y\_true: [ 2 4 9 21 26 29 32 36 47]

Y\_pred: [20 21 27 29 33 35 36]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

rll pna persistent on cxr with, score: 0.06826095

treatment of pneumonia with broad spectrum, score: 0.03355794

for days prochlorperazine maleate, score: 0.018544933

confidence of prediction: 0.837648

Y\_true: [ 2 4 9 21 26 29 32 36 47]

Y\_pred: [20 21 27 29 33 35 36]

top three important windows for true positive code 36 (585.9:

Chronic kidney disease, unspecified)

chronic renal insufficiency baseline creatinine in the, score: 0.13821426

renal insufficiency in the, score: 0.012931769  
for cr baseline bnp numeric identifier, score: 0.0084180655

confidence of prediction: 0.907025  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia statin was continued depression, score: 0.1537911  
alc htn hyperlipidemia cad s p stemi, score: 0.14378837  
50mg hospital11 nitroglycerin 4mg, score: 0.03982359

confidence of prediction: 0.547287  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
had a bleed in, score: 0.15104419  
hospitalization her hematocrits were monitored, score: 0.033124898  
loss, score: 0.024240889

confidence of prediction: 0.650866  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
was continued depression citalopram was continued code, score:  
0.49736607  
she was symptom free, score: 0.020821339  
bilateral adrenal nodules discharge, score: 0.013981452

confidence of prediction: 0.500565  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
right subclavian picc line with its, score: 0.07362367  
subarachnoid component of hemorrhage, score: 0.060489364  
sicu she developed hematemesis with, score: 0.05616312

confidence of prediction: 0.848998  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
ckd cr in per report, score: 0.18912302  
hl ckd cad breast cancer s, score: 0.025581948  
ef ckd cr in peripheral neuropathy, score: 0.016164852

confidence of prediction: 0.892672  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
managed stemi in no, score: 0.14338234  
cad s p stemi medically managed chf ef ckd, score: 0.027300352  
ckd cad breast cancer, score: 0.018739706

confidence of prediction: 0.725197  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 25 (424.0: Mitral valve disorders)  
mitral valve prolapse h o, score: 0.81575024  
mobilize her from a, score: 0.0084254835  
congestive heart failure pneumonia, score: 0.006770192

confidence of prediction: 0.909806  
Y\_true: [ 4 6 7 11 17 21 23 24 25 26 27]  
Y\_pred: [ 2 4 7 11 17 21 22 24 25 27 29 36]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
congestive heart failure pneumonia severe, score: 0.06525929  
medically managed chf ef ckd cr in, score: 0.045929093  
congestive heart failure bilateral dependent, score: 0.040045932

confidence of prediction: 0.979526  
Y\_true: [ 2 4 8 27 31 33 41 43 46]  
Y\_pred: [ 0 17 27 31 33 40 41 42 43 44 46]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
with systolic chf lvef from ivf resucitation, score: 0.05955738  
dysfunction with akinesis of, score: 0.0033298398  
versus edema consider repeat, score: 0.0014553375

confidence of prediction: 0.881963  
Y\_true: [ 2 4 8 27 31 33 41 43 46]  
Y\_pred: [ 0 17 27 31 33 40 41 42 43 44 46]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
for aspiration pneumonia prior, score: 0.108730726  
likely aspiration pneumonitis and complicated by, score: 0.10326847  
melanoma aspiration pneumonia history, score: 0.02881774

confidence of prediction: 0.897594  
Y\_true: [ 2 4 8 27 31 33 41 43 46]  
Y\_pred: [ 0 17 27 31 33 40 41 42 43 44 46]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxic respiratory failure she was intubated on, score: 0.20857927  
acute respiratory failure leukocytosis, score: 0.07278528  
fio2 subsequent abg revealed, score: 0.050821554

confidence of prediction: 0.508488  
Y\_true: [ 2 4 8 27 31 33 41 43 46]  
Y\_pred: [ 0 17 27 31 33 40 41 42 43 44 46]  
top three important windows for true positive code 41 (96.6: Enteral

infusion of concentrated nutritional substances)  
on tube feeding based on nutrition recommendation after extubation  
patient, score: 0.21051368  
were carried out with patient, score: 0.04151206  
et tube in place with pink, score: 0.024627613

confidence of prediction: 0.644205  
Y\_true: [ 2 4 8 27 31 33 41 43 46]  
Y\_pred: [ 0 17 27 31 33 40 41 42 43 44 46]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
sedation for intubation but also, score: 0.08262986  
on tube feeding based on nutrition recommendation, score:  
0.028697498  
her sputum grew out staph aureus, score: 0.024826407

confidence of prediction: 0.524538  
Y\_true: [ 2 4 8 27 31 33 41 43 46]  
Y\_pred: [ 0 17 27 31 33 40 41 42 43 44 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
sepsis likely pneumonia and bacteremia, score: 0.044495106  
metas myelos coagulations pt ptt, score: 0.032129057  
multiple discussions were carried, score: 0.027425515

confidence of prediction: 0.868413  
Y\_true: [ 1 2 3 21 24 27 37]  
Y\_pred: [ 1 2 21 27 29 36 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
oa hypothyroidism s p thyroidectomy, score: 0.4471846  
br hypothyroidism tsh may, score: 0.14497088  
hypercholesterolemia hypothyroidism and two, score: 0.07948248

confidence of prediction: 0.714287  
Y\_true: [ 1 2 3 21 24 27 37]  
Y\_pred: [ 1 2 21 27 29 36 37]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
br dm2 controlled without complications sliding, score: 0.064592734  
chronic kidney disease hypothyroidism, score: 0.03618593  
cad dm biventricular r sided and, score: 0.013172598

confidence of prediction: 0.852262  
Y\_true: [ 1 2 3 21 24 27 37]  
Y\_pred: [ 1 2 21 27 29 36 37]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
diabetes chronic kidney disease hypothyroidism cad, score:  
0.056192618  
cr prior baseline in upper, score: 0.019745182

patient appeared hypervolemic still, score: 0.011454696

confidence of prediction: 0.989504

Y\_true: [ 1 2 3 21 24 27 37]

Y\_pred: [ 1 2 21 27 29 36 37]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

chf exacerbation as detailed, score: 0.030261407

chf exacerbation hypernatremia diabetes, score: 0.023698779

chf exacerbation a likely, score: 0.010381838

confidence of prediction: 0.958652

Y\_true: [ 1 2 3 21 24 27 37]

Y\_pred: [ 1 2 21 27 29 36 37]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

known uti ecoli uti from last, score: 0.07185919

urinary tract infection [UNK] chf, score: 0.057750247

for uti as above, score: 0.05258339

confidence of prediction: 0.634956

Y\_true: [ 0 17 41 46]

Y\_pred: [ 0 17 31 37 46]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

criteria for shock underlying, score: 0.69747823

picture resolved and no, score: 0.03364488

resuscitation and pressors resolved patient s hypotension, score:

0.016555607

confidence of prediction: 0.722487

Y\_true: [ 0 17 41 46]

Y\_pred: [ 0 17 31 37 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous catheter terminates in, score: 0.5318477

dna amplification assay final, score: 0.028985025

dear mr known lastname and, score: 0.02217309

confidence of prediction: 0.623376

Y\_true: [ 0 17 41 46]

Y\_pred: [ 0 17 31 37 46]

top three important windows for true positive code 46 (995.92:

Severe sepsis)

criteria for shock underlying infection, score: 0.3807242

picture resolved and no, score: 0.051805254

ams hypothermia major surgical or, score: 0.02739757

confidence of prediction: 0.740760

Y\_true: [17 21 24 35 36]

Y\_pred: [17 29 40 42]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

venous access line today the, score: 0.35751945



and a line were, score: 0.08976939  
in the sicu she, score: 0.047208264

confidence of prediction: 0.542422  
Y\_true: [ 2 4 21 34 42 48]  
Y\_pred: [ 2 4 21 34 36 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
diabetes mellitus discharge condition mental, score: 0.22274813  
cad dm2 ckd presenting from rehab, score: 0.10161916  
including iddm cad s p 3v, score: 0.085896775

confidence of prediction: 0.576756  
Y\_true: [ 2 4 21 34 42 48]  
Y\_pred: [ 2 4 21 34 36 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
artery disease hyperlipidemia insulin dependent diabetes mellitus,  
score: 0.11496668  
cabg htn hl ckd, score: 0.046585266  
sun feso4 325mg daily, score: 0.020853681

confidence of prediction: 0.901221  
Y\_true: [ 2 4 21 34 42 48]  
Y\_pred: [ 2 4 21 34 36 48]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
cabg ckd iii h o, score: 0.08995881  
htn hl ckd iii essential tremor, score: 0.031144882  
chronic kidney disease and a, score: 0.022316365

confidence of prediction: 0.737886  
Y\_true: [ 2 4 21 34 42 48]  
Y\_pred: [ 2 4 21 34 36 48]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
and niacin gerd on ppi fe def, score: 0.18974458  
patterns were evident but, score: 0.06156033  
[UNK] days per picc, score: 0.00848784

confidence of prediction: 0.892421  
Y\_true: [ 2 4 21 34 42 48]  
Y\_pred: [ 2 4 21 34 36 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p 3v cabg htn hl ckd, score: 0.004359883  
s p 3v cabg ckd iii, score: 0.004359883  
artery disease hyperlipidemia insulin, score: 0.0033645164

confidence of prediction: 0.576771  
Y\_true: [ 2 20 31 35]  
Y\_pred: [ 2 20 31 35 41]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
and diabetes in her family, score: 0.078663506  
dm2 hold home medications, score: 0.06174305  
dm2 htn presents to ew, score: 0.057166293

confidence of prediction: 0.925519

Y\_true: [ 2 20 31 35]

Y\_pred: [ 2 20 31 35 41]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

cva dm2 htn p w aspiration, score: 0.06342821

[UNK] and produced 90cc, score: 0.042458087

cva dm2 htn presents to, score: 0.036251195

confidence of prediction: 0.968008

Y\_true: [ 2 20 31 35]

Y\_pred: [ 2 20 31 35 41]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

primary aspiration pneumonia hypernatremia due to, score: 0.25207305

hcap aspiration pneumonia given elevated lactate, score: 0.07206111

w aspiration pneumonia and constipation pneumonia, score:

0.010470476

confidence of prediction: 0.918617

Y\_true: [ 2 20 31 35]

Y\_pred: [ 2 20 31 35 41]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

kidney injury perianal fistula, score: 0.25829417

kidney injury likely pre renal etiology although, score: 0.029025925

acute kidney injury likely pre renal etiology however, score:

0.014087035

confidence of prediction: 0.707205

Y\_true: [ 0 5 16 17 31 33 35 40 42 46]

Y\_pred: [ 2 6 17 28 31 33 35 40 42]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

grew methicillin resistant staph aureus he, score: 0.08748027

line was placed and, score: 0.08139182

left subclavian line placement arterial line placement, score:

0.046175957

confidence of prediction: 0.846092

Y\_true: [ 0 5 16 17 31 33 35 40 42 46]

Y\_pred: [ 2 6 17 28 31 33 35 40 42]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

dehydration aspiration pneumonia secondary diagnosis diabetes,  
score: 0.20616095

but aspiration pneumonia but later narrowed, score: 0.04317229

mrsa aspiration pneumonia he had last, score: 0.028986853

confidence of prediction: 0.857035

Y\_true: [ 0 5 16 17 31 33 35 40 42 46]

Y\_pred: [ 2 6 17 28 31 33 35 40 42]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

after intubation og tube, score: 0.14686526

he was intubated and, score: 0.07313377

hypercarbic respiratory failure elevated troponins, score: 0.050454818

confidence of prediction: 0.704309

Y\_true: [ 0 5 16 17 31 33 35 40 42 46]

Y\_pred: [ 2 6 17 28 31 33 35 40 42]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

with pre renal dehydration, score: 0.07458305

acute renal failure was likely, score: 0.052495

was profoundly acidotic at, score: 0.030816581

confidence of prediction: 0.959620

Y\_true: [ 0 5 16 17 31 33 35 40 42 46]

Y\_pred: [ 2 6 17 28 31 33 35 40 42]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

after intubation og tube, score: 0.21302228

he was intubated and sedated, score: 0.026477002

was briefly intubated in the, score: 0.010243095

confidence of prediction: 0.865687

Y\_true: [ 0 5 16 17 31 33 35 40 42 46]

Y\_pred: [ 2 6 17 28 31 33 35 40 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

after intubation og tube, score: 0.19101329

shortly before intubation for unresponsiveness showed, score: 0.03458337

was briefly intubated in the, score: 0.024716562

confidence of prediction: 0.906099

Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]

Y\_pred: [ 2 17 33 40 41 42 43 46]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

hospital1 metformin 1000mg hospital1 metoprolol tartrate, score: 0.18979296

un metformin was discontinued and, score: 0.011283329

dm given her last name, score: 0.010842299

confidence of prediction: 0.928884

Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]

Y\_pred: [ 2 17 33 40 41 42 43 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line growing gnr picc, score: 0.07503508  
line was placed on, score: 0.07141734  
bacteremic the picc line was d ced, score: 0.05931485

confidence of prediction: 0.556119  
Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]  
Y\_pred: [ 2 17 33 40 41 42 43 46]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
fio2 general intubated sedated heent sclera, score: 0.044683058  
to painful stimuli pertinent, score: 0.0342468  
sixty mg intravenous q48, score: 0.03275813

confidence of prediction: 0.826970  
Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]  
Y\_pred: [ 2 17 33 40 41 42 43 46]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
post intubation cxr demonstrated, score: 0.37410468  
ra reintubated on and, score: 0.065525144  
was intubated on presentation, score: 0.0613912

confidence of prediction: 0.683914  
Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]  
Y\_pred: [ 2 17 33 40 41 42 43 46]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
her tube feeds for a goal, score: 0.08270375  
a bedside eeg that, score: 0.06253425  
sixty mg intravenous q48, score: 0.055684786

confidence of prediction: 0.691586  
Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]  
Y\_pred: [ 2 17 33 40 41 42 43 46]  
top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)  
post intubation cxr demonstrated rml opacity, score: 0.1942301  
general intubated sedated heent, score: 0.118851006  
was intubated and sedated, score: 0.102266796

confidence of prediction: 0.571635  
Y\_true: [ 0 2 4 6 8 17 20 31 33 37 40 41 42 46]  
Y\_pred: [ 2 17 33 40 41 42 43 46]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
midaz with maps increasing, score: 0.06908589  
she is usually treated, score: 0.065117694  
shock due to right, score: 0.064028494

confidence of prediction: 0.560581

Y\_true: [10 12]  
Y\_pred: [10 29]  
top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)  
roomates tobacco smokes 1pack per days for, score: 0.04114026  
lymphoplasmacytic interstitial infiltrate with alveolar, score:  
0.0058995197  
widening and pneumocyte hyperplasia, score: 0.005261781

confidence of prediction: 0.559102  
Y\_true: [ 7 47 49]  
Y\_pred: [ 7 20 34 44]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
the lesion grew significantly, score: 0.28426415  
with a locking nail, score: 0.068211846  
units prbc the post transfusion hematocrit, score: 0.02855312

confidence of prediction: 0.856529  
Y\_true: [11 12 17 20 32 33 34 40 42]  
Y\_pred: [11 31 35 45]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
ppi depression duloxetine was continued medications, score:  
0.04482407  
pneumatized the osseous structures are, score: 0.027815633  
history hypertension paraplegia with, score: 0.011226876

confidence of prediction: 0.894330  
Y\_true: [ 4 6 8 17 26 31 41 47 48]  
Y\_pred: [ 4 17 26 31 37 41 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
cabg htn hld dm2 with neuropathy pvd, score: 0.5237761  
simvastatin mg tablet sig, score: 0.024118828  
qd gabapentin 600mg hospital1 asa 81mg qd gemfibrozil 600mg tramadol  
50mg hospital1, score: 0.006233891

confidence of prediction: 0.955605  
Y\_true: [ 4 6 8 17 26 31 41 47 48]  
Y\_pred: [ 4 17 26 31 37 41 48]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
inserted central catheter picc line feeding tube placement, score:  
0.049601056  
line skin erythematous at, score: 0.02531459  
central venous catheter placement open, score: 0.023740876

confidence of prediction: 0.960925  
Y\_true: [ 4 6 8 17 26 31 41 47 48]  
Y\_pred: [ 4 17 26 31 37 41 48]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation on amiodarone and, score: 0.35299212

fib in post operative, score: 0.10538815  
atrial fibrillation pneumonia urinary tract, score: 0.013055834

confidence of prediction: 0.816045  
Y\_true: [ 4 6 8 17 26 31 41 47 48]  
Y\_pred: [ 4 17 26 31 37 41 48]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
acquired pneumonia aspiration pneumonia vent associated pneumonia,  
score: 0.076740235  
aspiration hypoxia and dyspnea have, score: 0.060237955  
witnessed aspiration despite this he continued, score: 0.048050832

confidence of prediction: 0.543232  
Y\_true: [ 4 6 8 17 26 31 41 47 48]  
Y\_pred: [ 4 17 26 31 37 41 48]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
fusion with plate and screws posterior fusion, score: 0.1396377  
and tube feeds speech evaluated, score: 0.07914632  
feeding tube placement history of, score: 0.06404558

confidence of prediction: 0.876356  
Y\_true: [ 4 6 8 17 26 31 41 47 48]  
Y\_pred: [ 4 17 26 31 37 41 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg and, score: 0.3235033  
s p cabg pvd s p bypass presented, score: 0.3235033  
p le bypass s p open, score: 0.008691538

confidence of prediction: 0.857070  
Y\_true: [ 1 5 27]  
Y\_pred: [ 1 27 31]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
on insulin hypothyroidism h o intraabdominal, score: 0.0066224644  
metas red cell morphology hypochr anisocy, score: 0.0045925146  
proving respiratory status cv, score: 0.0010133408

confidence of prediction: 0.921062  
Y\_true: [ 1 5 27]  
Y\_pred: [ 1 27 31]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf initially asymptomatic found by, score: 0.10129827  
impression poor technical quality, score: 0.03347057  
congestive heart failure pcp name initial, score: 0.032418292

confidence of prediction: 0.940447  
Y\_true: [ 7 9 30]  
Y\_pred: [ 7 30 37]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)

anemia pt with brbpr, score: 0.087031126  
in the cecum angioectasia, score: 0.07128266  
history of present illness, score: 0.03534084

confidence of prediction: 0.537072

Y\_true: [ 7 9 30]

Y\_pred: [ 7 30 37]

top three important windows for true positive code 30 (496: Chronic airway obstruction, not elsewhere classified)

involving hands copd s p appendectomy s, score: 0.18633662

copd oral thrush pt was, score: 0.1264452

chronic issues copd continued flovent albuterol and, score: 0.11666732

confidence of prediction: 0.742268

Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]

Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

ezetimibe mg daily nitroglycerin mg, score: 0.02246227

simvastatin mg tablet sig, score: 0.02011248

iii hyperlipidemia with ldl of, score: 0.019044453

confidence of prediction: 0.585528

Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]

Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]

top three important windows for true positive code 11 (311:

Depressive disorder, not elsewhere classified)

in hospital depression non active he continued, score: 0.039716825

clinic omeprazole mg capsule, score: 0.017684836

mg daily omeprazole mg, score: 0.0107363155

confidence of prediction: 0.746266

Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]

Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]

top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)

lactate 24pm lactate 42pm cardiac enzymes, score: 0.017530056

failure pre renal hemoptysis, score: 0.013858249

chronic in nature but, score: 0.012067253

confidence of prediction: 0.647600

Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]

Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]

top three important windows for true positive code 23 (412: Old myocardial infarction)

s p mi in and cabg lima, score: 0.8796793

svg rpda rpl svg lcx with, score: 0.023188401

k to reverse the blood, score: 0.007882575

confidence of prediction: 0.981801

Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]

Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib p w progressive, score: 0.30182782  
afib bp ra was, score: 0.15372781  
atrial fibrillation on coumadin and, score: 0.08068435

confidence of prediction: 0.959390  
Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]  
Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
failure from chf exacerbation, score: 0.2022207  
heart failure caused some, score: 0.10446554  
chf af h o, score: 0.07341298

confidence of prediction: 0.802064  
Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]  
Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
acquired pneumonia this was, score: 0.108640224  
for presumed pna labs also, score: 0.08818437  
community acquired pneumonia congestive heart, score: 0.08288055

confidence of prediction: 0.944597  
Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]  
Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure pre renal hemoptysis likely, score: 0.017682653  
acute renal failure likely chf, score: 0.016977616  
lactate 24pm lactate 42pm, score: 0.015133493

confidence of prediction: 0.557789  
Y\_true: [ 4 11 21 23 26 27 29 35 47 48 49]  
Y\_pred: [ 4 11 21 23 24 26 27 29 35 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
effect of coumadin you, score: 0.08739901  
afib bp ra was, score: 0.06559084  
hemoptysis his coumadin was, score: 0.06535888

confidence of prediction: 0.677378  
Y\_true: [ 3 10 14 24 26 27 34]  
Y\_pred: [ 3 4 14 24 26 27 34 37 38]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
hypercholesterolemia discontinued gemfibrozil started, score:  
0.059024584  
son mi hypercholesterolemia son name ni, score: 0.021198189  
fibrillation diagnosis hypercholesterolemia diverticulitis gerd  
dyspepsia back and, score: 0.012269477

confidence of prediction: 0.529577



Y\_true: [ 3 10 14 24 26 27 34]  
Y\_pred: [ 3 4 14 24 26 27 34 37 38]  
top three important windows for true positive code 14 (37.22: Left heart cardiac catheterization)  
cardiac catheterization history of present, score: 0.17854162  
nondominant and small assessment, score: 0.03167534  
catheterization which showed single, score: 0.02891362

confidence of prediction: 0.984057  
Y\_true: [ 3 10 14 24 26 27 34]  
Y\_pred: [ 3 4 14 24 26 27 34 37 38]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
chronic rca nondominant and small assessment, score: 0.14823504  
coronary artery disease medical, score: 0.11420079  
vessel disease with no, score: 0.074689426

confidence of prediction: 0.554705  
Y\_true: [ 3 10 14 24 26 27 34]  
Y\_pred: [ 3 4 14 24 26 27 34 37 38]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
atrial fibrillation diagnosis hypercholesterolemia diverticulitis, score: 0.2952383  
atrial fibrillation was not observed, score: 0.03157204  
contract normally lvef right, score: 0.02912583

confidence of prediction: 0.975878  
Y\_true: [ 3 10 14 24 26 27 34]  
Y\_pred: [ 3 4 14 24 26 27 34 37 38]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
congestive heart failure with systolic dysfunction, score: 0.070607446  
and systolic chf who presented with, score: 0.045006063  
cad chf ef of in presenting, score: 0.017554777

confidence of prediction: 0.950997  
Y\_true: [ 3 10 14 24 26 27 34]  
Y\_pred: [ 3 4 14 24 26 27 34 37 38]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
started pravastatin gerd dyspepsia continued ppi chronic, score: 0.19979472  
paroxetine and clonazepam inactive issues, score: 0.012535744  
hypercholesterolemia diverticulitis gerd dyspepsia back and pelvic, score: 0.0039772345

confidence of prediction: 0.778194  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]  
Y\_pred: [ 4 11 17 20 26 35 42 44]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
fibrillation anemia hyperlipidemia htn arthritis depression social,

score: 0.07408018  
glimepiride mg daily omeprazole mg, score: 0.041082207  
mg hospital1 amitriptyline mg qhs lovastatin mg, score: 0.025778374

confidence of prediction: 0.529369  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]  
Y\_pred: [ 4 11 17 20 26 35 42 44]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
daily paroxetine hcl mg, score: 0.036332704  
mg daily omeprazole mg, score: 0.0344276  
prn lispro insulin sliding, score: 0.021106835

confidence of prediction: 0.896261  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]  
Y\_pred: [ 4 11 17 20 26 35 42 44]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
anemia hyperlipidemia htn arthritis depression social history,  
score: 0.15373777  
history of hypertension her, score: 0.12733921  
hydrochlorothiazide mg daily glimepiride mg, score: 0.07059665

confidence of prediction: 0.936677  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]  
Y\_pred: [ 4 11 17 20 26 35 42 44]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation the patient has, score: 0.17528537  
fibrillation anemia hyperlipidemia htn, score: 0.097027846  
atrial fibrillation transferred from hospital3, score: 0.09666219

confidence of prediction: 0.648858  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]  
Y\_pred: [ 4 11 17 20 26 35 42 44]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute renal failure and bilateral, score: 0.20304462  
acute renal failure with a, score: 0.0645938  
her renal function eventually improved her, score: 0.023759887

confidence of prediction: 0.649474  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]  
Y\_pred: [ 4 11 17 20 26 35 42 44]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
boots neuro intubated sedated to painful, score: 0.5073647  
sedated intubated withdraws to painful stimuli will, score:  
0.09254181  
she was intubated in the, score: 0.011090098

confidence of prediction: 0.790041  
Y\_true: [ 0 2 4 7 11 20 26 35 42 44 46 49]

Y\_pred: [ 4 11 17 20 26 35 42 44]  
 top three important windows for true positive code 44 (99.04:  
 Transfusion of packed cells)  
 received units prbcs intra operatively, score: 0.17966694  
 units of prbcs over the, score: 0.16155149  
 received unit prbc to maintain, score: 0.10626241  
  
 confidence of prediction: 0.634961  
 Y\_true: [20 35 37]  
 Y\_pred: [ 7 11 35 37]  
 top three important windows for true positive code 35 (584.9: Acute  
 kidney failure, unspecified)  
 acute renal failure given response, score: 0.14728047  
 acute renal injury also, score: 0.06905003  
 acute renal failure gout osteoarthritis, score: 0.050779827  
  
 confidence of prediction: 0.898508  
 Y\_true: [20 35 37]  
 Y\_pred: [ 7 11 35 37]  
 top three important windows for true positive code 37 (599.0:  
 Urinary tract infection, site not specified)  
 tract infection urine culture, score: 0.108154595  
 leuks sm 05pm urine rbc, score: 0.046197645  
 leuks tr 57pm urine, score: 0.024877531  
  
 confidence of prediction: 0.871942  
 Y\_true: [ 1 19 25 33 37 39 42]  
 Y\_pred: [ 1 4 9 19 26 27 37 40 42]  
 top three important windows for true positive code 1 (244.9:  
 Unspecified acquired hypothyroidism)  
 daily hypothyroidism continued synthroid transitional issues,  
 score: 0.52556854  
 colitis hypothyroidism mitral and tricuspid, score: 0.19801673  
 daily levothyroxine mcg daily mycophenolate, score: 0.03143459  
  
 confidence of prediction: 0.774766  
 Y\_true: [ 1 19 25 33 37 39 42]  
 Y\_pred: [ 1 4 9 19 26 27 37 40 42]  
 top three important windows for true positive code 19 (39.95:  
 Hemodialysis)  
 of dialysis her cmv, score: 0.063321404  
 you started dialysis you were, score: 0.045982778  
 during dialysis and fax, score: 0.04328898  
  
 confidence of prediction: 0.713603  
 Y\_true: [ 1 19 25 33 37 39 42]  
 Y\_pred: [ 1 4 9 19 26 27 37 40 42]  
 top three important windows for true positive code 37 (599.0:  
 Urinary tract infection, site not specified)  
 equivocal ekgs baseline artifact sinus, score: 0.03240497  
 tape x10yd lisinopril bactrim, score: 0.03212876  
 for enterococcus uti dapsone, score: 0.023379588  
  
 confidence of prediction: 0.561874

Y\_true: [ 1 19 25 33 37 39 42]  
Y\_pred: [ 1 4 9 19 26 27 37 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
non mobile thoracic aortic, score: 0.008605192  
acute respiratory distress requiring immediate intubation and  
mechanical ventilation she, score: 0.008328944  
hypervolemia and perhaps flash, score: 0.007820634

confidence of prediction: 0.957540  
Y\_true: [ 9 18 20 26 34 37 47 49]  
Y\_pred: [18 20 25 26 27]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
wires were removed and, score: 0.77390337  
diuresed toward the preoperative, score: 0.09022906  
cardiothoracic allergies no known, score: 0.025858356

confidence of prediction: 0.907603  
Y\_true: [ 9 18 20 26 34 37 47 49]  
Y\_pred: [18 20 25 26 27]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
chronic constipation ibs gerd polyuria osteopenia, score: 0.1653054  
mg daily atenolol mg, score: 0.099749915  
atrial fibrillation hypertension left ventricular function, score:  
0.05046236

confidence of prediction: 0.971095  
Y\_true: [ 9 18 20 26 34 37 47 49]  
Y\_pred: [18 20 25 26 27]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation chronic constipation ibs, score: 0.13507442  
atrial fibrillation narcotics were held, score: 0.08628092  
atrial fibrillation hypertension left ventricular, score: 0.0759526

confidence of prediction: 0.975690  
Y\_true: [ 5 8 29]  
Y\_pred: [ 2 5 31]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
hydrothorax hypervolemic hyponatremia on tolvaptan initially  
presenting, score: 0.58105004  
encephalopathy chronic hyponatremia type ii, score: 0.13364904  
eosinophilia chronic hyponatremia pt w h o hyponatremia thought to  
be cirrhosis, score: 0.01510656

confidence of prediction: 0.847167  
Y\_true: [ 1 12 16 33 37 40 42]  
Y\_pred: [ 1 5 32 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

hyperkalemia hypothyroidism patient was hyponatremic, score: 0.2506837  
hyperkalemia hypothyroidism urinary tract infection, score: 0.1432623  
start levothyroxine 25mcg daily for thyroid, score: 0.03996635

confidence of prediction: 0.759027  
Y\_true: [ 1 12 16 33 37 40 42]  
Y\_pred: [ 1 5 32 37]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
a urinary tract infection we starting, score: 0.0658002  
for uti for days last, score: 0.045803126  
hypothyroidism urinary tract infection discharge condition, score: 0.022697806

confidence of prediction: 0.712339  
Y\_true: [ 6 7 9 12 19 33 41 43]  
Y\_pred: [12 19 35 40 42]  
top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
pending inpatient bronchoalveolar lavage gram stain final, score: 0.03721677  
bronched urine sediment was consistent, score: 0.0089914575  
hemorrhage and acute renal, score: 0.0058362912

confidence of prediction: 0.881648  
Y\_true: [ 6 7 9 12 19 33 41 43]  
Y\_pred: [12 19 35 40 42]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
qhd each hemodialysis please take, score: 0.11570004  
started on cvvh on day, score: 0.04347171  
ongoing dialysis which will, score: 0.01969859

confidence of prediction: 0.658580  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 0 (038.9: Unspecified septicemia)  
septic shock supported by hypotension leukocytosis with bandemia and elevated lactate unclear, score: 0.32865185  
he had adequate urine, score: 0.16945209  
briefly on levophed his, score: 0.013152494

confidence of prediction: 0.954574  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)  
htn dm recently dx rectal adenocarcinoma, score: 0.28535482  
diabetes mellitus patient s oral, score: 0.041822094  
metformin mg hospital1 simvastatin, score: 0.021776361

confidence of prediction: 0.873294  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hypotensive episodes hld he continued with rosuvastatin, score:  
0.051625952  
diabetes hypertension hyperlipidemia h o nerve, score: 0.04314089  
valsartan mg daily flomax, score: 0.014515975

confidence of prediction: 0.951143  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
given autodiuresis hyponatremia likely secondary to dehydration,  
score: 0.79981184  
node biopsy proven non, score: 0.016511552  
his sodium improved he, score: 0.014172846

confidence of prediction: 0.720274  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
non gap acidosis given delta delta, score: 0.08453667  
caseating granulomas his lll, score: 0.037258398  
bandemia and elevated lactate unclear, score: 0.033403613

confidence of prediction: 0.822515  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn his antihypertensives were held, score: 0.28467172  
softners comm name ni, score: 0.060954526  
htn dm recently dx rectal, score: 0.030194879

confidence of prediction: 0.826918  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
leukocytosis with bandemia and elevated lactate unclear, score:  
0.059818547  
non caseating granulomas his lll, score: 0.03891028  
acute kidney insufficiency likely pre renal in the setting, score:  
0.024119707

confidence of prediction: 0.831621  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)  
wbc mod leuks he received pyridium, score: 0.14994349  
uti urosepsis the original plan, score: 0.039794642  
urinary retention it was, score: 0.027858231

confidence of prediction: 0.792101  
Y\_true: [ 0 2 4 5 6 20 35 37 46]  
Y\_pred: [ 0 2 4 5 6 20 35 37 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
he had adequate urine, score: 0.11647271  
septic shock supported by hypotension leukocytosis with bandemia and  
elevated lactate unclear, score: 0.10428119  
fluid collection pt was, score: 0.083695605

confidence of prediction: 0.735809  
Y\_true: [ 1 17 26 27 35 36 37]  
Y\_pred: [ 1 4 21 24 27 35 37 41 48]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
stable hypothyroid patient continued on her synthroid tsh was,  
score: 0.5616616  
day synthroid mcg day per rehab, score: 0.029430104  
bedtime levothyroxine mcg tablet sig one, score: 0.013134522

confidence of prediction: 0.972683  
Y\_true: [ 1 17 26 27 35 36 37]  
Y\_pred: [ 1 4 21 24 27 35 37 41 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure elevated bnp and, score: 0.44757283  
chf ef history of, score: 0.055161897  
diastolic congestive heart failure acute, score: 0.048878744

confidence of prediction: 0.599216  
Y\_true: [ 1 17 26 27 35 36 37]  
Y\_pred: [ 1 4 21 24 27 35 37 41 48]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure to cr of, score: 0.13293491  
on chronic kidney disease, score: 0.11484453  
improved renal function cdiff, score: 0.10793789

confidence of prediction: 0.899042  
Y\_true: [ 1 17 26 27 35 36 37]  
Y\_pred: [ 1 4 21 24 27 35 37 41 48]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection c difficile, score: 0.30212885  
for uti unless positive, score: 0.09728899  
therefore uti ppx hypoglycemia diabetes, score: 0.039557096

confidence of prediction: 0.760764  
Y\_true: [16 17 20 33 37 39 41 43 47]

Y\_pred: [17 20 31 33 41 43]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

inserted central catheter tip projects over, score: 0.14185943

high amplitude spike and polyspike, score: 0.11110966

keppra pheytoin and valproate, score: 0.06472417

confidence of prediction: 0.738804

Y\_true: [16 17 20 33 37 39 41 43 47]

Y\_pred: [17 20 31 33 41 43]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

medical history hypertension social history tobacco, score: 0.15979262

to threat iii iv, score: 0.04977547

of bursting appeared to, score: 0.043663945

confidence of prediction: 0.622125

Y\_true: [16 17 20 33 37 39 41 43 47]

Y\_pred: [17 20 31 33 41 43]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

hypoperfusion injury on eeg the, score: 0.03300064

tidal vol peep o2, score: 0.031424847

fio2 po2 pco2 ph, score: 0.027381612

confidence of prediction: 0.615987

Y\_true: [16 17 20 33 37 39 41 43 47]

Y\_pred: [17 20 31 33 41 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

sputum source endotracheal final, score: 0.065617345

pharmacologic sedation eeg study, score: 0.06382046

continuous eeg due to, score: 0.05798314

confidence of prediction: 0.817259

Y\_true: [16 17 20 33 37 39 41 43 47]

Y\_pred: [17 20 31 33 41 43]

top three important windows for true positive code 43 (96.72:

Continuous invasive mechanical ventilation for 96 consecutive hours or more)

vent controlled 47pm glucose, score: 0.03907371

am sputum source endotracheal final report, score: 0.03399619

pharmacologic sedation eeg study, score: 0.03109086

confidence of prediction: 0.935674

Y\_true: [17]

Y\_pred: [17]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

ischemia necrotic tissue drainage, score: 0.0702372

central venous line tip seen, score: 0.02783887

of subclavian central venous catheter debridement of, score: 0.024034739



confidence of prediction: 0.935850  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
issues hypothyroidism continued levothyroxine mcg daily hypertension  
due, score: 0.6188147  
hypertension hypothyroidism mitral regurgitation, score: 0.04023021  
allergies levothyroxine mcg daily lisinopril, score: 0.011872888

confidence of prediction: 0.947962  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
likely hypovolemic hyponatremia in setting of diarrhea, score:  
0.55292344  
some sundowning hyponatremia patient with na of, score: 0.052301392  
injury hyponatremia started to, score: 0.044964608

confidence of prediction: 0.933308  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
resolved doboff was placed, score: 0.02419468  
cdiff mini bal and pleural fluid, score: 0.023603246  
mini bal final report, score: 0.015927706

confidence of prediction: 0.628458  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
showing possible pneumonia vs, score: 0.11233153  
days pna treatment lactate and, score: 0.08656033  
team that infiltrate had been, score: 0.08319583

confidence of prediction: 0.555801  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 32 (511.9:  
Unspecified pleural effusion)  
pleural effusion required intubation for, score: 0.047938254  
pleural effusions had started, score: 0.03409547  
and pleural fluid with, score: 0.030586554

confidence of prediction: 0.521644

Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
distress and hypoxia also, score: 0.0929385  
hypoxia requiring 5l nc, score: 0.04885632  
cefepime as unclear if, score: 0.03266045

confidence of prediction: 0.688655  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
illumigene dna amplification reference, score: 0.024356784  
pancolitis ground glass opacities, score: 0.018396858  
interstitial thickening multiple dilated, score: 0.012000094

confidence of prediction: 0.586922  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
cdiff mini bal and pleural, score: 0.3438751  
after mini bal was performed, score: 0.13898364  
pm mini bal final report, score: 0.11819288

confidence of prediction: 0.784724  
Y\_true: [ 1 3 5 6 8 9 12 16 17 20 25 29 32 33 34 40 41 42 45  
46]  
Y\_pred: [ 1 5 12 29 32 33 34 35 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
dobbhoff tube whose distal, score: 0.13880347  
and tube feeds were started due, score: 0.053337727  
effusion required intubation for, score: 0.021824973

confidence of prediction: 0.750048  
Y\_true: [ 6 10 16 17 33 42]  
Y\_pred: [40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
fentanyl while intubated and subsequently, score: 0.17545888  
intubated intubated ct abd, score: 0.1150795  
was subsequently intubated for airway protection, score: 0.059655275

confidence of prediction: 0.665683  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

atrial fibrillation copd discharge, score: 0.12287435  
cr baseline patient given, score: 0.10409778  
coronary artery disease status, score: 0.0804907

confidence of prediction: 0.500350  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
chf ef nstemi on afib, score: 0.016772496  
un inferoseptal akinesis hypokinesis, score: 0.016650567  
copd coronary artery disease status post nstemi ischemic  
cardiomyopathy congestive heart, score: 0.016478175

confidence of prediction: 0.846888  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
severe mitral regurgitation hypertension hyperlipidemia, score:  
0.124167986  
severe mitral regurgitation is seen, score: 0.066822305  
severe mitral regurgitation extensive simple, score: 0.066822305

confidence of prediction: 0.995467  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin and, score: 0.44153184  
atrial fibrillation copd discharge condition, score: 0.01873282  
fibrillation he was strongly, score: 0.015504245

confidence of prediction: 0.924724  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
ef nstemi on afib, score: 0.13319586  
chf exacerbation intially was, score: 0.06016378  
cardiomyopathy congestive heart failure atrial, score: 0.04924212

confidence of prediction: 0.570489  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
may have worsened pt, score: 0.09188675  
medical history copd coronary, score: 0.07526367  
coumadin and copd who presents from home, score: 0.06353444

confidence of prediction: 0.936770  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]

top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
transesophageal echocardiogram dc cardioversion, score: 0.9985257  
tee as it was, score: 0.00025101707  
tee the left atrium, score: 0.00022966668

confidence of prediction: 0.780310  
Y\_true: [ 4 8 10 20 23 24 25 26 27 30 39 49]  
Y\_pred: [18 20 24 25 26 27 30 39 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
afib on coumadin and copd who, score: 0.4772695  
was decreased warfarin was, score: 0.016790114  
atrial appendage ejection velocity, score: 0.0026945032

confidence of prediction: 0.929584  
Y\_true: [12 17 33 42]  
Y\_pred: [10 12 17 33 40 42]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
hematemesis alveolar hemorrhage cxr, score: 0.037948977  
placment bronchoalveolar lavage bronchoscopy history of, score:  
0.034704033  
but bal negative and, score: 0.026333578

confidence of prediction: 0.784443  
Y\_true: [12 17 33 42]  
Y\_pred: [10 12 17 33 40 42]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
[UNK] and acyclovir given, score: 0.4641494  
although likely hyperthermia in the, score: 0.03131421  
mg iv x2 which, score: 0.02013633

confidence of prediction: 0.595615  
Y\_true: [12 17 33 42]  
Y\_pred: [10 12 17 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
patient was intubated from arrival, score: 0.06255675  
on fio2 tv rr, score: 0.05386125  
alveolar hemorrhage multifocal opacities, score: 0.051107552

confidence of prediction: 0.727752  
Y\_true: [12 17 33 42]  
Y\_pred: [10 12 17 33 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
was intubated from arrival, score: 0.14498465  
alveolar hemorrhage multifocal opacities, score: 0.09898765  
intubation initiated at outside, score: 0.0950391

confidence of prediction: 0.571537

Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
the foramen magnum and 2mm, score: 0.095062785  
given unit prbc on am, score: 0.09188468  
bleeding medium hiatal hernia peg, score: 0.0651199

confidence of prediction: 0.996855  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
and cipro bal bronch washings with gram, score: 0.055734646  
and peg tube placement, score: 0.0057602725  
sedation opens left eye, score: 0.0045277406

confidence of prediction: 0.806962  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
encephalopathy medications metabolic disturbances, score: 0.05078639  
puncture x picc placement history of, score: 0.028332422  
characterized by sural nerve, score: 0.026727015

confidence of prediction: 0.582177  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
rehab nstemi bp at the time, score: 0.117342904  
consulted considered nstemi and managed medically with, score:  
0.043588407  
p mi nstemi in r dominant, score: 0.032838758

confidence of prediction: 0.686939  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi nstemi in r dominant, score: 0.13930957  
consulted considered nstemi and managed medically with aspirin  
plavix statin, score: 0.0048886524  
s p stent transferred, score: 0.0024629028

confidence of prediction: 0.934594  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stent transferred, score: 0.58533543  
and managed medically with aspirin, score: 0.08790697  
for cad his hemodynamics stabalized quickly, score: 0.026183298

confidence of prediction: 0.898834  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
presumed aspiration event he had new, score: 0.26446548  
with aspiration pneumonia emg abnormal study, score: 0.13024667  
failure aspiration pneumonia the patient had, score: 0.024739882

confidence of prediction: 0.813120  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
responsive respiratory failure aspiration pneumonia, score:  
0.09239578  
caused episodic hypoxia given, score: 0.03651254  
following intubation he was, score: 0.02093445

confidence of prediction: 0.607064  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
exam gen intubated sedation opens, score: 0.13653766  
following intubation he was, score: 0.13366203  
of intubation ecg with, score: 0.08643064

confidence of prediction: 0.974151  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
fen tube feeds access picc, score: 0.039712563  
pt trach peg placed with, score: 0.02071794  
and peg tube placement ir, score: 0.019081863

confidence of prediction: 0.929868  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
pending improvement trach peg placed on, score: 0.0414423  
and peg tube placement, score: 0.041363627  
pt bronched on with thick secretions, score: 0.040892642

confidence of prediction: 0.645230  
Y\_true: [ 5 7 10 11 12 17 22 23 24 28 31 33 34 35 40 41 43 44]  
Y\_pred: [ 4 7 12 17 20 22 23 24 31 33 40 41 43 44]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
of u prbc over days, score: 0.14416534

given unit prbc on am, score: 0.13235763  
to third part of, score: 0.039159264

confidence of prediction: 0.852859  
Y\_true: [ 1 9 34 35]  
Y\_pred: [1]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
bedtime levothyroxine levoxyl mcg tablet tablet s, score:  
0.051046368  
medications levothyroxine mcg tablet sig, score: 0.030568393  
cholecystectomy gerd hypothyroidism issues with, score: 0.003764867

confidence of prediction: 0.876438  
Y\_true: [ 2 4 10 20 24 26 27 35 41 49]  
Y\_pred: [ 2 4 20 24 26 27 37 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
metformin glucophage prescribed by other, score: 0.032213066  
dabigatran diabetes mellitus history of poor, score: 0.0311786  
recurrent utis dmii dmii most recent alc has, score: 0.009684743

confidence of prediction: 0.791444  
Y\_true: [ 2 4 10 20 24 26 27 35 41 49]  
Y\_pred: [ 2 4 20 24 26 27 37 48]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia alcohol abuse and, score: 0.17666773  
on insulin hyperlipidemia atrial fibrillation previously on, score:  
0.047670264  
of htn hl dmii cad ischemic cardiomyopathy, score: 0.03277052

confidence of prediction: 0.895723  
Y\_true: [ 2 4 10 20 24 26 27 35 41 49]  
Y\_pred: [ 2 4 20 24 26 27 37 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
liver disease hypertension social history he, score: 0.114149705  
history of htn hl dmii cad, score: 0.03986728  
occipital infarctions larger on the, score: 0.020479891

confidence of prediction: 0.757856  
Y\_true: [ 2 4 10 20 24 26 27 35 41 49]  
Y\_pred: [ 2 4 20 24 26 27 37 48]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease nonocclusive, score: 0.08208821  
s p cabg paternal, score: 0.031574897  
dmii cad ischemic cardiomyopathy with mild, score: 0.026119865

confidence of prediction: 0.973682  
Y\_true: [ 2 4 10 20 24 26 27 35 41 49]  
Y\_pred: [ 2 4 20 24 26 27 37 48]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib cardiac enzymes were, score: 0.16957906  
atrial fibrillation on dabigatran prior, score: 0.09009377  
atrial fibrillation on dabigatran diabetes, score: 0.07113443

confidence of prediction: 0.643668  
Y\_true: [ 2 4 10 20 24 26 27 35 41 49]  
Y\_pred: [ 2 4 20 24 26 27 37 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure previous echo, score: 0.018250974  
cad ischemic cardiomyopathy with mild systolic heart failure atrial  
fibrillation on, score: 0.016007649  
nitrostat mg tablet sublingual tablet, score: 0.012284041

confidence of prediction: 0.966196  
Y\_true: [16 26 27 37]  
Y\_pred: [ 1 23 26 37]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib and to rate, score: 0.24324185  
afib with rvt hr, score: 0.23635781  
afib with rvr hrs 130s, score: 0.16326763

confidence of prediction: 0.963432  
Y\_true: [16 26 27 37]  
Y\_pred: [ 1 23 26 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
urinary tract infection the patient, score: 0.07158233  
proportionately decreased in number, score: 0.057959538  
epicardial tumor metastasis right, score: 0.022761269

confidence of prediction: 0.703496  
Y\_true: [ 1 2 4 20 26 49]  
Y\_pred: [ 1 2 4 20 26 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
hypercholesterolemia hypothyroidism recurrent urinary tract  
infections, score: 0.42950323  
daily levothyroxine mcg tablet sig one, score: 0.08938748  
a day levothyroxine mcg tab one tablet, score: 0.0022575823

confidence of prediction: 0.688785  
Y\_true: [ 1 2 4 20 26 49]  
Y\_pred: [ 1 2 4 20 26 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
become extremely nauseous and, score: 0.049921393  
hld diabetes type pulmonary htn who, score: 0.039047357  
in diabetes mellitus has been, score: 0.036199547



confidence of prediction: 0.899242  
Y\_true: [ 1 2 4 20 26 49]  
Y\_pred: [ 1 2 4 20 26 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
coumadin hypertension hyperlipidemia diabetes type pulmonary  
hypertension, score: 0.12636353  
coumadin htn hld diabetes type pulmonary htn, score: 0.101835065  
in [UNK] direction left cervical tenderness, score: 0.015722614

confidence of prediction: 0.800905  
Y\_true: [ 1 2 4 20 26 49]  
Y\_pred: [ 1 2 4 20 26 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
on coumadin htn hld diabetes type pulmonary, score: 0.111341685  
on coumadin hypertension hyperlipidemia diabetes type, score:  
0.08398516  
hypertension was recently seen, score: 0.055726834

confidence of prediction: 0.987968  
Y\_true: [ 1 2 4 20 26 49]  
Y\_pred: [ 1 2 4 20 26 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib on coumadin htn hld, score: 0.32830253  
afib patient s ldl, score: 0.092179134  
fib she was concerned, score: 0.029359566

confidence of prediction: 0.834776  
Y\_true: [ 1 2 4 20 26 49]  
Y\_pred: [ 1 2 4 20 26 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fib on coumadin htn, score: 0.7795206  
fibrillation on coumadin hypertension, score: 0.1530597  
ct her coumadin was, score: 0.009535777

confidence of prediction: 0.762960  
Y\_true: [37]  
Y\_pred: [21 36 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
[UNK] girl unclear word for, score: 0.022951098  
count questionable pneumonia comparison, score: 0.0052754087  
asked to point to, score: 0.00525808

confidence of prediction: 0.840841  
Y\_true: [ 3 6 28]  
Y\_pred: [ 3 28 37]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
r dvt hypercholesterolemia bilateral knee replacements in, score:  
0.04534329

bacteremia superior mesenteric artery syndrome, score: 0.0018219091  
ln s p ercp, score: 0.0017919958

confidence of prediction: 0.814764

Y\_true: [ 3 6 28]

Y\_pred: [ 3 28 37]

top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)

otherwise normal egd to second part of, score: 0.6619237

french ng tube to, score: 0.02917699

egd was done on, score: 0.018101517

confidence of prediction: 0.977568

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43 46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)

negative bal gs pmn, score: 0.102724195

isolated bal gs pmn, score: 0.06903535

primary team bronchoscopy with blood, score: 0.042228937

confidence of prediction: 0.768802

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43 46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

advanced and picc placed, score: 0.060342982

line ending extending to, score: 0.05089226

otherwise pan sensitive studies, score: 0.0503527

confidence of prediction: 0.963355

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43 46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib htn patient has, score: 0.2176739

atrial fibrillation with rvr received, score: 0.18830329

afib occurred with physical, score: 0.13369459

confidence of prediction: 0.566162

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43 46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

endotracheal tube ends at the, score: 0.106837176

mssa now hd stable, score: 0.05903417

bal gs pmn s, score: 0.055809107

confidence of prediction: 0.626738

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43

46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)

endotracheal tube ends at the, score: 0.13795352

distress intubated upon arrival acidotic, score: 0.11854178

mini bal ordered consider, score: 0.09294766

confidence of prediction: 0.665114

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43  
46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)

isolated bal gs pmn, score: 0.13225266

peritoneal gs pmns no, score: 0.079509154

bronched with bal sent tte, score: 0.053049926

confidence of prediction: 0.977838

Y\_true: [ 1 4 6 8 9 10 11 12 16 17 19 26 29 32 33 36 37 40 41 43  
46]

Y\_pred: [12 17 26 27 33 35 39 40 41 43]

top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)

isolated bal gs pmn no, score: 0.13946171

bronched with bal sent tte, score: 0.12153054

negative bal gs pmn s, score: 0.023414722

confidence of prediction: 0.565301

Y\_true: [ 1 2 16 17 21 27 29 35 36 40 41 43 45]

Y\_pred: [ 1 2 17 33 35 40 42]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)

daily hypothyroidism his ct of the, score: 0.5929278

his home levothyroxine 175mcg daily bph, score: 0.020475185

300mg daily levothyroxine 175mcg daily diphenoxylate atropine,  
score: 0.0027701417

confidence of prediction: 0.594162

Y\_true: [ 1 2 16 17 21 27 29 35 36 40 41 43 45]

Y\_pred: [ 1 2 17 33 35 40 42]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

p colectomy diabetes social history no, score: 0.033846486

zyprexa standing and prn he, score: 0.017947502

a mi dm he was placed on, score: 0.010922263

confidence of prediction: 0.946431

Y\_true: [ 1 2 16 17 21 27 29 35 36 40 41 43 45]

Y\_pred: [ 1 2 17 33 35 40 42]

top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)

venous catheter placement history of, score: 0.69022167  
retroperitoneal lymph nodes measuring, score: 0.028038125  
the patient tended to, score: 0.014224071

confidence of prediction: 0.768221  
Y\_true: [ 1 2 16 17 21 27 29 35 36 40 41 43 45]  
Y\_pred: [ 1 2 17 33 35 40 42]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
patient pre renal etiology to explain, score: 0.1470161  
acute renal failure in the, score: 0.03268316  
improved renal function with levophed the, score: 0.027440432

confidence of prediction: 0.621911  
Y\_true: [ 1 2 16 17 21 27 29 35 36 40 41 43 45]  
Y\_pred: [ 1 2 17 33 35 40 42]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
collar while intubated and sedated, score: 0.17240153  
re intubation and no, score: 0.16394569  
was intubated and started, score: 0.114493914

confidence of prediction: 0.890746  
Y\_true: [ 0 1 2 4 12 32 33 34 37 41 43 46]  
Y\_pred: [ 1 4 20 31 34 37 40 42]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
simvastatin hypothyroidism continued levothyroxine asthma continued, score: 0.24748753  
daily levothyroxine 50mcg po daily asa, score: 0.06905002  
asthma hypothyroidism social history lives, score: 0.034269422

confidence of prediction: 0.957840  
Y\_true: [ 0 1 2 4 12 32 33 34 37 41 43 46]  
Y\_pred: [ 1 4 20 31 34 37 40 42]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
gerd htn hl seizure d o asthma, score: 0.024080122  
simvastatin mg tablet sig, score: 0.01751872  
are stable hl continued simvastatin hypothyroidism continued, score: 0.008000731

confidence of prediction: 0.962142  
Y\_true: [ 0 1 2 4 12 32 33 34 37 41 43 46]  
Y\_pred: [ 1 4 20 31 34 37 40 42]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
and electrolytes kidney function, score: 0.0077176564  
asthma continued albuterol once, score: 0.0031997187  
extubation with continued areas, score: 0.0031959536

confidence of prediction: 0.883112  
Y\_true: [ 0 1 2 4 12 32 33 34 37 41 43 46]  
Y\_pred: [ 1 4 20 31 34 37 40 42]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
final escherichia coli organisms ml sensitivities, score: 0.04321241  
sedation probable restrictive disease, score: 0.022836953  
ml escherichia coli ampicillin, score: 0.016228093

confidence of prediction: 0.776593  
Y\_true: [ 0 4 7 23 24 35 41 42 45 46]  
Y\_pred: [ 4 23 24 41 45]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
stent x hyperlipidemia social history lives with, score: 0.13477148  
intrapancreatic focal tumor size, score: 0.06577638  
pt pt3 tumor invades, score: 0.024136541

confidence of prediction: 0.683718  
Y\_true: [ 0 4 7 23 24 35 41 42 45 46]  
Y\_pred: [ 4 23 24 41 45]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
medical history cad s p mi lad stent x hyperlipidemia, score:  
0.005134172  
procedure his gda was, score: 0.0017112371  
celiac angiography gda stump angiography gda coil, score:  
0.0011683805

confidence of prediction: 0.885177  
Y\_true: [ 0 4 7 23 24 35 41 42 45 46]  
Y\_pred: [ 4 23 24 41 45]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
his gda was prophylactically, score: 0.071405336  
history cad s p mi lad stent x hyperlipidemia social, score:  
0.023684781  
celiac angiography gda stump, score: 0.018798023

confidence of prediction: 0.904224  
Y\_true: [ 0 4 7 23 24 35 41 42 45 46]  
Y\_pred: [ 4 23 24 41 45]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tube feeds were started, score: 0.10991498  
tube feeds were initiated, score: 0.10991498  
tube feeds were changed, score: 0.10991498

confidence of prediction: 0.992627  
Y\_true: [ 0 4 7 23 24 35 41 42 45 46]  
Y\_pred: [ 4 23 24 41 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
goal tpn discontinued diarrhea, score: 0.0057374756  
continued tpn and tf pod, score: 0.0050065587  
feed and tpn reglan started for persistent, score: 0.004303462

confidence of prediction: 0.609635

Y\_true: [ 2 20 29 42]

Y\_pred: [20 29 40 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

medical history htn hx of l, score: 0.09063913

of chronic microangiopathy given, score: 0.085394695

pitting lower extremity swelling, score: 0.0789614

confidence of prediction: 0.694148

Y\_true: [ 2 20 29 42]

Y\_pred: [20 29 40 42]

top three important windows for true positive code 29 (486:

Pneumonia, organism unspecified)

hospital acquired pneumonia and recommendation to, score: 0.13422495

have a pneumonia as this, score: 0.048414655

as you agreed to, score: 0.012886984

confidence of prediction: 0.758474

Y\_true: [ 2 20 29 42]

Y\_pred: [20 29 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96  
consecutive hours)

was intubated and sedated, score: 0.20824663

bed intubated and sedated, score: 0.039751083

patient was intubated for airway protection, score: 0.023876924

confidence of prediction: 0.889066

Y\_true: [15 24 27 38 40 42]

Y\_pred: [24 27 38 40 42]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

coronary artery disease the, score: 0.22297129

lad was tortuous the, score: 0.15061934

eliminating ischemic cardiomyopathy as, score: 0.055258837

confidence of prediction: 0.926155

Y\_true: [15 24 27 38 40 42]

Y\_pred: [24 27 38 40 42]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

cardiomyopathy given her decreased, score: 0.012434494

cardiac arrest it is, score: 0.009845602

heart catheterization showed elevated right, score: 0.007239418

confidence of prediction: 0.528520

Y\_true: [15 24 27 38 40 42]

Y\_pred: [24 27 38 40 42]

top three important windows for true positive code 38 (88.56:

Coronary arteriography using two catheters)

selective coronary angiography of this, score: 0.29130453

cardiac catheterization revealing minimal, score: 0.14523691

catheterization on right atrium, score: 0.046474453

confidence of prediction: 0.511692  
Y\_true: [15 24 27 38 40 42]  
Y\_pred: [24 27 38 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
bilateral neuro intubated moving all extremities, score: 0.03518429  
she was intubated and dopamine, score: 0.02358135  
patient was intubated with etomidate, score: 0.01294006

confidence of prediction: 0.741723  
Y\_true: [15 24 27 38 40 42]  
Y\_pred: [24 27 38 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
she was intubated and dopamine was, score: 0.0076258015  
was fed a cardiac, score: 0.004003417  
rr peep gen obese, score: 0.0034977216

confidence of prediction: 0.502748  
Y\_true: [ 4 20 26 27 31 41]  
Y\_pred: [ 4 17 20 24 26 31 41]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
medical history hl htn previous strokes late, score: 0.12650011  
with htn hl previous embolic strokes, score: 0.08000556  
foam hospital1 crestor 40mg po daily, score: 0.028106999

confidence of prediction: 0.847136  
Y\_true: [ 4 20 26 27 31 41]  
Y\_pred: [ 4 17 20 24 26 31 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
pacemaker placed pradaxa stopped prior, score: 0.1915873  
history hl htn previous, score: 0.07609259  
wbcclump mod 54am glucose, score: 0.05833885

confidence of prediction: 0.959776  
Y\_true: [ 4 20 26 27 31 41]  
Y\_pred: [ 4 17 20 24 26 31 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
paf sick sinus syndrome, score: 0.10404155  
af untreated with [UNK], score: 0.07781844  
fib at this time, score: 0.04644744

confidence of prediction: 0.597472  
Y\_true: [ 4 20 26 27 31 41]  
Y\_pred: [ 4 17 20 24 26 31 41]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
potential aspiration pneumonia ua and cultures, score: 0.16022205  
fall and aspiration precautions, score: 0.02236805

tube for feeding and, score: 0.01590561

confidence of prediction: 0.880898

Y\_true: [ 4 20 26 27 31 41]

Y\_pred: [ 4 17 20 24 26 31 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

and tube feeds were initiated, score: 0.1273655

on tube feeds on which, score: 0.06745565

tube for feeding and, score: 0.06652909

confidence of prediction: 0.884076

Y\_true: [20 39 46]

Y\_pred: [17 35 39]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

mg recon soln sig, score: 0.0029720648

a tee on that was negative, score: 0.0025461863

incisions no lifting greater, score: 0.0019775953

confidence of prediction: 0.708966

Y\_true: [ 3 4 20 39 43 46]

Y\_pred: [ 0 4 17 33 39 40 42]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

including htn hld and [UNK] who was, score: 0.21173458

pkd htn hld and polycythemia who, score: 0.14528416

qweekly omeprazole mg po, score: 0.011783415

confidence of prediction: 0.805362

Y\_true: [ 3 4 20 39 43 46]

Y\_pred: [ 0 4 17 33 39 40 42]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

tee was negative for endocarditis, score: 0.59837955

tee no spontaneous echo, score: 0.22843565

vegetation is seen on, score: 0.023872536

confidence of prediction: 0.814307

Y\_true: [28 45]

Y\_pred: [45]

top three important windows for true positive code 45 (99.15:

Parenteral infusion of concentrated nutritional substances)

diverting loop ileostomy multiple admissions for partial, score: 0.0150942495

diverting loop ileostomy dvt, score: 0.0150942495

diverting loop ileostomy cmv, score: 0.0150942495

confidence of prediction: 0.697739

Y\_true: [ 0 5 8 10 35]

Y\_pred: [17 27 35]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

renal failure in the, score: 0.05799681



effect from arf the patient, score: 0.03132183  
pressors were considered but, score: 0.021247527

confidence of prediction: 0.560203  
Y\_true: [ 4 8 20 34 47]  
Y\_pred: [ 4 34]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
age gerd hld possible sleep apnea, score: 0.39651006  
ezetimibe mg tablet sig, score: 0.06445242  
to keppra 1000mg qid vimpat 200mg, score: 0.032859787

confidence of prediction: 0.872427  
Y\_true: [ 4 8 20 34 47]  
Y\_pred: [ 4 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
2000mg qid lacosamide 250mg, score: 0.033824377  
w known gerd we continued omeprazole follow, score: 0.022542004  
swipe x antagonistic movements, score: 0.016285516

confidence of prediction: 0.826895  
Y\_true: [ 2 7 21 26 27 29 34 49]  
Y\_pred: [ 2 26 27 31 44 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm who presents afer, score: 0.07451139  
glipizide mg hospital1 diltiazem, score: 0.05439557  
has dm2 and hypothyroid dm2 controlled by glipizide and, score:  
0.033051472

confidence of prediction: 0.993002  
Y\_true: [ 2 7 21 26 27 29 34 49]  
Y\_pred: [ 2 26 27 31 44 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin presents s, score: 0.52786326  
afib flutter with no major, score: 0.27429828  
atrial fibrillation coumadin dm who, score: 0.14275944

confidence of prediction: 0.987276  
Y\_true: [ 2 7 21 26 27 29 34 49]  
Y\_pred: [ 2 26 27 31 44 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure was a consideration, score: 0.3499037  
diastolic heart failure her home regimen, score: 0.3499037  
diastolic heart failure i e, score: 0.24433273

confidence of prediction: 0.673554  
Y\_true: [ 2 7 21 26 27 29 34 49]  
Y\_pred: [ 2 26 27 31 44 49]  
top three important windows for true positive code 49 (V58.61: Long-

term (current) use of anticoagulants)  
afib on coumadin presents, score: 0.46614468  
atrial fibrillation coumadin dm, score: 0.09440015  
qhs ou coumadin per, score: 0.033627357

confidence of prediction: 0.701198  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]  
Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
febrile to 103f and, score: 0.027399626  
days antibiotics sepsis patient presented w septic, score:  
0.025430787  
levofloxacin and levophed pressor weaned, score: 0.017147303

confidence of prediction: 0.800967  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]  
Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
medications prn diabetes monitoring and insulin, score: 0.08083607  
htn dm a1c a chronic nonhealing, score: 0.07745424  
htn dm mi s p, score: 0.061492216

confidence of prediction: 0.781065  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]  
Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement transesophageal echocardiogram, score: 0.090921834  
febrile to 103f and, score: 0.064522214  
in place dressing soaked, score: 0.043091528

confidence of prediction: 0.840085  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]  
Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stent in, score: 0.19813238  
discharge cad hx mi recent post, score: 0.04108322  
s p cabg and, score: 0.037691813

confidence of prediction: 0.957369  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]  
Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure ef cad w, score: 0.13075423  
chronic systolic heart failure ef hyperlipidemia, score: 0.03199028  
chf who presented to, score: 0.030286776

confidence of prediction: 0.663826  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]

Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
transesophageal echocardiogram ulcer wound, score: 0.52385074  
tee were both without, score: 0.10573656  
transesophageal echocardiogram conclusions the, score: 0.07358955

confidence of prediction: 0.888586  
Y\_true: [ 0 2 4 17 21 24 27 36 39 48]  
Y\_pred: [ 0 2 17 22 23 24 25 27 39 46 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg at, score: 0.30576003  
s p cabg and, score: 0.30576003  
of his bypass surgery, score: 0.0054787975

confidence of prediction: 0.723856  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
chronic hypothyroidism mild to moderate, score: 0.3079193  
home levothyroxine transitional issues, score: 0.18918154  
mg levothyroxine mcg isosorbide [UNK], score: 0.084118664

confidence of prediction: 0.827525  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hyperlipidemia left ventricular diastolic, score: 0.15588771  
risk factors dyslipidemia hypertension chronic kidney, score:  
0.0708038  
mg sl rosuvastatin mg daily discharge, score: 0.032614037

confidence of prediction: 0.989679  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia requiring transfusion transient hypotension, score:  
0.76359767  
anemia as above which, score: 0.16429499  
morphine penicillins attending doctor, score: 0.008520736

confidence of prediction: 0.510103  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 15 (37.23:  
Combined right and left heart cardiac catheterization)  
cardiac catheterization with deployment of, score: 0.73882866  
lesion resting hemodynamics revealed, score: 0.026170602  
heart catheterization which showed pcw, score: 0.022540899

confidence of prediction: 0.786396  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
kidney disease hypertension and, score: 0.10062983  
chronic renal failure post catheterization, score: 0.09809963  
chronic ckd per report patient, score: 0.09682506

confidence of prediction: 0.896523  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
st elevation myocardial infarction coronary artery, score:  
0.09473208  
cad tiny nstemi chronic kidney, score: 0.008900728  
with an nstemi cad nstemi patient was transferred, score:  
0.0045130877

confidence of prediction: 0.993417  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
tiny nstemi chronic kidney, score: 0.07673454  
coronary artery disease acute, score: 0.06349398  
vessel coronary artery disease the, score: 0.02440884

confidence of prediction: 0.985019  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation on coumadin s, score: 0.28432688  
fibrillation on coumadin transferred, score: 0.28432688  
atrial fibrillation patient noted to, score: 0.08268278

confidence of prediction: 0.963463  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure of uncertain, score: 0.24004847  
diastolic heart failure of uncertain, score: 0.050635614  
heart failure tte demonstrated, score: 0.039184928

confidence of prediction: 0.802952  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure post, score: 0.15330759

on chronic ckd per, score: 0.15099247  
her renal function scr beginning, score: 0.041131165

confidence of prediction: 0.621823  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
chronic renal failure post catheterization, score: 0.11808012  
chronic ckd per report patient, score: 0.10224037  
renal insufficiency with baseline creatinine of, score: 0.08638589

confidence of prediction: 0.591598  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
culture with colonies of e coli, score: 0.12459148  
hypertension urinary tract infection atrial fibrillation, score:  
0.06577763  
at uti the patient was, score: 0.04323394

confidence of prediction: 0.840655  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
cardiac catheterization with deployment of, score: 0.48818251  
distal rca stenosis requiring, score: 0.0383061  
heart catheterization which showed pcw, score: 0.035312664

confidence of prediction: 0.641975  
Y\_true: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
Y\_pred: [ 1 4 7 15 21 22 24 26 27 35 36 37 38 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
fibrillation on coumadin s, score: 0.41191226  
fibrillation on coumadin transferred, score: 0.41191226  
fibrillation with long term, score: 0.029855747

confidence of prediction: 0.940788  
Y\_true: [19 26 49]  
Y\_pred: [ 9 17 19 26]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
fax esrd hd likely secondary, score: 0.13992922  
outpatient hemodialysis sessions hematology reviewed, score:  
0.12124778  
routine hemodialysis schedule monday, score: 0.105628245

confidence of prediction: 0.977333  
Y\_true: [19 26 49]  
Y\_pred: [ 9 17 19 26]  
top three important windows for true positive code 26 (427.31:

Atrial fibrillation)  
afib hypercoagulopathy who p w, score: 0.5537527  
afib recent endocarditis antiphospholipid, score: 0.22249858  
atrial fibrillation hypercoagulability anemia hx, score: 0.05758952

confidence of prediction: 0.563404  
Y\_true: [ 2 10 30 31 33 40 41 42]  
Y\_pred: [ 9 30 31]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
hepatoma diabetes copd orbit repair social history, score:  
0.015619371  
ulcers neck supple no, score: 0.0044221133  
bilateral mastoid air cells, score: 0.0010581831

confidence of prediction: 0.948223  
Y\_true: [ 2 10 30 31 33 40 41 42]  
Y\_pred: [ 9 30 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
f aspiration pneumonia as he also, score: 0.3592469  
lightheadedness palpitations ros pt, score: 0.0018038546  
ros was otehrwise negative, score: 0.0014078154

confidence of prediction: 0.910190  
Y\_true: [ 5 8 12 29 34]  
Y\_pred: [ 5 12 20 30 33 34 40]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
given his hyponatremia he was given iv, score: 0.38010827  
due to hyponatremia during, score: 0.07332038  
pneumonia emphysema hyponatremia secondary, score: 0.056361604

confidence of prediction: 0.986496  
Y\_true: [ 5 8 12 29 34]  
Y\_pred: [ 5 12 20 30 33 34 40]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
pm bronchoalveolar lavage gram stain final, score: 0.016173437  
reaction bronchial washings bronchial lavage atypical single  
epithelioid, score: 0.01472161  
and bronchial cells portable cxr there, score: 0.0067244363

confidence of prediction: 0.675163  
Y\_true: [ 5 8 12 29 34]  
Y\_pred: [ 5 12 20 30 33 34 40]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
hyponatremia secondary gerd hypertension discharge condition mental,  
score: 0.04792332  
discharge gerd pt reported symptoms, score: 0.032265317  
cells with scant cytoplasm, score: 0.01599364

confidence of prediction: 0.617229

Y\_true: [ 0 1 4 17 20 24]  
Y\_pred: [ 1 2 4 20 24 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
hyperlipidemia hypothyroidism hit neurogenic, score: 0.13282311  
sunday levothyroxine mcg tablet sig, score: 0.10611229  
daily levothyroxine mcg tablet sig, score: 0.060046826  
  
confidence of prediction: 0.787672  
Y\_true: [ 0 1 4 17 20 24]  
Y\_pred: [ 1 2 4 20 24 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hld neurogenic bladder with self, score: 0.11370564  
hld neurogenic bladder with catheterization, score: 0.11370564  
months ago hyperlipidemia hypothyroidism hit neurogenic bladder,  
score: 0.020817585  
  
confidence of prediction: 0.661380  
Y\_true: [ 0 1 4 17 20 24]  
Y\_pred: [ 1 2 4 20 24 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
x [UNK] hypertension presumed, score: 0.080037184  
stabilized without transfusion and, score: 0.015314185  
for asystole htn hld neurogenic bladder with, score: 0.014081896  
  
confidence of prediction: 0.944689  
Y\_true: [ 0 1 4 17 20 24]  
Y\_pred: [ 1 2 4 20 24 37]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
s p stent in, score: 0.40191332  
pvd cad s p stent in, score: 0.028476449  
mid rca stent in prior, score: 0.010564958  
  
confidence of prediction: 0.904965  
Y\_true: [ 1 7 11 20]  
Y\_pred: [ 1 4 20 33 34]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
pouch hypothyroid depression hx tia, score: 0.23371147  
this hypothyroid continued levothyroxine while in house, score:  
0.04808238  
apnea hypothyroidism hypertension hyperlipidemia, score: 0.03957148  
  
confidence of prediction: 0.780680  
Y\_true: [ 1 7 11 20]  
Y\_pred: [ 1 4 20 33 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
prn for hypertension when, score: 0.18486403  
pmn s gpc s in, score: 0.112412155  
hypertension on valsartan at, score: 0.07741374

confidence of prediction: 0.809225  
Y\_true: [ 2 5 17 21 26 27 29 35 48]  
Y\_pred: [ 0 1 2 17 26 27 35 40 48 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm type ii previously only, score: 0.12733045  
dchf dm2 recurrent month year, score: 0.06910618  
qid lantus units sc hs, score: 0.055977598

confidence of prediction: 0.723442  
Y\_true: [ 2 5 17 21 26 27 29 35 48]  
Y\_pred: [ 0 1 2 17 26 27 35 40 48 49]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
line placement and removal, score: 0.21347259  
had picc placed for access and, score: 0.07947755  
femoral line was placed under, score: 0.016878631

confidence of prediction: 0.978880  
Y\_true: [ 2 5 17 21 26 27 29 35 48]  
Y\_pred: [ 0 1 2 17 26 27 35 40 48 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib she had a few, score: 0.4126305  
afib rvr earlier asa for, score: 0.39940044  
afib rvr when metoprolol held, score: 0.06420394

confidence of prediction: 0.974407  
Y\_true: [ 2 5 17 21 26 27 29 35 48]  
Y\_pred: [ 0 1 2 17 26 27 35 40 48 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
dchf s p 3l fluids, score: 0.3024367  
dchf brought to the ed, score: 0.07907362  
chf ef history of, score: 0.051311493

confidence of prediction: 0.898806  
Y\_true: [ 2 5 17 21 26 27 29 35 48]  
Y\_pred: [ 0 1 2 17 26 27 35 40 48 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
have leukocytosis arf diagnosed with recurrent, score: 0.15939642  
baseline nonfocal arf uremia hypona, score: 0.051241275  
exacerbation arf and c, score: 0.032550275

confidence of prediction: 0.870728  
Y\_true: [ 2 5 17 21 26 27 29 35 48]  
Y\_pred: [ 0 1 2 17 26 27 35 40 48 49]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg c, score: 0.30147156  
hypok cad cabg had, score: 0.120430075



course after cabg and, score: 0.012395651

confidence of prediction: 0.903466

Y\_true: [ 4 16 17 20 29 40 41 42 49]

Y\_pred: [ 4 20 39 40 41 42 43]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

controlled and hld p w new, score: 0.08439057

medical history hyperlipidemia hypertension social history lives, score: 0.0788326

history of hyperlipidemia and hypertension who presented, score: 0.04803748

confidence of prediction: 0.972433

Y\_true: [ 4 16 17 20 29 40 41 42 49]

Y\_pred: [ 4 20 39 40 41 42 43]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

significant for htn diet controlled and, score: 0.17189634

lobe in contralateral left, score: 0.10056788

history hyperlipidemia hypertension social history lives, score: 0.07329641

confidence of prediction: 0.776356

Y\_true: [ 4 16 17 20 29 40 41 42 49]

Y\_pred: [ 4 20 39 40 41 42 43]

top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)

required endotracheal intubation received etomidate mg, score: 0.34018016

was re intubated heparin gtt, score: 0.14208841

and required intubation he was, score: 0.08281457

confidence of prediction: 0.970802

Y\_true: [ 4 16 17 20 29 40 41 42 49]

Y\_pred: [ 4 20 39 40 41 42 43]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

new dobbhoff feeding tube with a, score: 0.0545859

started tube feeds were held, score: 0.029162634

feeding tube was placed and tube feeds were started, score: 0.02394445

confidence of prediction: 0.769974

Y\_true: [ 4 16 17 20 29 40 41 42 49]

Y\_pred: [ 4 20 39 40 41 42 43]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

required endotracheal intubation received etomidate mg, score: 0.20171784

extubation x2 evd placement and, score: 0.19728571

was re intubated heparin gtt, score: 0.021207744

confidence of prediction: 0.588866  
 Y\_true: [ 1 4 19 22 24 27 37]  
 Y\_pred: [ 1 4 19 24 27 38]  
 top three important windows for true positive code 1 (244.9:  
 Unspecified acquired hypothyroidism)  
 medications levothyroxine mcg daily nph, score: 0.20812054  
 stay hypothyroidism home dose levothyroxine was continued fen,  
 score: 0.13298239  
 stent hypothyroidism prior thyroidectomy, score: 0.10259925

confidence of prediction: 0.774525  
 Y\_true: [ 1 4 19 22 24 27 37]  
 Y\_pred: [ 1 4 19 24 27 38]  
 top three important windows for true positive code 4 (272.4: Other  
 and unspecified hyperlipidemia)  
 hypertension hyperlipidemia prior tia and, score: 0.13034852  
 valsartan mg hospital1 isosorbide mononitrate, score: 0.03917421  
 100mg qpm hyperlipidemia patient s simvastatin 40mg, score:  
 0.031999428

confidence of prediction: 0.941839  
 Y\_true: [ 1 4 19 22 24 27 37]  
 Y\_pred: [ 1 4 19 24 27 38]  
 top three important windows for true positive code 19 (39.95:  
 Hemodialysis)  
 v on hemodialysis who, score: 0.07581321  
 v on hemodialysis every mon, score: 0.07581321  
 on hemodialysis m w, score: 0.07311879

confidence of prediction: 0.888163  
 Y\_true: [ 1 4 19 22 24 27 37]  
 Y\_pred: [ 1 4 19 24 27 38]  
 top three important windows for true positive code 24 (414.01:  
 Coronary atherosclerosis of native coronary artery)  
 coronary artery disease secondary, score: 0.10354831  
 coronary artery disease stenosis, score: 0.06140194  
 coronary artery disease with, score: 0.047128502

confidence of prediction: 0.988453  
 Y\_true: [ 1 4 19 22 24 27 37]  
 Y\_pred: [ 1 4 19 24 27 38]  
 top three important windows for true positive code 27 (428.0:  
 Congestive heart failure, unspecified)  
 chronic systolic chf from ischemic cardiomyopathy lvef, score:  
 0.008809057  
 systolic chf, score: 0.0078075523  
 chronic systolic chf osh tte from, score: 0.0063149477

confidence of prediction: 0.542604  
 Y\_true: [17 27 29 32]  
 Y\_pred: [29 44]  
 top three important windows for true positive code 29 (486:  
 Pneumonia, organism unspecified)  
 hospital acquired pneumonia on top, score: 0.08937473

r asp pna djd 40am blood, score: 0.073694795  
recovering pneumonia and loculated infiltrate sequelae, score:  
0.049940936

confidence of prediction: 0.536303  
Y\_true: [16 17 20 24 27 33 34]  
Y\_pred: [ 0 17 27]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
of r ij line insertion of l radial, score: 0.042265046  
hr decreased with metoprolol, score: 0.03902439  
hypotensive again cortisol level checked, score: 0.031246958

confidence of prediction: 0.959941  
Y\_true: [16 17 20 24 27 33 34]  
Y\_pred: [ 0 17 27]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure patient with, score: 0.17273085  
diastolic heart failure found, score: 0.08906919  
dementia diastolic chf interstitial lung, score: 0.06832149

confidence of prediction: 0.678799  
Y\_true: [20 23 26 27 35 39 46]  
Y\_pred: [ 2 5 17 23 24 26 27 35 39 49]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
medical history cad s p mi medically managed chf ef reported, score:  
0.0022988964  
of remote myocardial infarction small bilateral pleural, score:  
0.0010801537

confidence of prediction: 0.996794  
Y\_true: [20 23 26 27 35 39 46]  
Y\_pred: [ 2 5 17 23 24 26 27 35 39 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin s, score: 0.36495015  
afib on coumadin social, score: 0.36495015  
atrial fibrillation modest intraventricular, score: 0.123410724

confidence of prediction: 0.942928  
Y\_true: [20 23 26 27 35 39 46]  
Y\_pred: [ 2 5 17 23 24 26 27 35 39 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cardiomyopathy and chf as, score: 0.12221272  
chf shortness of breath, score: 0.07163498  
chf p w shoulder pain, score: 0.023761688

confidence of prediction: 0.535782  
Y\_true: [20 23 26 27 35 39 46]  
Y\_pred: [ 2 5 17 23 24 26 27 35 39 49]  
top three important windows for true positive code 35 (584.9: Acute

kidney failure, unspecified)  
cxr elevated bnp but, score: 0.28220534  
including inr renal failure hyponatremia at, score: 0.089201525  
support and fresh frozen, score: 0.029296178

confidence of prediction: 0.915052  
Y\_true: [20 23 26 27 35 39 46]  
Y\_pred: [ 2 5 17 23 24 26 27 35 39 49]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
tee were negative ef continued, score: 0.56286466  
vegetation is seen on, score: 0.0049471045  
descending thoracic aorta the, score: 0.003551131

confidence of prediction: 0.576512  
Y\_true: [ 2 4 5 7 13 21 24 35 36 38]  
Y\_pred: [ 2 13 18 24]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
glucophage 500mg po bid lisinopril, score: 0.08957044  
with hypertension diabetes mellitus and benign prostatic, score:  
0.030426154  
diabetes social history mr known, score: 0.021957096

confidence of prediction: 0.990792  
Y\_true: [ 2 4 5 7 13 21 24 35 36 38]  
Y\_pred: [ 2 13 18 24]  
top three important windows for true positive code 13 (36.15: Single  
internal mammary-coronary artery bypass)  
pump cabgx4 lima lad svg to, score: 0.25829306  
coronary artery bypass grafting times four, score: 0.075663716  
cardiothoracic doctor first name, score: 0.009681848

confidence of prediction: 0.981556  
Y\_true: [ 2 4 5 7 13 21 24 35 36 38]  
Y\_pred: [ 2 13 18 24]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease the, score: 0.17772686  
coronary artery disease refer, score: 0.17772686  
coronary artery disease carotid, score: 0.07294599

confidence of prediction: 0.530058  
Y\_true: [ 5 11 19 20 23 26 27 35 37 48]  
Y\_pred: [ 2 4 5 17 19 24 26 27 35 37 49]  
top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)  
to be hyponatremic on admission and was, score: 0.7429095  
on flanks impossible to palpate abdominal, score: 0.04734742  
in a condominium on, score: 0.0076972162

confidence of prediction: 0.942413  
Y\_true: [ 5 11 19 20 23 26 27 35 37 48]

Y\_pred: [ 2 4 5 17 19 24 26 27 35 37 49]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
placement of hemodialysis line placement, score: 0.114079416  
hypotensive during cvvh as noted, score: 0.06998359  
consulted and cvvh was initially, score: 0.024559313

confidence of prediction: 0.977235  
Y\_true: [ 5 11 19 20 23 26 27 35 37 48]  
Y\_pred: [ 2 4 5 17 19 24 26 27 35 37 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib she was given, score: 0.08697303  
atrial fibrillation on coumadin chronic, score: 0.05840329  
afib w rvr and, score: 0.05061523

confidence of prediction: 0.986202  
Y\_true: [ 5 11 19 20 23 26 27 35 37 48]  
Y\_pred: [ 2 4 5 17 19 24 26 27 35 37 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure last known ef, score: 0.08326514  
diastolic heart failure her initial, score: 0.041148342  
chf cxr impression slightly, score: 0.009171337

confidence of prediction: 0.543560  
Y\_true: [ 5 11 19 20 23 26 27 35 37 48]  
Y\_pred: [ 2 4 5 17 19 24 26 27 35 37 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
on chronic renal failure w, score: 0.09249038  
w pre renal state a foley, score: 0.07947535  
renal state likely poor, score: 0.06587587

confidence of prediction: 0.594803  
Y\_true: [ 5 11 19 20 23 26 27 35 37 48]  
Y\_pred: [ 2 4 5 17 19 24 26 27 35 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
daily uti pt was found to, score: 0.25489265  
markedly rotated film which limits, score: 0.13415135  
baseline creatinine and presented, score: 0.020407055

confidence of prediction: 0.847309  
Y\_true: [10 12]  
Y\_pred: [12]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
with bronchoalveolar lavage history of, score: 0.6757469  
underwent a bronchoscopy the appearance, score: 0.056854043  
on bal on visualization, score: 0.033968255

confidence of prediction: 0.710898  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]

Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
source line picc hemolytic workup ret, score: 0.09495342  
source line picc immunology crp 30am, score: 0.09495342  
source line picc 07am, score: 0.031870667

confidence of prediction: 0.963889  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]  
Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
and hemodialysis initiation nasogastric, score: 0.18507725  
guided hemodialysis tunneled catheter placement lumbar, score: 0.080747545  
lumbar puncture hemodialysis line placement, score: 0.066894084

confidence of prediction: 0.589730  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]  
Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p imi with stents to rca, score: 0.23567043  
s p imi ruled out, score: 0.23567043  
with cardiac biomarkers and, score: 0.17766008

confidence of prediction: 0.534680  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]  
Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p imi ruled, score: 0.18495606  
cad s p imi in with stents in, score: 0.023410512  
dm managed initially with, score: 0.019021546

confidence of prediction: 0.718653  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]  
Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
outpatient respiratory failure he was intubated shortly, score: 0.08117923  
for respiratory failure post, score: 0.04652295  
was urgently intubated to protect his, score: 0.044933382

confidence of prediction: 0.938598  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]  
Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
re intubate for respiratory failure, score: 0.5066576  
was urgently intubated to protect, score: 0.24353229  
he was intubated shortly after, score: 0.011793788

confidence of prediction: 0.531932  
Y\_true: [17 19 21 23 24 33 36 37 39 40 41 43 46]  
Y\_pred: [ 2 17 19 23 24 31 33 35 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
esr and crp very, score: 0.0774182  
intubation attempted bedside lumbar, score: 0.05373742  
meningitis he was transferred, score: 0.028529093

confidence of prediction: 0.929707  
Y\_true: [ 8 17 20 25 26 29]  
Y\_pred: [ 5 20 26 29]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
on vemurafenib htn and anxiety, score: 0.36017904  
this medication hypertension bp, score: 0.24156022  
gluteus calcific tendinopathy mild, score: 0.069839954

confidence of prediction: 0.976912  
Y\_true: [ 8 17 20 25 26 29]  
Y\_pred: [ 5 20 26 29]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib she reportedly has a, score: 0.46555856  
paf given her brain, score: 0.41218323  
afib with rvr ms known, score: 0.045241438

confidence of prediction: 0.820015  
Y\_true: [ 8 17 20 25 26 29]  
Y\_pred: [ 5 20 26 29]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
metastases pneumonia as well, score: 0.098010145  
getting a pneumonia and was, score: 0.034347065  
community acquired pneumonia lll infiltrate seen on cxr, score:  
0.0076253945

confidence of prediction: 0.858409  
Y\_true: [28]  
Y\_pred: [28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
otherwise normal egd to, score: 0.12926881  
s egd esophagus normal esophagus excavated, score: 0.059940446  
bedside egd where they, score: 0.049997184

confidence of prediction: 0.894999  
Y\_true: [ 2 6 8 9 17 21 28 35 36 41]  
Y\_pred: [ 5 17 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
macro 59am pleural totprot ld, score: 0.17862146  
status a dobhoff tube was, score: 0.15133041  
and a picc line was placed for, score: 0.026623303

confidence of prediction: 0.946936  
Y\_true: [ 2 6 8 9 17 21 28 35 36 41]  
Y\_pred: [ 5 17 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tube feeds now at, score: 0.050832763  
getting tube feeds sodium on, score: 0.018678727  
status tube feeds constant supervision, score: 0.013331134

confidence of prediction: 0.978306  
Y\_true: [ 4 29]  
Y\_pred: [ 4 37]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
target range hld continued home gemfibrozil tinea, score:  
0.008284864  
lv hypertrophy hld obesity hypercalcemia sleep apnea, score:  
0.0068984465  
precludes definitive comparison right, score: 0.0036532423

confidence of prediction: 0.736831  
Y\_true: [ 9 20 34 40 41 42 45]  
Y\_pred: [40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
she was intubated for airway protection and, score: 0.24618413  
2l gen intubated sedated, score: 0.11890685  
she was intubated after the, score: 0.03918358

confidence of prediction: 0.742517  
Y\_true: [ 9 20 34 40 41 42 45]  
Y\_pred: [40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
neuro intubated sedated does, score: 0.3210858  
she was intubated for airway protection and, score: 0.16519699  
she was intubated after the, score: 0.0254163

confidence of prediction: 0.837124  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
mg daily hyperlipidemia chronic the patient s, score: 0.34374294  
simvastatin mg oral tablet, score: 0.014647955  
warfarin mg oral tablet, score: 0.011421193

confidence of prediction: 0.871782  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic



kidney disease stage I through stage IV, or unspecified)  
chronic kidney disease after her, score: 0.10559146  
ckd chronic kidney disease stage gfr, score: 0.096022025  
kidney failure atenolol was, score: 0.0034028157

confidence of prediction: 0.983205  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
edema from chf in the setting of, score: 0.03669126  
heart failure diastolic chronic lung, score: 0.035540603  
chronic diastolic heart failure the patient desaturated, score:  
0.0025963788

confidence of prediction: 0.799772  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
otherwise normal egd to third, score: 0.25460377  
source egd done this, score: 0.058292724  
mg egd gastritis in, score: 0.030059453

confidence of prediction: 0.891533  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
of her arf was likely pre renal in context of, score: 0.09055143  
kidney failure atenolol was, score: 0.06627116  
on chronic kidney disease, score: 0.04494057

confidence of prediction: 0.642362  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
for uti prophylaxis but ua, score: 0.05731162  
wtih tramadol uti the patient had been, score: 0.012394389  
says was reminiscent of, score: 0.012052287

confidence of prediction: 0.710719  
Y\_true: [ 2 3 4 11 17 21 27 28 30 35 37 47 49]  
Y\_pred: [ 4 7 21 27 28 35 36 37 40 42 44 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
on chronic coumadin coumadin and aspirin, score: 0.24461487  
and her coumadin aspirin, score: 0.027648963  
daily 50mgm warfarin mg, score: 0.020949818

confidence of prediction: 0.900497  
Y\_true: [ 0 17 32 37 45]  
Y\_pred: [17 20 37 45]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
access showing opacification of, score: 0.15969665  
via a picc the, score: 0.068966545  
line with tip now, score: 0.037529428

confidence of prediction: 0.876643  
Y\_true: [ 0 17 32 37 45]  
Y\_pred: [17 20 37 45]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
urinary tract infection secondary cryptogenic, score: 0.27677283  
known uti and intra abdominal, score: 0.08642593  
time uti urine cultures were sent, score: 0.050348196

confidence of prediction: 0.939611  
Y\_true: [ 0 17 32 37 45]  
Y\_pred: [17 20 37 45]  
top three important windows for true positive code 45 (99.15: Parenteral infusion of concentrated nutritional substances)  
and tpn with daily, score: 0.17549263  
qhs tpn discharge medications, score: 0.02528257  
and on tpn slowly transitioned to po, score: 0.009111356

confidence of prediction: 0.829724  
Y\_true: [ 5 7 12 17 19 28 31 33 34 40 43 45]  
Y\_pred: [ 9 17 26 28 41 43 45]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
where a picc was, score: 0.08584522  
after wbc engraftment given, score: 0.04768548  
progressive ascites ruq pain, score: 0.026310217

confidence of prediction: 0.835632  
Y\_true: [ 5 7 12 17 19 28 31 33 34 40 43 45]  
Y\_pred: [ 9 17 26 28 41 43 45]  
top three important windows for true positive code 28 (45.13: Other endoscopy of small intestine)  
otherwise normal egd to second part of, score: 0.6379215  
study egd clotted blood was noted, score: 0.030002305  
a complete occlusion of, score: 0.016677313

confidence of prediction: 0.890698  
Y\_true: [ 5 7 12 17 19 28 31 33 34 40 43 45]  
Y\_pred: [ 9 17 26 28 41 43 45]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
engraftment ventilator associated pneumonia prior to, score: 0.078660175  
narrow complex tachycardia most, score: 0.056438997  
rhonchi normal respiratory effort, score: 0.03157924

confidence of prediction: 0.954876

Y\_true: [ 5 7 12 17 19 28 31 33 34 40 43 45]

Y\_pred: [ 9 17 26 28 41 43 45]

top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
secondary to tpn and steroids and was, score: 0.0147702135  
ventilator associated pneumonia prior, score: 0.0031375915  
patchy consolidation throughout the, score: 0.0021639152

confidence of prediction: 0.929856

Y\_true: [ 1 17 20 23 24 27 37 47 48 49]

Y\_pred: [ 1 6 24 27 33 35 37]

top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
metoprolol hypothyroidism tsh wnl, score: 0.41265777  
recent uti picc line in place, score: 0.0035827495  
continued levothyroxine code status she, score: 0.00351381

confidence of prediction: 0.964032

Y\_true: [ 1 17 20 23 24 27 37 47 48 49]

Y\_pred: [ 1 6 24 27 33 35 37]

top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
cad with stents and hx, score: 0.1078977  
retinal vein occlusion chronic anemia, score: 0.04010415  
cad sp cabg s p stemi in, score: 0.033332787

confidence of prediction: 0.876438

Y\_true: [ 1 17 20 23 24 27 37 47 48 49]

Y\_pred: [ 1 6 24 27 33 35 37]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chronic diastolic chf [UNK] continued asa plavix, score: 0.051286526  
component of diastolic heart failure through micu she, score:  
0.008115806  
daughter and became dnr, score: 0.00708604

confidence of prediction: 0.778710

Y\_true: [ 1 17 20 23 24 27 37 47 48 49]

Y\_pred: [ 1 6 24 27 33 35 37]

top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
and a uti she also, score: 0.07099773  
resolved bacterial uti pt with, score: 0.055458847  
recent uti noted during last, score: 0.049588505

confidence of prediction: 0.871401

Y\_true: [ 2 9 27]

Y\_pred: [ 2 4 20]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
and dm p w a cerebellar, score: 0.17415659  
history htn dm psoriatic arthritis alcoholism, score: 0.026235756  
htn hl dm who presented with, score: 0.022428365

confidence of prediction: 0.684578  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
secondary to infection id, score: 0.2900197  
on levophed levophed was, score: 0.054566514  
hypotension requiring a pressor, score: 0.041421656

confidence of prediction: 0.664887  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 6 (276.2:  
Acidosis)  
gap metabolic acidosis had a non anion, score: 0.15578221  
cefepime cefoxitin ceftriaxone gent tobra, score: 0.12605739  
bear hugger sating well, score: 0.04364257

confidence of prediction: 0.710567  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
s p mi chf, score: 0.19023585  
s p mi medically managed ppm aicd, score: 0.19023585  
s p mi medically managed continued home, score: 0.19023585

confidence of prediction: 0.776449  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
with [UNK] chf afib, score: 0.09717215  
s p mi medically managed ppm aicd, score: 0.073507294  
s p mi medically, score: 0.073507294

confidence of prediction: 0.997616  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin s p, score: 0.9157796  
afib coumadin w icd, score: 0.020109363  
atrial fibrillation on admission inr, score: 0.0056562093

confidence of prediction: 0.961606  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
chf ef reported by patient, score: 0.11254422  
failure chronic systolic heart failure with ef s, score: 0.042222925  
ef pvd dm2 afib, score: 0.021017598

confidence of prediction: 0.905180  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
on crf cr bun in, score: 0.19826771  
on crf cr bun and, score: 0.19826771  
bear hugger sating well, score: 0.18162692

confidence of prediction: 0.908569  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
uti urine culture from at, score: 0.053144842  
complicated uti following this treatment, score: 0.050595794  
known uti now in shock, score: 0.048960216

confidence of prediction: 0.895259  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 46 (995.92: Severe sepsis)  
secondary to infection id, score: 0.12926957  
now significantly improved active, score: 0.057291858  
infection non gap metabolic, score: 0.045480143

confidence of prediction: 0.673285  
Y\_true: [ 0 1 5 6 10 11 21 23 24 26 27 35 36 37 46 49]  
Y\_pred: [ 0 2 4 6 9 23 24 26 27 35 37 46 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
afib on coumadin s p long hospitalization, score: 0.77135825  
icd on coumadin and, score: 0.12422767  
on his coumadin inr, score: 0.019408021

confidence of prediction: 0.791523  
Y\_true: [ 6 11 21 29 34 35]  
Y\_pred: [ 1 21 34 35 36 42]  
top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
renal insufficiency kidney ureter dysfunction recurrent utis, score: 0.2081553  
ckd dementia who presented for, score: 0.0680168  
chronic renal failure respiratory, score: 0.064083636

confidence of prediction: 0.807567  
Y\_true: [ 6 11 21 29 34 35]  
Y\_pred: [ 1 21 34 35 36 42]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
dementia depression gerd obesity htn neurologic neglect, score:

0.10383223

line ends approximately in, score: 0.010680011

catheter that crosses the, score: 0.008098897

confidence of prediction: 0.749578

Y\_true: [ 6 11 21 29 34 35]

Y\_pred: [ 1 21 34 35 36 42]

top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)

on chronic renal failure respiratory, score: 0.11201933

on chronic renal failure was, score: 0.11201933

on chronic renal failure pneumonia, score: 0.11201933

confidence of prediction: 0.917990

Y\_true: [10 20 39]

Y\_pred: [ 1 11 26 39]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

tee no spontaneous echo, score: 0.9716583

vegetation is seen on, score: 0.004350463

descending thoracic aorta the, score: 0.0031228499

confidence of prediction: 0.574770

Y\_true: [ 4 34 42 47]

Y\_pred: [ 4 31 34 40 42]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

age gerd hld possible sleep apnea, score: 0.4046224

mg hospital1 felbamate mg, score: 0.022681799

atorvastatin mg qhs zetia mg qhs omeprazole mg, score: 0.021441747

confidence of prediction: 0.755753

Y\_true: [ 4 34 42 47]

Y\_pred: [ 4 31 34 40 42]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

at age gerd hld possible sleep apnea, score: 0.025692394

transportation to hospital1 resumed, score: 0.009632776

kidney stones thought to be, score: 0.009228833

confidence of prediction: 0.539340

Y\_true: [ 4 34 42 47]

Y\_pred: [ 4 31 34 40 42]

top three important windows for true positive code 42 (96.71:

Continuous invasive mechanical ventilation for less than 96 consecutive hours)

was subsequently intubated transportation to, score: 0.10320096

eeg recordings eeg impression, score: 0.059540175

recent intubation blood urine, score: 0.042946324

confidence of prediction: 0.749433

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

urinary tract infection who, score: 0.06835584

urinary tract infection now, score: 0.06835584

urinary tract infection patient, score: 0.06835584

confidence of prediction: 0.718738

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

illness and multiple vasopressors for, score: 0.11026752

lisinopril and atenolol were, score: 0.07174851

budding yeast with pseudohyphae, score: 0.06383878

confidence of prediction: 0.993547

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

afib and converted to, score: 0.71798086

afib she had successful, score: 0.105021544

atrial fib onset and converted, score: 0.014367706

confidence of prediction: 0.632259

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 33 (518.81: Acute respiratory failure)

injury required increasing pressor, score: 0.08712723

intubated for airway protection, score: 0.08370204

later transition off of, score: 0.040470712

confidence of prediction: 0.916595

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)

tract infection patient initially, score: 0.13554853

tract infection who originally, score: 0.083589286

diphtheroids organisms ml blood, score: 0.08297233

confidence of prediction: 0.547986

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

later transition off of, score: 0.05242822

profile 15am blood pt, score: 0.043107692

was intubated for airway protection, score: 0.04307966

confidence of prediction: 0.864722

Y\_true: [ 0 6 17 21 22 26 33 36 37 39 40 42 46]

Y\_pred: [ 0 17 26 33 35 37 42 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)  
secondary to urinary tract, score: 0.15217458  
was performed with albumin, score: 0.04738193  
secondary to uri with, score: 0.04523423

confidence of prediction: 0.784072  
Y\_true: [ 6 10 11 20 35]  
Y\_pred: [35]  
top three important windows for true positive code 35 (584.9: Acute kidney failure, unspecified)  
acute kidney injury secondary to pre renal etiology and elevated, score: 0.06523019  
evaluated and patient is, score: 0.022296408  
to b burgdorferi detected, score: 0.0063135372

confidence of prediction: 0.564659  
Y\_true: [ 4 6 9 17 20 26 27 31 37]  
Y\_pred: [ 4 5 17 20 26 31 35]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
htn pvd hyperlipidemia h o rheumatic heart, score: 0.09623987  
with htn hyperlipidemia and one week, score: 0.077115834  
atrial enlargement atherosclerotic coronary, score: 0.027802298

confidence of prediction: 0.792088  
Y\_true: [ 4 6 9 17 20 26 27 31 37]  
Y\_pred: [ 4 5 17 20 26 31 35]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line placement central line placement and removal, score: 0.2790216  
was diagnosed attempted diuresis, score: 0.02399973  
to ac fossa ct, score: 0.016138438

confidence of prediction: 0.530564  
Y\_true: [ 4 6 9 17 20 26 27 31 37]  
Y\_pred: [ 4 5 17 20 26 31 35]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
medical history htn pvd hyperlipidemia h o, score: 0.070411116  
metanepherines catecholamines vma 5hiaa were, score: 0.045828734  
metanepherines catecholamines vma 5hiaa heart, score: 0.045828734

confidence of prediction: 0.960162  
Y\_true: [ 4 6 9 17 20 26 27 31 37]  
Y\_pred: [ 4 5 17 20 26 31 35]  
top three important windows for true positive code 26 (427.31: Atrial fibrillation)  
afib country score is, score: 0.5026702  
developed afib with rvr with rates, score: 0.004639181  
af with rvr and, score: 0.0023888827

confidence of prediction: 0.922801  
Y\_true: [ 4 6 9 17 20 26 27 31 37]



Y\_pred: [ 4 5 17 20 26 31 35]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
hypoxia aspiration pneumonitis vs [UNK], score: 0.22295259  
multifocal aspiration pneumonia with course c, score: 0.11182933  
risk multifocal pna was, score: 0.08714021

confidence of prediction: 0.592005  
Y\_true: [ 0 2 20 31 33 41 46]  
Y\_pred: [ 2 3 17 20 31]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
anxiety type dm social history quit tobacco, score: 0.342316  
injection mucous membranes moist, score: 0.006273413  
l1 transverse process fracture l2, score: 0.006124107

confidence of prediction: 0.899447  
Y\_true: [ 0 2 20 31 33 41 46]  
Y\_pred: [ 2 3 17 20 31]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
exudate psychiatric tachypneic states, score: 0.12191636  
hypertension hypercholesterolemia bph depression anxiety type dm  
social, score: 0.08870077  
atherosclerotic vascular calcifications again, score: 0.0467369

confidence of prediction: 0.971079  
Y\_true: [ 0 2 20 31 33 41 46]  
Y\_pred: [ 2 3 17 20 31]  
top three important windows for true positive code 31 (507.0:  
Pneumonitis due to inhalation of food or vomitus)  
[UNK] aspiration pneumonia hypoxia pt was, score: 0.028992923  
suctioning again requires hospital1 suctioning support, score:  
0.002554294  
vanc cefepime aggressive pulm, score: 0.002548369

confidence of prediction: 0.752103  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
with the thrombocytopenia there was, score: 0.25071156  
this her thrombocytopenia was determined, score: 0.212808  
given her thrombocytopenia was was, score: 0.09889797

confidence of prediction: 0.979890  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
esrd on hemodialysis cad s, score: 0.10282098  
esrd on hemodialysis she received hd on, score: 0.051139582  
has received hemodialysis since that, score: 0.03236373

confidence of prediction: 0.682072  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
s p mi and pci pvd s, score: 0.38985708  
s p mi in received stent to, score: 0.10591762  
s p pci non, score: 0.005520726

confidence of prediction: 0.755665  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p pci non active, score: 0.26676738  
bypass with atherectomy in after, score: 0.07924982  
in received stent to, score: 0.07147632

confidence of prediction: 0.987348  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
diastolic heart failure asthma and, score: 0.12927228  
diastolic heart failure in the setting, score: 0.033512697  
systolic diastolic heart failure ef estimated, score: 0.0064513404

confidence of prediction: 0.521739  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 29 (486: Pneumonia, organism unspecified)  
her respiratory status improved, score: 0.046985082  
with thick sputum last, score: 0.025230201  
and also pneumonia were also, score: 0.024362069

confidence of prediction: 0.926591  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
hypoxic respiratory failure she was, score: 0.07877065  
hypoxic respiratory failure hypoxic respiratory failure on admission, score: 0.07877065  
her respiratory failure was, score: 0.05457538

confidence of prediction: 0.749494  
Y\_true: [ 2 4 9 19 23 24 27 29 33 34]  
Y\_pred: [ 9 19 23 24 27 29 33 34]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
hyperlipidemia gastroesophageal reflux gastritis egd chronic pancreatitis, score: 0.1253356

femoral grafts since then, score: 0.018814936  
schizoaffective disorder hypertension insulin, score: 0.011366749

confidence of prediction: 0.784220  
Y\_true: [21 24 26 27 36]  
Y\_pred: [21 26 27 36]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
it ckd baseline cr approximately previously more, score: 0.02899555  
cr below baseline trop, score: 0.023593856  
un on cri baseline creatinine from mild, score: 0.018003346

confidence of prediction: 0.975394  
Y\_true: [21 24 26 27 36]  
Y\_pred: [21 26 27 36]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib patient with intermittent afib and also v, score: 0.25228494  
atrial fibrillation dementia with recent, score: 0.037392233  
pacer interrogated on last, score: 0.0063464297

confidence of prediction: 0.984533  
Y\_true: [21 24 26 27 36]  
Y\_pred: [21 26 27 36]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic heart failure given, score: 0.7075545  
chf with lasix neurology was, score: 0.09482136  
chf exacerbation pt noted, score: 0.017831841

confidence of prediction: 0.892197  
Y\_true: [21 24 26 27 36]  
Y\_pred: [21 26 27 36]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
it ckd baseline cr approximately previously more, score: 0.016466038  
cr below baseline trop, score: 0.016396854  
un on cri baseline creatinine from mild, score: 0.012152265

confidence of prediction: 0.689638  
Y\_true: [ 0 9 39]  
Y\_pred: [ 0 17 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
line now advances to, score: 0.030233124  
broad spectrum antibiotics that were, score: 0.026107434  
picture improved microcytic anemia likely, score: 0.023188042

confidence of prediction: 0.708035  
Y\_true: [ 1 8 11 27 29]  
Y\_pred: [29 33]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)

presumed pneumonia patient presents, score: 0.23230562  
multifocal pneumonia an opportunistic, score: 0.05686308  
complaint pneumonia hypoxia major surgical, score: 0.05295503

confidence of prediction: 0.693264  
Y\_true: [ 2 5 8 9 16 17 21 27 29 32 33 35 37 40 41 43 46]  
Y\_pred: [17 21 27 37 40 41]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line placement arterial line placement, score: 0.13763495  
screen predicts possible synergy, score: 0.031188292  
with selected penicillins or, score: 0.027052242

confidence of prediction: 0.738594  
Y\_true: [ 2 5 8 9 16 17 21 27 29 32 33 35 37 40 41 43 46]  
Y\_pred: [17 21 27 37 40 41]  
top three important windows for true positive code 21 (403.90: Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified)  
with baseline lactate was, score: 0.026335543  
obesity hypertension colostomy for, score: 0.022845192  
improved in regards to, score: 0.021640647

confidence of prediction: 0.983300  
Y\_true: [ 2 5 8 9 16 17 21 27 29 32 33 35 37 40 41 43 46]  
Y\_pred: [17 21 27 37 40 41]  
top three important windows for true positive code 27 (428.0: Congestive heart failure, unspecified)  
dmii diastolic chf asthma and pemphigus, score: 0.023478836  
and oral lasix she, score: 0.008289023  
chronic diastolic heart failure repeat echo, score: 0.0028274006

confidence of prediction: 0.923569  
Y\_true: [ 2 5 8 9 16 17 21 27 29 32 33 35 37 40 41 43 46]  
Y\_pred: [17 21 27 37 40 41]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
caution escherichia coli organisms ml sensitivities, score: 0.06872381  
culture grew escherichia coli she initially received, score: 0.050274413  
mirabilis enterococcus faecalis ampicillin, score: 0.03215908

confidence of prediction: 0.737159  
Y\_true: [ 2 5 8 9 16 17 21 27 29 32 33 35 37 40 41 43 46]  
Y\_pred: [17 21 27 37 40 41]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
she was intubated for apnea, score: 0.06662764  
placement endotracheal intubation history of present, score: 0.04064405  
intact neuro moves arms, score: 0.011102673

confidence of prediction: 0.690368

Y\_true: [ 2 5 8 9 16 17 21 27 29 32 33 35 37 40 41 43 46]  
Y\_pred: [17 21 27 37 40 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
of tube feeds last name, score: 0.054503694  
received tube feeds diabetic formulation for poor, score:  
0.047071796  
her tube feeds then were, score: 0.024823315

confidence of prediction: 0.685750  
Y\_true: [ 0 2 4 5 20 32 34 35 46 49]  
Y\_pred: [ 0 2 20 34 35 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
collection acute renal failure, score: 0.041224066  
hypotension resolved sepsis initially presented with sepsis and  
admitted to micu, score: 0.034665007  
transfer hypotension sepsis major surgical or, score: 0.020928435

confidence of prediction: 0.905198  
Y\_true: [ 0 2 4 5 20 32 34 35 46 49]  
Y\_pred: [ 0 2 20 34 35 46]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
dm htn recent gallstone pancreatitis, score: 0.33331704  
hepatology t2dm insulin sliding, score: 0.07730952  
bid metformin 1000mg po bid glipizide, score: 0.052402325

confidence of prediction: 0.729781  
Y\_true: [ 0 2 4 5 20 32 34 35 46 49]  
Y\_pred: [ 0 2 20 34 35 46]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
elevated fs htn anti hypertensives held, score: 0.1935241  
with dm htn recent gallstone, score: 0.12706429  
diagnosed dmii htn popliteal aneurysms s p, score: 0.061590932

confidence of prediction: 0.760637  
Y\_true: [ 0 2 4 5 20 32 34 35 46 49]  
Y\_pred: [ 0 2 20 34 35 46]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
has dogs portugeuse [UNK], score: 0.03295277  
aneurysm gerd ppi omeprazole gout continued, score: 0.015739912  
abscess versus surgical ruq, score: 0.010413743

confidence of prediction: 0.796062  
Y\_true: [ 0 2 4 5 20 32 34 35 46 49]  
Y\_pred: [ 0 2 20 34 35 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
acute kidney injury creatinine up to, score: 0.038584303  
abscess versus surgical ruq, score: 0.037433103

collection acute renal failure and supratherapeutic inr, score: 0.021992747

confidence of prediction: 0.945943

Y\_true: [ 0 2 4 5 20 32 34 35 46 49]

Y\_pred: [ 0 2 20 34 35 46]

top three important windows for true positive code 46 (995.92: Severe sepsis)

sepsis major surgical or, score: 0.22411908

collection acute renal failure, score: 0.031939358

hypotension resolved sepsis initially presented with sepsis and admitted to micu, score: 0.027276043

confidence of prediction: 0.869909

Y\_true: [ 7 17 20 26 33 41 46 49]

Y\_pred: [17 26 35 41]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

thus had picc line placed on and, score: 0.05761593

via a picc line complicated by a, score: 0.052244958

tube dobhoff placement last name, score: 0.030982686

confidence of prediction: 0.921955

Y\_true: [ 7 17 20 26 33 41 46 49]

Y\_pred: [17 26 35 41]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

irregularly irregular no m r, score: 0.3828189

atrial fibrillation mrsa cholecystitis social, score: 0.07238447

malnutrition dysphagia mental status, score: 0.0066633727

confidence of prediction: 0.890117

Y\_true: [ 7 17 20 26 33 41 46 49]

Y\_pred: [17 26 35 41]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

tube feeds were started, score: 0.1144443

the tube feeds without nausea, score: 0.08907561

tube feed but this, score: 0.07613745

confidence of prediction: 0.910219

Y\_true: [ 2 3 11 20 24 27 34 35 47]

Y\_pred: [ 2 4 13 24 27 34 38]

top three important windows for true positive code 2 (250.00: Diabetes mellitus without mention of complication, type II or unspecified type, not stated as uncontrolled)

hypertension diabetes mellitus type dmt2 and, score: 0.05727953

htn dm2 hld osa on cpap, score: 0.027800508

htn dm2 hld osa on cpap, score: 0.017507846

confidence of prediction: 0.951387

Y\_true: [ 2 3 11 20 24 27 34 35 47]

Y\_pred: [ 2 4 13 24 27 34 38]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)  
lad x3 lad with, score: 0.055631228  
right heart catheterization swan, score: 0.042087954  
coronary artery disease cad status post stenting hypertension,  
score: 0.025177227

confidence of prediction: 0.923549  
Y\_true: [ 2 3 11 20 24 27 34 35 47]  
Y\_pred: [ 2 4 13 24 27 34 38]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
systolic heart failure getting listed, score: 0.12998606  
chf shifting dullness on, score: 0.06741904  
sided heart failure with severely elevated, score: 0.03344411

confidence of prediction: 0.889216  
Y\_true: [ 2 3 11 20 24 27 34 35 47]  
Y\_pred: [ 2 4 13 24 27 34 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
on cpap gerd sbo depression anxiety gout, score: 0.045294378  
ckd and gerd recently admitted date range, score: 0.025264736  
as another symptom of, score: 0.014444755

confidence of prediction: 0.738139  
Y\_true: [ 2 9 21 27 35 47]  
Y\_pred: [ 7 9 27 35]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
to have thrombocytopenia thought to, score: 0.21402784  
have anemia thrombocytopenia acute renal failure, score: 0.1942754  
hypoalbuminemia [UNK] elevated ldh suggested, score: 0.118748404

confidence of prediction: 0.955091  
Y\_true: [ 2 9 21 27 35 47]  
Y\_pred: [ 7 9 27 35]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
dchf with chronic hypokalemia sent, score: 0.27438155  
diastolic heart failure concerned for neoplastic, score: 0.1707304  
diastolic heart failure he was noted, score: 0.1707304

confidence of prediction: 0.771978  
Y\_true: [ 2 9 21 27 35 47]  
Y\_pred: [ 7 9 27 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
renal failure hypoalbuminemia symmetric, score: 0.20191163  
renal failure w proteinuria, score: 0.09963153  
likely pre renal perhaps due to, score: 0.046827987

confidence of prediction: 0.864020  
Y\_true: [ 4 7 45]  
Y\_pred: [ 4 45]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hyperlipidemia in her mother, score: 0.59709364  
breast cancer hyperlipidemia past surgical history partial, score: 0.102149315  
aj metastatic carcinoma pleural fluid, score: 0.023508953

confidence of prediction: 0.933081

Y\_true: [ 4 7 45]

Y\_pred: [ 4 45]

top three important windows for true positive code 45 (99.15: Parenteral infusion of concentrated nutritional substances)  
feeds and tpn but has remained npo, score: 0.065930195  
50cc hr nutrition was consulted, score: 0.0011569797  
wall and mesenteric adipose, score: 0.0008457495

confidence of prediction: 0.681063

Y\_true: [ 8 17 39]

Y\_pred: [17 39]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
emboli to lungs r, score: 0.28202417  
up with mr name13, score: 0.07339501  
emboli on last cta, score: 0.05694236

confidence of prediction: 0.732738

Y\_true: [ 8 17 39]

Y\_pred: [17 39]

top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)  
tee no spontaneous echo, score: 0.48628852  
tee conclusions pre bypass the, score: 0.07037189  
leaflet severe tricuspid regurgitation, score: 0.03545662

confidence of prediction: 0.650196

Y\_true: [ 6 7 11 12 19 20 28 41 43 45]

Y\_pred: [ 0 7 12 19 35 37 41 43 45 46]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)  
the bleed ooze originating from, score: 0.2933218  
her bleeding ooze episodes, score: 0.26044682  
concurrently had placement of a, score: 0.043273218

confidence of prediction: 0.885144

Y\_true: [ 6 7 11 12 19 20 28 41 43 45]

Y\_pred: [ 0 7 12 19 35 37 41 43 45 46]

top three important windows for true positive code 12 (33.24: Closed [endoscopic] biopsy of bronchus)  
am bronchoalveolar lavage branchial lavage left lung, score: 0.3107968  
percutaneous tracheostomy done in, score: 0.023635719  
a bronchoscopy was largely, score: 0.02139996

confidence of prediction: 0.798054



Y\_true: [ 6 7 11 12 19 20 28 41 43 45]  
Y\_pred: [ 0 7 12 19 35 37 41 43 45 46]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
started on cvvh on her, score: 0.11649567  
was on cvvh was expectedly, score: 0.07509798  
ffp cryoprecipitate transfusions see, score: 0.012043016  
  
confidence of prediction: 0.877107  
Y\_true: [ 6 7 11 12 19 20 28 41 43 45]  
Y\_pred: [ 0 7 12 19 35 37 41 43 45 46]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
tube feed rate was, score: 0.12337085  
j tube tracheostomy and eventual, score: 0.0635862  
tube feeds at goal, score: 0.05406286  
  
confidence of prediction: 0.975922  
Y\_true: [ 6 7 11 12 19 20 28 41 43 45]  
Y\_pred: [ 0 7 12 19 35 37 41 43 45 46]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours or more)  
perc tracheostomy exploratory laparotomy abdominal, score: 0.06629141  
ventilator on trach collar until when, score: 0.050631512  
percutaneous tracheostomy done in, score: 0.04952406  
  
confidence of prediction: 0.989356  
Y\_true: [ 6 7 11 12 19 20 28 41 43 45]  
Y\_pred: [ 0 7 12 19 35 37 41 43 45 46]  
top three important windows for true positive code 45 (99.15: Parenteral infusion of concentrated nutritional substances)  
started on tpn on and continued thereafter, score: 0.004725719  
consult service tpn was weaned off, score: 0.0028520871  
washout exploratory laparotomy washout, score: 0.0025416387  
  
confidence of prediction: 0.853468  
Y\_true: [ 4 34]  
Y\_pred: [ 4 5 20 34 41]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
of discharge hyperlipidemia stable continued home atorvastatin gerd stable continued home omeprazole rul, score: 0.022440003  
htn who presents with, score: 0.006483727  
reminded, score: 0.0063406993  
  
confidence of prediction: 0.929849  
Y\_true: [ 4 34]  
Y\_pred: [ 4 5 20 34 41]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
htn gerd benign lump removed from, score: 0.14701664  
home atorvastatin gerd stable continued home omeprazole, score:

0.059499204

reminded, score: 0.01103686

confidence of prediction: 0.706834

Y\_true: [ 2 4 5 20 23 27 30 49]

Y\_pred: [ 2 5 20 23 24 30 34]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)

finding dm patient s [UNK] was, score: 0.09825588

pvd niddm gout h o gallstone, score: 0.07429722

dm copd pvd s p, score: 0.07208137

confidence of prediction: 0.967128

Y\_true: [ 2 4 5 20 23 27 30 49]

Y\_pred: [ 2 5 20 23 24 30 34]

top three important windows for true positive code 5 (276.1:  
Hyposmolality and/or hyponatremia)

with hypovolemic hyponatremia na levels improved after, score:  
0.37995726

was 900cc hyponatremia na dropped from on, score: 0.3754783

hospital course hyponatremia and fevers, score: 0.13017748

confidence of prediction: 0.536930

Y\_true: [ 2 4 5 20 23 27 30 49]

Y\_pred: [ 2 5 20 23 24 30 34]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)

repeat colonoscopy htn his goal sbp, score: 0.060631502

fempop bpg with ptfe, score: 0.04349276

retroperitoneal approach social history, score: 0.041142456

confidence of prediction: 0.687412

Y\_true: [ 2 4 5 20 23 27 30 49]

Y\_pred: [ 2 5 20 23 24 30 34]

top three important windows for true positive code 23 (412: Old  
myocardial infarction)

s p mi x3 s p angioplasty, score: 0.43026054

medical history mi x3 most recent s, score: 0.031126799

dm copd cad s p mi x3 s, score: 0.0069163498

confidence of prediction: 0.824344

Y\_true: [ 2 4 5 20 23 27 30 49]

Y\_pred: [ 2 5 20 23 24 30 34]

top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)

history of copd and transiently required, score: 0.079548314

with dm copd cad s p mi, score: 0.014836665

thrombi dm copd pvd s p multiple, score: 0.004460905

confidence of prediction: 0.777375

Y\_true: [ 7 26 31 33 41 47]

Y\_pred: [ 5 26 28 31 33 41]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)  
atrial fibrillation not on coumadin who originally presented, score: 0.09706755  
atrial fibrillation not on anticoagulation, score: 0.033313047  
atrial fibrillation she continued on, score: 0.025898593

confidence of prediction: 0.854205  
Y\_true: [ 7 26 31 33 41 47]  
Y\_pred: [ 5 26 28 31 33 41]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
hcap aspiration therapy w vanc cefepime, score: 0.19449154  
aspiration vanc cefepime last name, score: 0.091864504  
with aspiration pneumonitis or, score: 0.06444564

confidence of prediction: 0.886457  
Y\_true: [ 7 26 31 33 41 47]  
Y\_pred: [ 5 26 28 31 33 41]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
cxr bibasilar opacities have, score: 0.033294734  
developed hypercarbic respiratory failure in the, score: 0.021997306  
feeds from airway rll, score: 0.01935295

confidence of prediction: 0.870248  
Y\_true: [ 7 26 31 33 41 47]  
Y\_pred: [ 5 26 28 31 33 41]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
tube feeds from airway, score: 0.13610573  
requiring peg tube h, score: 0.098983616  
tube feeds frequently suctioned, score: 0.08789021

confidence of prediction: 0.802971  
Y\_true: [ 1 4 5 8 16 20 31 33 40 41 42 47]  
Y\_pred: [17 20 31 33 41]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
episode hyperlipidemia hypertension past surgical history s, score: 0.30757943  
course the patient was, score: 0.06106599  
sternocleidomastoids and upper trapezius, score: 0.04547413

confidence of prediction: 0.884183  
Y\_true: [ 1 4 5 8 16 20 31 33 40 41 42 47]  
Y\_pred: [17 20 31 33 41]  
top three important windows for true positive code 31 (507.0: Pneumonitis due to inhalation of food or vomitus)  
an aspiration event that may have, score: 0.045412943  
stitle aspiration pneumonia on hd patient, score: 0.042239025  
to an aspiration event and subsequent aspiration, score: 0.03544714

confidence of prediction: 0.705106  
Y\_true: [ 1 4 5 8 16 20 31 33 40 41 42 47]

Y\_pred: [17 20 31 33 41]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxemic respiratory failure requiring intubation he was, score:  
0.31329432  
hypoxic respiratory failure see below, score: 0.11270726  
to painful stimuli no, score: 0.045627207

confidence of prediction: 0.956351  
Y\_true: [ 1 4 5 8 16 20 31 33 40 41 42 47]  
Y\_pred: [17 20 31 33 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
placed tube feedings were initiated the, score: 0.10492673  
has flexor posturing of, score: 0.006877218  
sputum cultures grew mssa and antibiotics, score: 0.006762237

confidence of prediction: 0.614662  
Y\_true: [ 0 5 12 20 34 35 41 43 46]  
Y\_pred: [26 31 34 40 41]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
predinsone cva gerd past surgical history s, score: 0.117301114  
hypothermic circulatory arrest 28mm, score: 0.03561067  
placement pmh lymphoplasmacytic lymphoma, score: 0.014628172

confidence of prediction: 0.715167  
Y\_true: [ 0 5 12 20 34 35 41 43 46]  
Y\_pred: [26 31 34 40 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
gastrostomy tube pneumobilia the study, score: 0.29515788  
tube feeds were initiated via, score: 0.08343102  
gelweave tracheostomy percutaneous gastrostomy tube history of,  
score: 0.039664708

confidence of prediction: 0.947397  
Y\_true: [26 41 49]  
Y\_pred: [ 2 4 20 26 37 40 41 42 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation which was well, score: 0.24203782  
atrial fibrillation was controlled and, score: 0.09598464  
fib perioperatively and then, score: 0.06350481

confidence of prediction: 0.721890  
Y\_true: [26 41 49]  
Y\_pred: [ 2 4 20 26 37 40 41 42 49]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
received tube feeds for several days, score: 0.17284743  
pulses dopplerable dp pt bilat, score: 0.051232714  
after extubation she awoke, score: 0.010129166

confidence of prediction: 0.610134  
Y\_true: [26 41 49]  
Y\_pred: [ 2 4 20 26 37 40 41 42 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
continued on coumadin 5mg, score: 0.06739836  
po qday coumadin 5mg, score: 0.05019277  
fib perioperatively and then, score: 0.016393906

confidence of prediction: 0.882823  
Y\_true: [ 1 4 17 34 46]  
Y\_pred: [ 0 1 4 17 34]  
top three important windows for true positive code 1 (244.9: Unspecified acquired hypothyroidism)  
gerd hypothyroidism who presented, score: 0.115107805  
history hypothyroidism gerd hyperlipidemia, score: 0.10402528  
of hypothyroidism gerd presenting, score: 0.08163255

confidence of prediction: 0.930847  
Y\_true: [ 1 4 17 34 46]  
Y\_pred: [ 0 1 4 17 34]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
hypothyroidism gerd hyperlipidemia fibromyalgia social history tobacco, score: 0.08697086  
pole left renal probable septated, score: 0.008890346

confidence of prediction: 0.825352  
Y\_true: [ 1 4 17 34 46]  
Y\_pred: [ 0 1 4 17 34]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line placement liver abscess aspiration, score: 0.16135938  
line placement liver abscess aspiration, score: 0.09844064  
line was placed and, score: 0.07644497

confidence of prediction: 0.699706  
Y\_true: [ 1 4 17 34 46]  
Y\_pred: [ 0 1 4 17 34]  
top three important windows for true positive code 34 (530.81: Esophageal reflux)  
gerd presenting from hospital1, score: 0.10165442  
hypothyroidism gerd hyperlipidemia fibromyalgia social history, score: 0.05836208  
milleri group moderate growth, score: 0.030245282

confidence of prediction: 0.963498  
Y\_true: [ 2 4 5 10 17 19 23 24 27 29 31 33 34 37]  
Y\_pred: [ 5 19 23 24 31 34]  
top three important windows for true positive code 5 (276.1: Hyposmolality and/or hyponatremia)  
with hypovolemic hyponatremia in setting of decreased, score: 0.6811688  
also discontinued hyponatremia patient had an admission, score:

0.07330899

talking and interacting with, score: 0.011013949

confidence of prediction: 0.854440

Y\_true: [ 2 4 5 10 17 19 23 24 27 29 31 33 34 37]

Y\_pred: [ 5 19 23 24 31 34]

top three important windows for true positive code 19 (39.95: Hemodialysis)

has received hemodialysis since that, score: 0.09470466

esrd on hd cad s, score: 0.079443626

esrd on hd patient noted, score: 0.078565724

confidence of prediction: 0.647700

Y\_true: [ 2 4 5 10 17 19 23 24 27 29 31 33 34 37]

Y\_pred: [ 5 19 23 24 31 34]

top three important windows for true positive code 23 (412: Old myocardial infarction)

s p mi htn dmii, score: 0.66805065

s p mi in received stent to, score: 0.18149814

inversions possibly suggestive of ischemia cardiology evaluated, score: 0.009448097

confidence of prediction: 0.509325

Y\_true: [ 2 4 5 10 17 19 23 24 27 29 31 33 34 37]

Y\_pred: [ 5 19 23 24 31 34]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

bypass with atherectomy in after, score: 0.11656478

in received stent to, score: 0.1051311

from cad heart attacks physical, score: 0.03166679

confidence of prediction: 0.695436

Y\_true: [ 2 4 5 10 17 19 23 24 27 29 31 33 34 37]

Y\_pred: [ 5 19 23 24 31 34]

top three important windows for true positive code 31 (507.0:

Pneumonitis due to inhalation of food or vomitus)

suggested aspiration pneumonia repeat cxr was, score: 0.12272264

hospital acquired pneumonia upon transfer, score: 0.011108461

palpation in epigastrium that, score: 0.0073191496

confidence of prediction: 0.635691

Y\_true: [ 2 4 5 10 17 19 23 24 27 29 31 33 34 37]

Y\_pred: [ 5 19 23 24 31 34]

top three important windows for true positive code 34 (530.81:

Esophageal reflux)

hyperlipidemia gastroesophageal reflux gastritis egd chronic, score: 0.11591615

catheter tip is in, score: 0.027406171

femoral grafts since then, score: 0.01740092

confidence of prediction: 0.617194

Y\_true: [28 33 35 37 40 41 43]

Y\_pred: [31 33 35 39 40 42]

top three important windows for true positive code 33 (518.81: Acute

respiratory failure)  
discharge respiratory failure pt was intubated on for airway  
protection, score: 0.049880315  
patient was intubated within, score: 0.0388605  
extubation with respiratory rate, score: 0.029251756  
  
confidence of prediction: 0.666400  
Y\_true: [28 33 35 37 40 41 43]  
Y\_pred: [31 33 35 39 40 42]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
was pre renal and we, score: 0.062942594  
3kg acute renal failure new, score: 0.053458635  
acute renal failure resolved and, score: 0.046212733

confidence of prediction: 0.772252  
Y\_true: [28 33 35 37 40 41 43]  
Y\_pred: [31 33 35 39 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
of intubation causing some, score: 0.09261867  
patient was intubated within hours, score: 0.027667351  
her from reintubation secondarily to, score: 0.026734099

confidence of prediction: 0.813486  
Y\_true: [ 2 6 10 29 30 32 35]  
Y\_pred: [31 35]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
renal failure improved with, score: 0.16150996  
acute renal failure on presentation, score: 0.108933926  
kidney injury from either, score: 0.06648683

confidence of prediction: 0.858851  
Y\_true: [ 1 17 32 37 41 45]  
Y\_pred: [ 5 17 41]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
subclavian line placement left removed, score: 0.172761  
drained liver abscess resolving, score: 0.10765556  
abscess vancomycin sensitive enterococcus enterococcus, score:  
0.04138138

confidence of prediction: 0.718057  
Y\_true: [ 1 17 32 37 41 45]  
Y\_pred: [ 5 17 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
or tube feed associated stool culture negative, score: 0.06868526  
sputum mssa staph aureus coag, score: 0.020144332  
vertebral bodies demonstrate enhancement, score: 0.008032204

confidence of prediction: 0.878145  
Y\_true: [ 3 7 19 27]

Y\_pred: [19 23 25 27]

top three important windows for true positive code 19 (39.95: Hemodialysis)

extra dialysis sessions for, score: 0.1328586

at dialysis sessions recently, score: 0.11228397

volume dialysis sessions in, score: 0.093173146

confidence of prediction: 0.963076

Y\_true: [ 3 7 19 27]

Y\_pred: [19 23 25 27]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

systolic heart failure ef at, score: 0.15300463

systolic heart failure lvef grossly, score: 0.15300463

torsemide for chf management, score: 0.0372877

confidence of prediction: 0.757366

Y\_true: [ 2 4 6 7 16 17 19 24 26 27 28]

Y\_pred: [ 7 17 19 22 26 28]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

duodenum normal duodenum impression, score: 0.2852203

otherwise normal egd to, score: 0.043285765

fatigue and melena in the, score: 0.041086353

confidence of prediction: 0.930660

Y\_true: [ 2 4 6 7 16 17 19 24 26 27 28]

Y\_pred: [ 7 17 19 22 26 28]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

central venous catheter placement and removal, score: 0.029722672

overnights and on she, score: 0.024700806

placement satisfactory placement of, score: 0.021889687

confidence of prediction: 0.983375

Y\_true: [ 2 4 6 7 16 17 19 24 26 27 28]

Y\_pred: [ 7 17 19 22 26 28]

top three important windows for true positive code 19 (39.95: Hemodialysis)

on hemodialysis on she, score: 0.0889741

on cvvh kg of, score: 0.044844136

cuff dialysis catheter in, score: 0.031706907

confidence of prediction: 0.984138

Y\_true: [ 2 4 6 7 16 17 19 24 26 27 28]

Y\_pred: [ 7 17 19 22 26 28]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

atrial fibrillation with a single, score: 0.19822389

af atrial fibrillation general alert oriented, score: 0.016938737

embolus that came back, score: 0.0012712505

confidence of prediction: 0.933756

Y\_true: [ 2 4 6 7 16 17 19 24 26 27 28]



Y\_pred: [ 7 17 19 22 26 28]  
top three important windows for true positive code 28 (45.13: Other  
endoscopy of small intestine)  
otherwise normal egd to, score: 0.40385383  
duodenum normal duodenum impression, score: 0.10028551  
noted stomach mucosa erythema, score: 0.017015947

confidence of prediction: 0.818355  
Y\_true: [ 7 10 11 20]  
Y\_pred: [11 20 34]  
top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
gerd depression hsv on, score: 0.11633928  
omeprazole depression continued fluoxetine and trazodone, score:  
0.10987695  
reflux esophagitis depression sigmoid, score: 0.058543544

confidence of prediction: 0.754252  
Y\_true: [ 7 10 11 20]  
Y\_pred: [11 20 34]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
htn gerd ra and, score: 0.101879716  
htn benign continued metoprolol, score: 0.085955106  
chronic suppression therapy urinary incontinence, score: 0.08399736

confidence of prediction: 0.560526  
Y\_true: [ 2 17 21 27 32 36 39 48]  
Y\_pred: [ 2 17 27 39 48]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
antibiotics type dm coronary [UNK] disease s, score: 0.15204531  
pvd dm ii systolic chf, score: 0.05800627  
with pvd dm ii cad s p, score: 0.020918336

confidence of prediction: 0.590557  
Y\_true: [ 2 17 21 27 32 36 39 48]  
Y\_pred: [ 2 17 27 39 48]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
atelectasis picc line placement read pending, score: 0.10121135  
revealed multiple organisms including pseudomonas of, score:  
0.08084539  
vancomycin a picc line was placed on, score: 0.020388732

confidence of prediction: 0.892894  
Y\_true: [ 2 17 21 27 32 36 39 48]  
Y\_pred: [ 2 17 27 39 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cabg systolic chf multiple recent admissions, score: 0.15767026  
ii systolic chf recent admissions for, score: 0.033503316  
cardiomyopathy with ef peripheral, score: 0.023103986

confidence of prediction: 0.923937  
Y\_true: [ 2 17 21 27 32 36 39 48]  
Y\_pred: [ 2 17 27 39 48]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
vegetation is seen on, score: 0.004984573  
descending thoracic aorta the, score: 0.0035780268  
wires there are surgical clips, score: 0.0035014641

confidence of prediction: 0.856493  
Y\_true: [ 2 17 21 27 32 36 39 48]  
Y\_pred: [ 2 17 27 39 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg systolic chf multiple, score: 0.71767616  
p 5v cabg in in, score: 0.17793673  
sternotomy and cabg with unchanged appearing, score: 0.010014651

confidence of prediction: 0.558511  
Y\_true: [ 7 20 30 37]  
Y\_pred: [ 7 20 30 31]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
of prbcs and units, score: 0.037977133  
f service orthopaedics allergies macrobid sulfa sulfonamide, score:  
0.026293175  
as an articular cutaneous, score: 0.021513019

confidence of prediction: 0.922729  
Y\_true: [ 7 20 30 37]  
Y\_pred: [ 7 20 30 31]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn copd anxiety and bilateral, score: 0.061875667  
diagnosis htn copd anxiety urinary incontience discharge, score:  
0.05677316  
medical history htn copd anxiety h o, score: 0.032132722

confidence of prediction: 0.744273  
Y\_true: [ 7 20 30 37]  
Y\_pred: [ 7 20 30 31]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
diagnosis htn copd anxiety, score: 0.0644135  
copd anxiety and bilateral hip, score: 0.061477162  
htn copd anxiety h o utis, score: 0.055065747

confidence of prediction: 0.708132  
Y\_true: [ 0 9 10 21 25 27 35 36 46]  
Y\_pred: [ 0 6 10 25 27 35 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
shock cholangitis s p, score: 0.14281833

criteria for septic shock given leukocytosis tachycardia, score:  
0.036192756

septic shock and intravascular volume, score: 0.026883546

confidence of prediction: 0.516731

Y\_true: [ 0 9 10 21 25 27 35 36 46]

Y\_pred: [ 0 6 10 25 27 35 46]

top three important windows for true positive code 10 (305.1:  
Tobacco use disorder)

social history smokes 2ppd x 50yrs no, score: 0.02021837

surgery allergies morphine attending, score: 0.005772295

2l cvp pt was, score: 0.0054310337

confidence of prediction: 0.780774

Y\_true: [ 0 9 10 21 25 27 35 36 46]

Y\_pred: [ 0 6 10 25 27 35 46]

top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)

severe mitral regurgitation past medical history, score: 0.12371739

moderate mitral regurgitation is seen, score: 0.022296255

moderate mitral regurgitation right ventricular, score: 0.009613729

confidence of prediction: 0.926509

Y\_true: [ 0 9 10 21 25 27 35 36 46]

Y\_pred: [ 0 6 10 25 27 35 46]

top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

mitral regurgitation past medical, score: 0.02018851

new onset chf tte during that admission, score: 0.009077516

cardiomyopathy with systolic heart failure ef on echo, score:  
0.007962126

confidence of prediction: 0.912473

Y\_true: [ 0 9 10 21 25 27 35 36 46]

Y\_pred: [ 0 6 10 25 27 35 46]

top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)

on chronic renal failure due, score: 0.09747704

on levophed ggt at 06mcg kg, score: 0.021147365

organ dysfunction in setting, score: 0.010875963

confidence of prediction: 0.968154

Y\_true: [ 0 9 10 21 25 27 35 36 46]

Y\_pred: [ 0 6 10 25 27 35 46]

top three important windows for true positive code 46 (995.92:  
Severe sepsis)

septic shock and intravascular volume, score: 0.04792

septic shock cholangitis s p, score: 0.033242818

septic shock secondary to cholangitis, score: 0.03250382

confidence of prediction: 0.567742

Y\_true: [ 2 8 20 24 30 33 43]

Y\_pred: [20 23 30 42]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)  
inhaler hospital1 pneumothorax due, score: 0.13571678  
of mi htn copd was participating in, score: 0.103127375  
cad, score: 0.0755384

confidence of prediction: 0.798303  
Y\_true: [ 2 8 20 24 30 33 43]  
Y\_pred: [20 23 30 42]  
top three important windows for true positive code 30 (496: Chronic  
airway obstruction, not elsewhere classified)  
mi htn copd was transferred from micu, score: 0.05491594  
mi htn copd was participating in the, score: 0.024688063  
inhaler hospital1 pneumothorax due to, score: 0.003838834

confidence of prediction: 0.544064  
Y\_true: [ 0 25 26 27 29 37 49]  
Y\_pred: [ 0 17 26 29 37 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
septic febrile leukocytosis and relative, score: 0.14673479  
this resolved with antibiotics, score: 0.1069489  
urosepsis and pna w improvement, score: 0.059303615

confidence of prediction: 0.991551  
Y\_true: [ 0 25 26 27 29 37 49]  
Y\_pred: [ 0 17 26 29 37 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib [UNK] no clear, score: 0.6627122  
afib on coumadin remote stroke, score: 0.28658724  
atrial fibrillation and remote hospital, score: 0.012637599

confidence of prediction: 0.682326  
Y\_true: [ 0 25 26 27 29 37 49]  
Y\_pred: [ 0 17 26 29 37 46 49]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
urosepsis and pna w improvement in, score: 0.16279618  
possible rml infiltrate and pt received, score: 0.10657065  
levofloxacin and azithromycin at, score: 0.013723925

confidence of prediction: 0.759538  
Y\_true: [ 0 25 26 27 29 37 49]  
Y\_pred: [ 0 17 26 29 37 46 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
for urinary tract infection initially neurology, score: 0.07077795  
suspected urinary source febrile and hypotensive, score: 0.03885327  
infiltrate and pt received, score: 0.03254264

confidence of prediction: 0.643299  
Y\_true: [ 0 25 26 27 29 37 49]  
Y\_pred: [ 0 17 26 29 37 46 49]  
top three important windows for true positive code 49 (V58.61: Long-

term (current) use of anticoagulants)  
afib on coumadin remote, score: 0.8567502  
afib [UNK] no clear, score: 0.03911418  
irregularly irregular systolic llsb, score: 0.0117202345

confidence of prediction: 0.876177  
Y\_true: [ 3 11 20 34 37]  
Y\_pred: [ 4 20 37]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
c difficile htn hld is emergently transferred, score: 0.33059812  
c difficile htn hld who was initially, score: 0.33059812  
hypertension and depression physical, score: 0.09006829

confidence of prediction: 0.839736  
Y\_true: [ 3 11 20 34 37]  
Y\_pred: [ 4 20 37]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
leuk lg 35am urine rbc, score: 0.35971537  
events after she had, score: 0.055961035  
a uti on the, score: 0.05230339

confidence of prediction: 0.649990  
Y\_true: [ 3 8 9 17 19 26 35 37]  
Y\_pred: [ 0 4 9 17 19 26 35 37 46]  
top three important windows for true positive code 9 (287.5:  
Thrombocytopenia, unspecified)  
persistent anemia thrombocytopenia treated with, score: 0.23962341  
of and thrombocytopenia since admission, score: 0.22504355  
m5 aml blast crisis and leukostasis, score: 0.035859197

confidence of prediction: 0.790115  
Y\_true: [ 3 8 9 17 19 26 35 37]  
Y\_pred: [ 0 4 9 17 19 26 35 37 46]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
catheter placement picc placement x, score: 0.093227156  
source line picc chemistry totprot albumin globuln, score:  
0.06598065  
complications detailed below who, score: 0.050039973

confidence of prediction: 0.803182  
Y\_true: [ 3 8 9 17 19 26 35 37]  
Y\_pred: [ 0 4 9 17 19 26 35 37 46]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
improved with cvvh allpurinol plasmapheresis, score: 0.058100875  
started on cvvh concomitantly with, score: 0.05558575  
and required cvvh for renal, score: 0.053998575

confidence of prediction: 0.982526  
Y\_true: [ 3 8 9 17 19 26 35 37]  
Y\_pred: [ 0 4 9 17 19 26 35 37 46]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib s p [UNK], score: 0.62869275  
atrial fibrillation he additionally has, score: 0.04802429  
atrial fibrillation mild pulmonary hypertension, score: 0.013768379

confidence of prediction: 0.828302  
Y\_true: [ 3 8 9 17 19 26 35 37]  
Y\_pred: [ 0 4 9 17 19 26 35 37 46]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
fluctuated renal function and his, score: 0.4357539  
cvvh for renal failure with subsequent improvement, score:  
0.023753366  
rasburicase acute renal failure blast casts, score: 0.009126018

confidence of prediction: 0.955913  
Y\_true: [ 3 8 9 17 19 26 35 37]  
Y\_pred: [ 0 4 9 17 19 26 35 37 46]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
a uti that was cipro sensitive, score: 0.13904424  
enterobacter uti and is completing, score: 0.071063615  
political science books he, score: 0.012708737

confidence of prediction: 0.681823  
Y\_true: [ 3 20 29 33 40 41 42]  
Y\_pred: [ 3 5 20 40]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
atherosclerotic calcifications of the, score: 0.00738187  
medical history hypertension and hypercholesterolemia social history  
she does, score: 0.006177375  
no vegetation mass is, score: 0.0016701898

confidence of prediction: 0.814074  
Y\_true: [ 3 20 29 33 40 41 42]  
Y\_pred: [ 3 5 20 40]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension and hypercholesterolemia social  
history, score: 0.2946187  
sequela of catheter passage stable, score: 0.13669583  
a left cerebellopontine angle, score: 0.052166045

confidence of prediction: 0.714539  
Y\_true: [ 3 20 29 33 40 41 42]  
Y\_pred: [ 3 5 20 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
evd replacement evd drain at bedside peg, score: 0.048208755  
a gcs reintubated and sent, score: 0.037617985  
her evd drain was, score: 0.015871715

confidence of prediction: 0.676107  
Y\_true: [11 17 33 35 39 42]  
Y\_pred: [33 39 40 42]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
ck respiratory failure the, score: 0.078593515  
injury respiratory failure major, score: 0.0737999  
and required intubation for airway protection, score: 0.069717266

confidence of prediction: 0.896809  
Y\_true: [11 17 33 35 39 42]  
Y\_pred: [33 39 40 42]  
top three important windows for true positive code 39 (88.72:  
Diagnostic ultrasound of heart)  
tee which was negative for, score: 0.84062123  
tee was negative for, score: 0.0761331  
vegetation seen mild to, score: 0.036004495

confidence of prediction: 0.727220  
Y\_true: [11 17 33 35 39 42]  
Y\_pred: [33 39 40 42]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
and required intubation for airway protection, score: 0.10006257  
was intubated for airway, score: 0.099692434  
ivdu attends methadone clinic, score: 0.055623304

confidence of prediction: 0.575737  
Y\_true: [ 0 8 26 27 34 47 49]  
Y\_pred: [ 0 17 26 27 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
of pneumonia sputum stains, score: 0.2279285  
she had fever leukocytosis, score: 0.22595863  
likely to sepsis hypovolemia resolved in the, score: 0.034711428

confidence of prediction: 0.985377  
Y\_true: [ 0 8 26 27 34 47 49]  
Y\_pred: [ 0 17 26 27 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fib on coumadin osteopenia neuropathy, score: 0.38294542  
afib chf copd gerd, score: 0.1715376  
fib rate controlled on, score: 0.0081003

confidence of prediction: 0.839090  
Y\_true: [ 0 8 26 27 34 47 49]  
Y\_pred: [ 0 17 26 27 46 49]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
veins bilaterally cardiac echo, score: 0.02903662  
pvd afib chf copd gerd on, score: 0.026865  
hbcab igm hav pnd, score: 0.014616176

confidence of prediction: 0.862976  
Y\_true: [ 0 8 26 27 34 47 49]  
Y\_pred: [ 0 17 26 27 46 49]  
top three important windows for true positive code 49 (V58.61: Long-term (current) use of anticoagulants)  
fib on coumadin r, score: 0.46953404  
fib on coumadin osteopenia neuropathy, score: 0.46953404  
that resolved coumadin held intermittently in, score: 0.025882881

confidence of prediction: 0.645749  
Y\_true: [ 2 12 20 31 33 40 41 42]  
Y\_pred: [20 37]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
pica and aica these, score: 0.11292335  
pica and aica which drape, score: 0.11292335  
history diabetes hypertension social history he lives, score: 0.093806736

confidence of prediction: 0.680893  
Y\_true: [ 3 17 37 39 41 43]  
Y\_pred: [ 4 17 39 40 41 43]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
gastrostomy placement picc line placement history of, score: 0.054818526  
tfts tox panels etc she, score: 0.020260343  
although inconsistently mimics well, score: 0.011989024

confidence of prediction: 0.818440  
Y\_true: [ 3 17 37 39 41 43]  
Y\_pred: [ 4 17 39 40 41 43]  
top three important windows for true positive code 39 (88.72: Diagnostic ultrasound of heart)  
tee no spontaneous echo, score: 0.8511929  
vegetation is seen on, score: 0.022135291  
atherosclerotic plaque to cm, score: 0.021882165

confidence of prediction: 0.627815  
Y\_true: [ 3 17 37 39 41 43]  
Y\_pred: [ 4 17 39 40 41 43]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
hemicraniectomy tracheostomy and subsequent removal, score: 0.09721049  
cxr tracheostomy tube terminates in, score: 0.0532476  
over trach stoma c, score: 0.044838697

confidence of prediction: 0.749790  
Y\_true: [ 3 17 37 39 41 43]  
Y\_pred: [ 4 17 39 40 41 43]  
top three important windows for true positive code 43 (96.72: Continuous invasive mechanical ventilation for 96 consecutive hours



or more)

hemicraniectomy tracheostomy and subsequent removal, score:  
0.12529714

am sputum source endotracheal gram, score: 0.051239107

tracheostomy tube terminates in the, score: 0.030302852

confidence of prediction: 0.550478

Y\_true: [ 0 2 5 15 20 26 27 31 38 39 40 42]

Y\_pred: [ 0 20 26 27 34 35 39 43]

top three important windows for true positive code 0 (038.9:

Unspecified septicemia)

hypotension likely sepsis and constrictive pericarditis pt, score:

0.033775926

broad spectrum abx given, score: 0.017838262

hypotensive requiring pressors and pulsus, score: 0.0132337995

confidence of prediction: 0.839863

Y\_true: [ 0 2 5 15 20 26 27 31 38 39 40 42]

Y\_pred: [ 0 20 26 27 34 35 39 43]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

on medications htn osteoarthritis social history he, score:

0.08716184

significant for htn and iddm admitted for, score: 0.043064162

confidence of prediction: 0.880996

Y\_true: [ 0 2 5 15 20 26 27 31 38 39 40 42]

Y\_pred: [ 0 20 26 27 34 35 39 43]

top three important windows for true positive code 26 (427.31:

Atrial fibrillation)

tee and tte and, score: 0.033695757

cool dry skin no, score: 0.017799184

atrial flutter shortness of breath, score: 0.0128628835

confidence of prediction: 0.534675

Y\_true: [ 0 2 5 15 20 26 27 31 38 39 40 42]

Y\_pred: [ 0 20 26 27 34 35 39 43]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

pulmonary edema his hospital, score: 0.15071051

pulmonary edema the patient, score: 0.050385483

flash pulmonary edema he was, score: 0.044557866

confidence of prediction: 0.739279

Y\_true: [ 0 2 5 15 20 26 27 31 38 39 40 42]

Y\_pred: [ 0 20 26 27 34 35 39 43]

top three important windows for true positive code 39 (88.72:

Diagnostic ultrasound of heart)

tee cardiac catheterization intubation history, score: 0.85869616

tee and tte and fluoroscopic, score: 0.10125978

tee performed in the, score: 0.009973816

confidence of prediction: 0.878737

Y\_true: [ 2 4 20 26 41 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
including dm ii hyperlipidemia cardiac, score: 0.09395902  
dm ii hld per report, score: 0.071294464

confidence of prediction: 0.833974

Y\_true: [ 2 4 20 26 41 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
hld per report labile htn, score: 0.13791649  
ii hyperlipidemia cardiac arrhythmia and, score: 0.028165625

confidence of prediction: 0.706939

Y\_true: [ 2 4 20 26 41 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
dm ii hld per report labile htn in few weeks, score: 0.032830954

confidence of prediction: 0.982824

Y\_true: [ 2 4 20 26 41 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib lasting for few, score: 0.7903001  
fib blood pressure aand, score: 0.028182928  
irregular rhythm normal s1, score: 0.0042884643

confidence of prediction: 0.854823

Y\_true: [ 2 4 20 26 41 49]

Y\_pred: [ 2 4 20 26 49]

top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
for constipation warfarin mg tablet sig, score: 0.8881696  
fib she had an, score: 0.019178942  
afib lasting for few, score: 0.012838339

confidence of prediction: 0.790017

Y\_true: [ 1 2 3 11 20 23 24 29 34 40 47]

Y\_pred: [ 2 4 7 11 17 34 40 42]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
mellitus and obesity denies, score: 0.124909095  
colonic polyps dm ii on metformin chronic pain depression, score:  
0.10810102  
chicken noodle soup if, score: 0.015429713

confidence of prediction: 0.577531

Y\_true: [ 1 2 3 11 20 23 24 29 34 40 47]

Y\_pred: [ 2 4 7 11 17 34 40 42]

top three important windows for true positive code 11 (311:  
Depressive disorder, not elsewhere classified)  
chronic pain depression hypertension s p gastric, score: 0.04692919  
with micron embospheres was performed, score: 0.015860118  
on pfts hyperlipidemia gerd, score: 0.012032561

confidence of prediction: 0.773313  
Y\_true: [ 1 2 3 11 20 23 24 29 34 40 47]  
Y\_pred: [ 2 4 7 11 17 34 40 42]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
pfts hyperlipidemia gerd gout hypothyroidism chronic, score:  
0.032181587  
frequent reflux for which he, score: 0.025428792  
vent controlled 31pm blood, score: 0.02145532

confidence of prediction: 0.810190  
Y\_true: [ 1 2 3 11 20 23 24 29 34 40 47]  
Y\_pred: [ 2 4 7 11 17 34 40 42]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
patient was intubated for airway protection and, score: 0.033865184  
patient was intubated he was, score: 0.033865184  
prepped and draped in, score: 0.0105259605

confidence of prediction: 0.930019  
Y\_true: [ 7 12 33 41 43]  
Y\_pred: [17 29 40 41 42 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
a dobbhoff feeding tube is within, score: 0.13536026  
subfalcine herniation cta head, score: 0.08734832  
subfalcine herniation hypodensity in, score: 0.06381

confidence of prediction: 0.806622  
Y\_true: [ 7 12 33 41 43]  
Y\_pred: [17 29 40 41 42 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
and tolerating trach mask, score: 0.039460022  
r o2sats100 assit control, score: 0.023929564  
subfalcine herniation cta head, score: 0.02327799

confidence of prediction: 0.844247  
Y\_true: [12 16 21 27 33 41 42]  
Y\_pred: [12 17 21 27 33 35 36 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
am bronchoalveolar lavage tube gram stain final, score: 0.39329198  
negative bronchial lavage negative for malignant, score: 0.054811813  
and bronchial cells see, score: 0.041156206

confidence of prediction: 0.806630

Y\_true: [12 16 21 27 33 41 42]  
Y\_pred: [12 17 21 27 33 35 36 43]  
top three important windows for true positive code 21 (403.90:  
Hypertensive chronic kidney disease, unspecified, with chronic  
kidney disease stage I through stage IV, or unspecified)  
brown casts consistent with, score: 0.13407253  
kidney disease transferred from, score: 0.088563494  
kidney disease with renal, score: 0.06748699

confidence of prediction: 0.715126  
Y\_true: [12 16 21 27 33 41 42]  
Y\_pred: [12 17 21 27 33 35 36 43]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
congestive heart failure cxr showed bilateral, score: 0.09624864  
pulmonary edema she was, score: 0.060853906  
probnp numeric identifier 34am blood, score: 0.022231407

confidence of prediction: 0.826645  
Y\_true: [12 16 21 27 33 41 42]  
Y\_pred: [12 17 21 27 33 35 36 43]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
hypoxic respiratory failure patient arrived, score: 0.27478698  
with respiratory failure and acute, score: 0.08144224  
respiratory function improved such, score: 0.043063

confidence of prediction: 0.623431  
Y\_true: [ 1 8 17 19]  
Y\_pred: [ 1 19 37]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
dialysis hypothyroidism continued on synthroid htn continued on,  
score: 0.2698786  
meals levothyroxine mcg tablet sig one, score: 0.1035093  
and santyl dressing changes, score: 0.0046731075

confidence of prediction: 0.971506  
Y\_true: [ 1 8 17 19]  
Y\_pred: [ 1 19 37]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
protocol hd protocol stop, score: 0.21594958  
esrd on hemodialysis mwf last dialysis yesterday, score: 0.097602375  
esrd on hd m w, score: 0.036562514

confidence of prediction: 0.808485  
Y\_true: [ 2 7 17 20 28 37 41 45]  
Y\_pred: [ 4 7 17 20 37 41 44 45]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
the red pulp is, score: 0.191014  
bleeding serial hematocrits were monitored, score: 0.17806068  
the red pulp note, score: 0.04526746

confidence of prediction: 0.595207  
Y\_true: [ 2 7 17 20 28 37 41 45]  
Y\_pred: [ 4 7 17 20 37 41 44 45]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
cava catheter placement inferior, score: 0.096566685  
picc was placed and he, score: 0.06189958  
spleen it consists of, score: 0.05619399

confidence of prediction: 0.974225  
Y\_true: [ 2 7 17 20 28 37 41 45]  
Y\_pred: [ 4 7 17 20 37 41 44 45]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
hypertension type dm schizophrenia pancreatitis, score: 0.054929808  
pancreatitis htn dm2 htn schizophrenia transferred from, score: 0.05187699  
after discharge htn hypertensive, score: 0.03173115

confidence of prediction: 0.747224  
Y\_true: [ 2 7 17 20 28 37 41 45]  
Y\_pred: [ 4 7 17 20 37 41 44 45]  
top three important windows for true positive code 37 (599.0: Urinary tract infection, site not specified)  
exlap gastrotomy duodenectomy for ugib, score: 0.054992285  
with a uti on for which he, score: 0.03203762  
adherent with respiratory toilet, score: 0.03057785

confidence of prediction: 0.608911  
Y\_true: [ 2 7 17 20 28 37 41 45]  
Y\_pred: [ 4 7 17 20 37 41 44 45]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
intake tube feeds were discontinued, score: 0.105821095  
a gj tube performed on, score: 0.053462125  
on tube feeds at goal with good, score: 0.048052654

confidence of prediction: 0.969581  
Y\_true: [ 2 7 17 20 28 37 41 45]  
Y\_pred: [ 4 7 17 20 37 41 44 45]  
top three important windows for true positive code 45 (99.15: Parenteral infusion of concentrated nutritional substances)  
after the tpn was discontinued and tube feeds, score: 0.009323371  
started on tpn in preparation, score: 0.008624378  
on exploratory laparotomy lysis, score: 0.0007926807

confidence of prediction: 0.994295  
Y\_true: [ 4 9 20 26 35 37 41 42]  
Y\_pred: [ 4 20 23 26 37 49]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
bj sj tj kj aj l r, score: 0.034662805  
mi htn hld presents with acute, score: 0.0040460317

htn hld macular degeneration multinodular goiter, score:  
0.0034565735

confidence of prediction: 0.846758  
Y\_true: [ 4 9 20 26 35 37 41 42]  
Y\_pred: [ 4 20 23 26 37 49]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
often with triphasic morphology, score: 0.21502295  
p mi htn hld presents with acute, score: 0.09360269  
reversal at t3 t5, score: 0.05188079

confidence of prediction: 0.974559  
Y\_true: [ 4 9 20 26 35 37 41 42]  
Y\_pred: [ 4 20 23 26 37 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
af on coumadin it was, score: 0.6919101  
atrial fibrillation found mri mra, score: 0.077794395  
af not on warfarin, score: 0.01463958

confidence of prediction: 0.690536  
Y\_true: [ 4 9 20 26 35 37 41 42]  
Y\_pred: [ 4 20 23 26 37 49]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
and inconsistently following comands no, score: 0.66177225  
had predominant theta activity admixed with, score: 0.02761381  
not on warfarin cads, score: 0.017348878

confidence of prediction: 0.752353  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
needs were met by, score: 0.12844549  
via a picc line starting, score: 0.08582986  
nodes ii retroperitoneal tissue r, score: 0.06509444

confidence of prediction: 0.718291  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 25 (424.0: Mitral  
valve disorders)  
ef mitral regurgitation systolic ventricular dysfunction, score:  
0.12789261  
moderate mitral regurgitation is seen, score: 0.040345564  
on tte chf with ef cad, score: 0.004297336

confidence of prediction: 0.943180  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)

chf with ef cad social, score: 0.4230996  
chf with an ef mitral regurgitation systolic ventricular, score:  
0.21995842  
with cad chf htn chronic renal insufficiency, score: 0.011867287

confidence of prediction: 0.635370  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
prn with continued good, score: 0.038864996  
history htn gerd nephrolithiasis s p cholecystectomy, score:  
0.0317246  
needs were met by, score: 0.026251204

confidence of prediction: 0.579705  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
colectomy ileal colostomy retroperitoneal abscess, score: 0.03501376  
htn chronic renal insufficiency presented to, score: 0.021405304  
abscess b frag rare, score: 0.020631712

confidence of prediction: 0.906545  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
tubefeeds and tpn nutrition was, score: 0.07595247  
cycled tubefeeds with replete with, score: 0.062365007  
g tube vented and the, score: 0.016311739

confidence of prediction: 0.673838  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 44 (99.04:  
Transfusion of packed cells)  
received unit prbcs for a hct, score: 0.33052462  
and tpn nutrition was, score: 0.017951848  
tubefeeds with replete with fiber, score: 0.011868943

confidence of prediction: 0.994027  
Y\_true: [ 0 17 21 24 25 26 27 34 35 36 39 41 43 44 45 46]  
Y\_pred: [17 25 27 34 36 41 44 45]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
tubefeeds and tpn nutrition was consulted and, score: 0.0032635124  
patient received tpn via a picc line, score: 7.0181624e-05  
viridans rare r thigh, score: 3.571754e-05

confidence of prediction: 0.775025  
Y\_true: [ 2 8 16 17 20 27 40 41 42 48]  
Y\_pred: [ 2 4 5 20 23 25 26 27 40 42 43 48]

top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
ef borderline dm and mild copd who, score: 0.052963182  
c5 intervertebral disc there, score: 0.0112779  
c5 intervertebral disc is, score: 0.0112779

confidence of prediction: 0.905507  
Y\_true: [ 2 8 16 17 20 27 40 41 42 48]  
Y\_pred: [ 2 4 5 20 23 25 26 27 40 42 43 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
history of htn mi, score: 0.11497455  
medical history hypertension hyperlipidemia s p mi, score:  
0.07302317  
intermittent atrial fibrillation with, score: 0.066661015

confidence of prediction: 0.944821  
Y\_true: [ 2 8 16 17 20 27 40 41 42 48]  
Y\_pred: [ 2 4 5 20 23 25 26 27 40 42 43 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
atrial fibrillation dchf ef borderline dm and, score: 0.08868304  
fibrillation diastolic chf borderline dm bph, score: 0.022314653  
mi dchf mild copd who was, score: 0.010935187

confidence of prediction: 0.735846  
Y\_true: [ 2 8 16 17 20 27 40 41 42 48]  
Y\_pred: [ 2 4 5 20 23 25 26 27 40 42 43 48]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
then re intubation successful extubation, score: 0.3830239  
remained intubated in ticu, score: 0.087130286  
needed intubation for airway protection, score: 0.066122584

confidence of prediction: 0.687214  
Y\_true: [ 2 8 16 17 20 27 40 41 42 48]  
Y\_pred: [ 2 4 5 20 23 25 26 27 40 42 43 48]  
top three important windows for true positive code 42 (96.71:  
Continuous invasive mechanical ventilation for less than 96  
consecutive hours)  
then re intubation successful extubation, score: 0.38078436  
remained intubated in ticu, score: 0.108126946  
of intubation and nasogastric, score: 0.061266117

confidence of prediction: 0.880322  
Y\_true: [ 2 8 16 17 20 27 40 41 42 48]  
Y\_pred: [ 2 4 5 20 23 25 26 27 40 42 43 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
s p cabg atrial fibrillation dchf, score: 0.6040777  
and vessel cabg in paroxysmal atrial, score: 0.34915718  
htn mi dchf mild, score: 0.0027735534



confidence of prediction: 0.880327  
Y\_true: [ 8 17 19 41 45]  
Y\_pred: [17 19 37 41 45]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
venous catheter terminates in, score: 0.34184343  
abdominal wall abscess drainage, score: 0.051140122  
yeast wound culture final, score: 0.044927634

confidence of prediction: 0.833405  
Y\_true: [ 8 17 19 41 45]  
Y\_pred: [17 19 37 41 45]  
top three important windows for true positive code 19 (39.95: Hemodialysis)  
she missed hd days pta, score: 0.05927287  
r hd line looks, score: 0.049844075  
and tunneled hd cath i, score: 0.040195916

confidence of prediction: 0.816061  
Y\_true: [ 8 17 19 41 45]  
Y\_pred: [17 19 37 41 45]  
top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)  
and tube feeds initiated however, score: 0.15309182  
instituted tube feeds also noted, score: 0.034300327  
amikacin s ampicillin s, score: 0.020135527

confidence of prediction: 0.660226  
Y\_true: [ 8 17 19 41 45]  
Y\_pred: [17 19 37 41 45]  
top three important windows for true positive code 45 (99.15: Parenteral infusion of concentrated nutritional substances)  
[UNK] tpn bmx1 general, score: 0.15156025  
ex lap gastrostomy closure, score: 0.14912346  
continue tpn in hopes of improving, score: 0.10068455

confidence of prediction: 0.543556  
Y\_true: [ 8 10 17 23 24 33 40 41 43]  
Y\_pred: [ 6 10 17 23 24 33 40 42]  
top three important windows for true positive code 10 (305.1: Tobacco use disorder)  
shelters tobacco ppd x years etoh one, score: 0.013712109  
history of alcoholic hepatitis, score: 0.013296573

confidence of prediction: 0.903278  
Y\_true: [ 8 10 17 23 24 33 40 41 43]  
Y\_pred: [ 6 10 17 23 24 33 40 42]  
top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)  
line was placed given, score: 0.13248344  
double lumen picc line final, score: 0.047076877  
bilateral central line placement picc placement iv antibiotics  
history, score: 0.046736285

confidence of prediction: 0.636340  
Y\_true: [ 8 10 17 23 24 33 40 41 43]  
Y\_pred: [ 6 10 17 23 24 33 40 42]  
top three important windows for true positive code 23 (412: Old myocardial infarction)  
prior inferior mi and, score: 0.34041822  
p silent myocardial infarction htn alcohol, score: 0.0361117  
p silent myocardial infarction he was, score: 0.0361117

confidence of prediction: 0.595637  
Y\_true: [ 8 10 17 23 24 33 40 41 43]  
Y\_pred: [ 6 10 17 23 24 33 40 42]  
top three important windows for true positive code 24 (414.01: Coronary atherosclerosis of native coronary artery)  
s p silent myocardial infarction he, score: 0.1737608  
arctic sun protocol and, score: 0.031921808  
cad s p silent myocardial infarction htn, score: 0.02835423

confidence of prediction: 0.506645  
Y\_true: [ 8 10 17 23 24 33 40 41 43]  
Y\_pred: [ 6 10 17 23 24 33 40 42]  
top three important windows for true positive code 33 (518.81: Acute respiratory failure)  
patients superimposed infection cannot, score: 0.10832709  
developed pea arrest and cpr, score: 0.045995355  
elderly male intubated and sedated heent, score: 0.036230035

confidence of prediction: 0.735568  
Y\_true: [ 8 10 17 23 24 33 40 41 43]  
Y\_pred: [ 6 10 17 23 24 33 40 42]  
top three important windows for true positive code 40 (96.04: Insertion of endotracheal tube)  
due to intubation sedation past, score: 0.054656982  
finding in intubated patients superimposed infection cannot, score: 0.053972084  
elderly male intubated and sedated, score: 0.015098488

confidence of prediction: 0.972214  
Y\_true: [ 4 10 16 17 20 33 41 42]  
Y\_pred: [ 4 20 42]  
top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)  
history pmh psh htn hl osteoporosis social history social, score: 0.008660252  
marginal artery we now, score: 0.0016236369  
seizures occupy less of, score: 0.0007332179

confidence of prediction: 0.995144  
Y\_true: [ 4 10 16 17 20 33 41 42]  
Y\_pred: [ 4 20 42]  
top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)  
pmh psh htn hl osteoporosis social history, score: 0.46899265  
multiple overlying wires are, score: 0.03465489

a sterile fashion access, score: 0.011109215

confidence of prediction: 0.627522

Y\_true: [ 4 10 16 17 20 33 41 42]

Y\_pred: [ 4 20 42]

top three important windows for true positive code 42 (96.71: Continuous invasive mechanical ventilation for less than 96 consecutive hours)

who electively intubated her she has been, score: 0.07729773

hr bp intubated general somnolent, score: 0.058540124

pedis pulses neurologic examination, score: 0.006632127

confidence of prediction: 0.939392

Y\_true: [ 4 6 7 12 16 17 20 26 34 40 41 43 47 49]

Y\_pred: [ 7 9 17 20 26 41 43 45]

top three important windows for true positive code 7 (285.1: Acute posthemorrhagic anemia)

given 1u prbc and 2u, score: 0.22310068

fitting pants clothing this will, score: 0.021507489

ptfe graft and endoluminal thoracic, score: 0.015597658

confidence of prediction: 0.599988

Y\_true: [ 4 6 7 12 16 17 20 26 34 40 41 43 47 49]

Y\_pred: [ 7 9 17 20 26 41 43 45]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

line flush picc heparin, score: 0.10291409

exploratory laparotomy evacuation of hematoma, score: 0.07490878

line heparin flush units, score: 0.027860384

confidence of prediction: 0.577497

Y\_true: [ 4 6 7 12 16 17 20 26 34 40 41 43 47 49]

Y\_pred: [ 7 9 17 20 26 41 43 45]

top three important windows for true positive code 20 (401.9: Unspecified essential hypertension)

cv baseline hypertension treated, score: 0.1733053

lipase 25pm albumin calcium, score: 0.071527116

history pmh htn gout afib type b, score: 0.05885812

confidence of prediction: 0.860290

Y\_true: [ 4 6 7 12 16 17 20 26 34 40 41 43 47 49]

Y\_pred: [ 7 9 17 20 26 41 43 45]

top three important windows for true positive code 26 (427.31: Atrial fibrillation)

atrial fibrillation he was reversed, score: 0.0407132

atrial fibrillation pod on day, score: 0.03690554

atrial fibrillation prior to admission, score: 0.033656865

confidence of prediction: 0.900961

Y\_true: [ 4 6 7 12 16 17 20 26 34 40 41 43 47 49]

Y\_pred: [ 7 9 17 20 26 41 43 45]

top three important windows for true positive code 41 (96.6: Enteral infusion of concentrated nutritional substances)

percutaneous peg tube currently, score: 0.061175585

percutaneous tracheostomy tube and percutaneous endoscopic  
gastrostomy peg tube open, score: 0.040115587  
tube feeds initially via, score: 0.03185639

confidence of prediction: 0.703191  
Y\_true: [ 4 6 7 12 16 17 20 26 34 40 41 43 47 49]  
Y\_pred: [ 7 9 17 20 26 41 43 45]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
access tracheostomy peg social history, score: 0.050952427  
gastrostomy peg tube open, score: 0.033613335  
percutaneous tracheostomy tube and percutaneous endoscopic, score:  
0.025753785

confidence of prediction: 0.536347  
Y\_true: [22 24 27 34 36 38]  
Y\_pred: [ 4 21 22 24 34 36 38]  
top three important windows for true positive code 22 (410.71:  
Subendocardial infarction, initial episode of care)  
of nstemi and underwent cath, score: 0.026122559  
lab revealed large lad, score: 0.023720585  
consistent with nstemi patient received a, score: 0.02075521

confidence of prediction: 0.986500  
Y\_true: [22 24 27 34 36 38]  
Y\_pred: [ 4 21 22 24 34 36 38]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
lad coronary disease proximal, score: 0.07285839  
nitrate sl nitro resolved, score: 0.04761226  
single vessel coronary artery disease the, score: 0.045993697

confidence of prediction: 0.888186  
Y\_true: [22 24 27 34 36 38]  
Y\_pred: [ 4 21 22 24 34 36 38]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
kidney disease gerd social history tobacco history, score:  
0.068587884  
moderate rca l main, score: 0.0027382853  
lucency concerning in a, score: 0.0027083883

confidence of prediction: 0.665976  
Y\_true: [22 24 27 34 36 38]  
Y\_pred: [ 4 21 22 24 34 36 38]  
top three important windows for true positive code 36 (585.9:  
Chronic kidney disease, unspecified)  
hld ckd ra on chronic prednisone, score: 0.32129663  
chronic kidney disease gerd social, score: 0.28998736  
of ckd htn hl was admitted, score: 0.02810409

confidence of prediction: 0.784944  
Y\_true: [22 24 27 34 36 38]

Y\_pred: [ 4 21 22 24 34 36 38]  
top three important windows for true positive code 38 (88.56:  
Coronary arteriography using two catheters)  
lab revealed large lad, score: 0.10805668  
catheterization comments selective coronary angiography of this,  
score: 0.05806528  
procedure cardiac cath complicated with, score: 0.047418352

confidence of prediction: 0.594112  
Y\_true: [ 0 8 19 26 27 33 41 43 46]  
Y\_pred: [ 0 17 21 22 24 26 27 33 35 36 37 40 42 46]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
with broad spectrum antibiotics including vancomycin, score:  
0.25882405  
of unclear origin on, score: 0.13458204  
sepsis major surgical or, score: 0.12197706

confidence of prediction: 0.938631  
Y\_true: [ 0 8 19 26 27 33 41 43 46]  
Y\_pred: [ 0 17 21 22 24 26 27 33 35 36 37 40 42 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation not on coumadin, score: 0.10547554  
af not on coumadin, score: 0.056726266  
af with rvr not, score: 0.008632499

confidence of prediction: 0.585662  
Y\_true: [ 0 8 19 26 27 33 41 43 46]  
Y\_pred: [ 0 17 21 22 24 26 27 33 35 36 37 40 42 46]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
cardiomyopathy ef aicd niddm ckd, score: 0.15576813  
probnp numeric identifier 50am, score: 0.075082205  
severe pacemaker defibrillator lead terminates, score: 0.044242963

confidence of prediction: 0.914038  
Y\_true: [ 0 8 19 26 27 33 41 43 46]  
Y\_pred: [ 0 17 21 22 24 26 27 33 35 36 37 40 42 46]  
top three important windows for true positive code 33 (518.81: Acute  
respiratory failure)  
intubation mechanical ventilation central, score: 0.131763  
discharge respiratory failure he was intubated for inadequate  
compensation, score: 0.06483528  
intubated for respiratory failure evaluate, score: 0.049014837

confidence of prediction: 0.781932  
Y\_true: [ 0 8 19 26 27 33 41 43 46]  
Y\_pred: [ 0 17 21 22 24 26 27 33 35 36 37 40 42 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
sepsis major surgical or, score: 0.12862416  
with broad spectrum antibiotics including vancomycin, score:  
0.07401299

of unclear origin on, score: 0.06438693

confidence of prediction: 0.951013

Y\_true: [ 4 6 22 24 25 26 27 38 41 43]

Y\_pred: [ 2 4 17 20 24 27 48]

top three important windows for true positive code 4 (272.4: Other and unspecified hyperlipidemia)

p cabg hyperlipidemia hypertension diabetes social history, score: 0.31828326

mi hyperlipidemia hypertension and kidney failure, score: 0.014427126

gentleman w pmhx significant, score: 0.009139067

confidence of prediction: 0.907647

Y\_true: [ 4 6 22 24 25 26 27 38 41 43]

Y\_pred: [ 2 4 17 20 24 27 48]

top three important windows for true positive code 24 (414.01:

Coronary atherosclerosis of native coronary artery)

w cad rca pda distribution, score: 0.09177457

w mi s p cabg htn, score: 0.07182289

coronary artery disease the, score: 0.043512274

confidence of prediction: 0.952948

Y\_true: [ 4 6 22 24 25 26 27 38 41 43]

Y\_pred: [ 2 4 17 20 24 27 48]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

systolic heart failure ef cad w, score: 0.17093222

systolic heart failure cad w mi, score: 0.17093222

gave 80iv lasix and, score: 0.01205562

confidence of prediction: 0.757395

Y\_true: [11 20 25]

Y\_pred: [20 25]

top three important windows for true positive code 20 (401.9:

Unspecified essential hypertension)

pmh of htn and, score: 0.38366705

embolic acute infarcts in, score: 0.083626404

prolapse depression hypertension dental infection for, score: 0.080901824

confidence of prediction: 0.539780

Y\_true: [11 20 25]

Y\_pred: [20 25]

top three important windows for true positive code 25 (424.0: Mitral valve disorders)

mitral valve prolapse depression, score: 0.5766707

mitral valve prolapse trivial mitral regurgitation is seen, score: 0.14514191

visualized portions of the paranasal sinuses, score: 0.01668383

confidence of prediction: 0.599919

Y\_true: [10 32 39]

Y\_pred: [17 32 43]

top three important windows for true positive code 32 (511.9:  
Unspecified pleural effusion)  
pleural fluid pleural fluid final report, score: 0.052271  
pleural effusions right continues, score: 0.022730608  
pleural effusions are resolving, score: 0.021250444

confidence of prediction: 0.543458  
Y\_true: [ 0 1 2 19 23 26 27 37 46]  
Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]  
top three important windows for true positive code 0 (038.9:  
Unspecified septicemia)  
shock and a recent, score: 0.14901045  
meeting initiation of hd was, score: 0.11704861  
given multiple possible sources known uti likely chronic, score:  
0.1161294

confidence of prediction: 0.710166  
Y\_true: [ 0 1 2 19 23 26 27 37 46]  
Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]  
top three important windows for true positive code 2 (250.00:  
Diabetes mellitus without mention of complication, type II or  
unspecified type, not stated as uncontrolled)  
amputation type ii diabetes mellitus recent weight loss, score:  
0.010968716  
hemodialysis on via a temporary dialysis line he previously, score:  
0.007284777  
hemodialysis catheter history of, score: 0.0022496055

confidence of prediction: 0.980446  
Y\_true: [ 0 1 2 19 23 26 27 37 46]  
Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
of tunneled hemodialysis catheter history of, score: 0.17896521  
initiated on hemodialysis on via, score: 0.07156376  
a temporary dialysis line he, score: 0.013560307

confidence of prediction: 0.769697  
Y\_true: [ 0 1 2 19 23 26 27 37 46]  
Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]  
top three important windows for true positive code 23 (412: Old  
myocardial infarction)  
w ischemic cardiomyopathy ef, score: 0.008508138  
medical history cad s p mi in medically managed systolic chf last,  
score: 0.0031331482  
c w cad proximal, score: 0.0026951032

confidence of prediction: 0.986359  
Y\_true: [ 0 1 2 19 23 26 27 37 46]  
Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
atrial fibrillation nsvt he was, score: 0.24113098  
atrial fibrillation with a, score: 0.07073253

atrial fibrillation with moderate ventricular, score: 0.028936116

confidence of prediction: 0.954817

Y\_true: [ 0 1 2 19 23 26 27 37 46]

Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]

top three important windows for true positive code 27 (428.0:

Congestive heart failure, unspecified)

managed systolic chf last echo per osh, score: 0.1448947

yellow brown extr no, score: 0.020748805

pacer defibrillator lead tip projects, score: 0.010810932

confidence of prediction: 0.805165

Y\_true: [ 0 1 2 19 23 26 27 37 46]

Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]

top three important windows for true positive code 37 (599.0:

Urinary tract infection, site not specified)

leuks lg 37pm urine, score: 0.1541125

associated uti pt remained afebrile, score: 0.10083369

urosepsis on hospital day the, score: 0.09714459

confidence of prediction: 0.758512

Y\_true: [ 0 1 2 19 23 26 27 37 46]

Y\_pred: [ 0 2 19 21 23 26 27 35 37 46 49]

top three important windows for true positive code 46 (995.92:

Severe sepsis)

meeting initiation of hd was, score: 0.10224575

urosepsis on hospital day the, score: 0.093324654

given multiple possible sources known uti likely chronic, score:

0.0418804

confidence of prediction: 0.872974

Y\_true: [ 5 6 17 31 33 40 41 42 46]

Y\_pred: [ 0 5 29 41 46]

top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)

cachexia hypotension hyponatremia hypoglycemia lower extremity

swelling, score: 0.5929127

noted on volar surface, score: 0.051959693

insults likely deriving from, score: 0.050000418

confidence of prediction: 0.587328

Y\_true: [ 5 6 17 31 33 40 41 42 46]

Y\_pred: [ 0 5 29 41 46]

top three important windows for true positive code 41 (96.6: Enteral

infusion of concentrated nutritional substances)

pneumothorax feeding tube ends in the, score: 0.04810378

foreign body suture material chest, score: 0.034891322

suture over paracentesis site, score: 0.027007146

confidence of prediction: 0.500212

Y\_true: [ 5 6 17 31 33 40 41 42 46]

Y\_pred: [ 0 5 29 41 46]

top three important windows for true positive code 46 (995.92:

Severe sepsis)



attributed to sepsis from the, score: 0.10498953  
fluid collection brief hospital, score: 0.07699281  
shock in the setting, score: 0.036849897

confidence of prediction: 0.976731  
Y\_true: [ 7 9 20 24 27 35 45]  
Y\_pred: [ 7 17 20 24 27 30 37 48]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
underwent a bleeding study, score: 0.02701527  
definitively redemonstrate bleeding gi bleeding study, score:  
0.025684964  
colitis with ulceration no, score: 0.012708033

confidence of prediction: 0.843580  
Y\_true: [ 7 9 20 24 27 35 45]  
Y\_pred: [ 7 17 20 24 27 30 37 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
favoring chronic diverticulitis as, score: 0.33671224  
failure benign hypertension obstructive sleep apnea, score:  
0.042922057  
chf carcinoid tumor diverticulosis, score: 0.042693995

confidence of prediction: 0.930259  
Y\_true: [ 7 9 20 24 27 35 45]  
Y\_pred: [ 7 17 20 24 27 30 37 48]  
top three important windows for true positive code 24 (414.01:  
Coronary atherosclerosis of native coronary artery)  
coronary artery disease s p cabg in cad no, score: 0.50078905  
s cad copd chf carcinoid tumor, score: 0.019443298  
cad s p cabg dchf and, score: 0.018892877

confidence of prediction: 0.983501  
Y\_true: [ 7 9 20 24 27 35 45]  
Y\_pred: [ 7 17 20 24 27 30 37 48]  
top three important windows for true positive code 27 (428.0:  
Congestive heart failure, unspecified)  
diastolic pulmonic regurgitation velocity, score: 0.062809125  
diastolic congestive heart failure benign hypertension, score:  
0.040180326  
cad copd chf carcinoid tumor diverticulosis, score: 0.03643002

confidence of prediction: 0.841987  
Y\_true: [ 0 4 6 7 12 16 17 20 25 29 33 35 40 41 42 49]  
Y\_pred: [ 4 7 17 27 29 35 40]  
top three important windows for true positive code 4 (272.4: Other  
and unspecified hyperlipidemia)  
anemia hypertension hyperlipidemia seizure disorder osa colon,  
score: 0.07090716  
continued meclizine hyperlipidemia continued atorvastatin seizure  
disorder, score: 0.057417594  
ecf held coumadin on, score: 0.018513462

confidence of prediction: 0.898964  
Y\_true: [ 0 4 6 7 12 16 17 20 25 29 33 35 40 41 42 49]  
Y\_pred: [ 4 7 17 27 29 35 40]  
top three important windows for true positive code 7 (285.1: Acute  
posthemorrhagic anemia)  
anemia bright red blood, score: 0.49692667  
and clorazepate dipotassium ora on, score: 0.061428882  
500mg tamiflu 75mg x1, score: 0.038152717

confidence of prediction: 0.752331  
Y\_true: [ 0 4 6 7 12 16 17 20 25 29 33 35 40 41 42 49]  
Y\_pred: [ 4 7 17 27 29 35 40]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
picc was placed for difficult, score: 0.19435821  
vein picc placement history of, score: 0.038085766  
central line placement and removal, score: 0.022979386

confidence of prediction: 0.869074  
Y\_true: [ 0 4 6 7 12 16 17 20 25 29 33 35 40 41 42 49]  
Y\_pred: [ 4 7 17 27 29 35 40]  
top three important windows for true positive code 29 (486:  
Pneumonia, organism unspecified)  
associated pneumonia acute renal, score: 0.3747588  
associated pneumonia acute renal, score: 0.21508545  
associated pneumonia shortness of, score: 0.12522687

confidence of prediction: 0.774028  
Y\_true: [ 0 4 6 7 12 16 17 20 25 29 33 35 40 41 42 49]  
Y\_pred: [ 4 7 17 27 29 35 40]  
top three important windows for true positive code 35 (584.9: Acute  
kidney failure, unspecified)  
also had arf with cr now resolving, score: 0.044229694  
acute renal failure resolved with, score: 0.025290985  
acute renal failure internal hemorrhoids, score: 0.025290985

confidence of prediction: 0.723495  
Y\_true: [ 0 4 6 7 12 16 17 20 25 29 33 35 40 41 42 49]  
Y\_pred: [ 4 7 17 27 29 35 40]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
and extubation central line, score: 0.09282642  
the micu intubated on icu day1, score: 0.08605147  
pulses compression stockings in place, score: 0.047699466

confidence of prediction: 0.933587  
Y\_true: [ 9 10 12 16 17 29 30 32 33 41 43 46]  
Y\_pred: [17 41 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
right picc line placed retaining co2, score: 0.09916955  
mrsa bal yeast bal yeast bcx ng, score: 0.08991959  
extremities dobhoff placed tf re started, score: 0.041877415

confidence of prediction: 0.501774  
Y\_true: [ 9 10 12 16 17 29 30 32 33 41 43 46]  
Y\_pred: [17 41 43]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
trach at bedside neuro, score: 0.15470174  
alert moving all extremities, score: 0.044375997  
abscess percutaneous tracheostomy at bedside in, score: 0.028112946

confidence of prediction: 0.624876  
Y\_true: [ 9 10 12 16 17 29 30 32 33 41 43 46]  
Y\_pred: [17 41 43]  
top three important windows for true positive code 43 (96.72:  
Continuous invasive mechanical ventilation for 96 consecutive hours  
or more)  
rr o2sat intubated gen, score: 0.070869036  
percutaneous tracheostomy at bedside in, score: 0.03563823  
perc trach at bedside neuro, score: 0.026602603

confidence of prediction: 0.822658  
Y\_true: [ 1 12 16 17 33 40 41 42 46]  
Y\_pred: [ 1 12 17 29 35 37 40 43]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
and hypothyroidism who presented earlier today, score: 0.623507  
and hypothyroidism admitted with multifocal, score: 0.29083568  
trisomy hypothyroidism chronic flatulence abdominal pain, score:  
0.0077805812

confidence of prediction: 0.681036  
Y\_true: [ 1 12 16 17 33 40 41 42 46]  
Y\_pred: [ 1 12 17 29 35 37 40 43]  
top three important windows for true positive code 12 (33.24: Closed  
[endoscopic] biopsy of bronchus)  
flora mini bal commensal respiratory flora yeast, score: 0.08528925  
and mini bal cultures were negative, score: 0.071118504  
sensitive strep pneumoniae she became, score: 0.03831724

confidence of prediction: 0.903300  
Y\_true: [ 1 12 16 17 33 40 41 42 46]  
Y\_pred: [ 1 12 17 29 35 37 40 43]  
top three important windows for true positive code 17 (38.93: Venous  
catheterization, not elsewhere classified)  
emboli and bedside echo, score: 0.09846234  
venous catheter endotracheal tube, score: 0.046636365  
ventilation picc line placement r ij central line placement history  
of, score: 0.020940352

confidence of prediction: 0.716525  
Y\_true: [ 1 12 16 17 33 40 41 42 46]  
Y\_pred: [ 1 12 17 29 35 37 40 43]  
top three important windows for true positive code 40 (96.04:  
Insertion of endotracheal tube)  
and mini bal cultures were, score: 0.17041002

and was intubated in the, score: 0.075139716  
flora mini bal commensal, score: 0.057577513

confidence of prediction: 0.708906  
Y\_true: [ 3 20 24 26 37 41 47 49]  
Y\_pred: [ 3 20 26 31 37 41]  
top three important windows for true positive code 3 (272.0: Pure  
hypercholesterolemia)  
at hypercholesterolemia hypertension anxiety disorder history of,  
score: 0.029910987  
on she spiked a fever, score: 0.0058621876  
was subsequently discontinued due, score: 0.002412905

confidence of prediction: 0.652338  
Y\_true: [ 3 20 24 26 37 41 47 49]  
Y\_pred: [ 3 20 26 31 37 41]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
perseverating with non fluent, score: 0.12066509  
female with htn dlp atrial fibrillation, score: 0.08191764  
female with htn dlp atrial fibrillation flutter on coumadin  
coronary, score: 0.08191764

confidence of prediction: 0.838184  
Y\_true: [ 3 20 24 26 37 41 47 49]  
Y\_pred: [ 3 20 26 31 37 41]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
fibrillation flutter on coumadin, score: 0.11735486  
atrial fibrillation atrial flutter atrial, score: 0.07744513  
afib flutter a tach she, score: 0.059782833

confidence of prediction: 0.977841  
Y\_true: [ 3 20 24 26 37 41 47 49]  
Y\_pred: [ 3 20 26 31 37 41]  
top three important windows for true positive code 37 (599.0:  
Urinary tract infection, site not specified)  
enterococcus uti subdural hemorrhage the, score: 0.1874531  
her uti infection she also, score: 0.1560009  
urinary tract infection and post, score: 0.10662624

confidence of prediction: 0.947989  
Y\_true: [ 3 20 24 26 37 41 47 49]  
Y\_pred: [ 3 20 26 31 37 41]  
top three important windows for true positive code 41 (96.6: Enteral  
infusion of concentrated nutritional substances)  
placed tube feeds were re started, score: 0.07992601  
secretions dry mucous membranes perrla, score: 0.015303651  
and subsequent eeg on showed, score: 0.014714766

confidence of prediction: 0.861436  
Y\_true: [ 2 5 7 19 28 29 40 43 45]  
Y\_pred: [5]  
top three important windows for true positive code 5 (276.1:

Hyposmolality and/or hyponatremia)  
showed worsening hyponatremia with na and last, score: 0.7450011  
and lobular inflammation is, score: 0.0408769  
of lobular [UNK] laden, score: 0.030476298

confidence of prediction: 0.895114  
Y\_true: [ 1 7 20]  
Y\_pred: [ 1 11 17 20 35 45]  
top three important windows for true positive code 1 (244.9:  
Unspecified acquired hypothyroidism)  
disease hypothyroid continued outpatient medications tsh, score:  
0.4676704  
impairment hypothyroidism insomnia osteoporosis did, score:  
0.33249554  
ago hypothyroidism depression dementia nos short term, score:  
0.046608564

confidence of prediction: 0.758778  
Y\_true: [ 1 7 20]  
Y\_pred: [ 1 11 17 20 35 45]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
medical history hypertension tia, score: 0.059664156  
of cad htn anemia dementia who presents, score: 0.045589883  
pts daughter htn [UNK] and norvasc, score: 0.034239117

confidence of prediction: 0.873145  
Y\_true: [ 6 14 18 22 38 39 45 49]  
Y\_pred: [ 8 17 18 24 45 49]  
top three important windows for true positive code 18 (39.61:  
Extracorporeal circulation auxiliary to open heart surgery)  
cardiothoracic allergies codeine urecholine, score: 0.14073172  
and usual tpn related, score: 0.012414391  
transesophageal echocardiogram minimally invasive, score:  
0.010247198

confidence of prediction: 0.908312  
Y\_true: [ 6 14 18 22 38 39 45 49]  
Y\_pred: [ 8 17 18 24 45 49]  
top three important windows for true positive code 45 (99.15:  
Parenteral infusion of concentrated nutritional substances)  
usual tpn related blood tests, score: 0.7585304  
risks tpn was administered, score: 0.08438192  
on tpn for nutrition as well, score: 0.065639794

confidence of prediction: 0.714167  
Y\_true: [ 6 14 18 22 38 39 45 49]  
Y\_pred: [ 8 17 18 24 45 49]  
top three important windows for true positive code 49 (V58.61: Long-  
term (current) use of anticoagulants)  
x on coumadin history, score: 0.37453902  
resumed with coumadin and, score: 0.28279346  
a day warfarin mg, score: 0.09679933

confidence of prediction: 0.704643  
Y\_true: [ 8 9 16 17 19 26 27 29 31 32 33 40 42 46 49]  
Y\_pred: [ 2 19 21 26 35 36 41 46]  
top three important windows for true positive code 19 (39.95:  
Hemodialysis)  
sessions of hd and afib, score: 0.077675276  
ct lplt 02am blood, score: 0.0139295645  
troponins and initiation of, score: 0.010331764

confidence of prediction: 0.984738  
Y\_true: [ 8 9 16 17 19 26 27 29 31 32 33 40 42 46 49]  
Y\_pred: [ 2 19 21 26 35 36 41 46]  
top three important windows for true positive code 26 (427.31:  
Atrial fibrillation)  
afib on coumadin and pvd, score: 0.69848585  
irregularly irregular s1 s2 systolic, score: 0.1692783  
afib with rvr s p, score: 0.04047091

confidence of prediction: 0.785866  
Y\_true: [ 8 9 16 17 19 26 27 29 31 32 33 40 42 46 49]  
Y\_pred: [ 2 19 21 26 35 36 41 46]  
top three important windows for true positive code 46 (995.92:  
Severe sepsis)  
multiple full and partial, score: 0.07635709  
with septic shock from blood cultures, score: 0.057409313  
vanc zosyn source felt to, score: 0.041058335

confidence of prediction: 0.843613  
Y\_true: [11 34]  
Y\_pred: [27 34]  
top three important windows for true positive code 34 (530.81:  
Esophageal reflux)  
recurrence depression gerd social history lives with, score:  
0.070394404  
discontinued as disease progression, score: 0.010199065  
thoracoscopy biopsy biopsies confirmed, score: 0.009968663

confidence of prediction: 0.754770  
Y\_true: [ 1 2 20 48]  
Y\_pred: [17 20 48]  
top three important windows for true positive code 20 (401.9:  
Unspecified essential hypertension)  
non coronary study date, score: 0.131428  
infarcts of undetermined age, score: 0.09458468  
medical history htn parkinson s disease diagnosed, score: 0.08744099

confidence of prediction: 0.835597  
Y\_true: [ 1 2 20 48]  
Y\_pred: [17 20 48]  
top three important windows for true positive code 48 (V45.81:  
Aortocoronary bypass status)  
cad with cabg several, score: 0.22752558  
ago cad s p cabg years ago and, score: 0.0011883614  
myocardial infarction of undetermined, score: 0.0011300113

confidence of prediction: 0.694732

Y\_true: [ 2 5 8 17 31 33 40 41 43 45]

Y\_pred: [17 26]

top three important windows for true positive code 17 (38.93: Venous catheterization, not elsewhere classified)

source line picc line m furfur added, score: 0.15123937

picc line and replaced over, score: 0.062359903

venous line ends low, score: 0.050658025