Postoperative Hip Fracture Rate Technical Specifications

Patient Safety Indicators 08 (PSI 08)

AHRQ Quality Indicators™, Research Version 5.0

November 2014

Provider-Level Indicator

Type of Score: Rate

Description

Postoperative hip fracture (secondary diagnosis) per 1,000 surgical discharges for patients ages 18 years and older. Excludes cases that are susceptible to falling (seizure disorder, syncope, stroke, occlusion of arteries, coma, cardiac arrest, poisoning, trauma, delirium or other psychoses, anoxic brain injury, metastatic cancer, lymphoid malignancy, bone malignancy, disorders of the musculoskeletal system, and disorders of connective tissue), cases with self-inflicted injury, cases with a principal diagnosis of hip fracture, cases with a secondary diagnosis of hip fracture present on admission, and obstetric cases,

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report events per 1,000 hospital discharges.]

Numerator

Discharges, among cases meeting the inclusion and exclusion rules for the denominator, with any secondary ICD-9-CM diagnosis codes for hip fracture.

ICD-9-CM Hip fracture diagnosis codes:

82000	FX FEMUR INTRCAPS NOS-CL	82019	FX FEMUR INTRCAP NEC-OPN
82001	FX UP FEMUR EPIPHY-CLOS	82020	TROCHANTERIC FX NOS-CLOS
82002	FX FEMUR, MIDCERVIC-CLOS	82021	INTERTROCHANTERIC FX-CL
82003	FX BASE FEMORAL NCK-CLOS	82022	SUBTROCHANTERIC FX-CLOSE
82009	FX FEMUR INTRCAPS NEC-CL	82030	TROCHANTERIC FX NOS-OPEN
82010	FX FEMUR INTRCAP NOS-OPN	82031	INTERTROCHANTERIC FX-OPN
82011	FX UP FEMUR EPIPHY-OPEN	82032	SUBTROCHANTERIC FX-OPEN
82012	FX FEMUR, MIDCERVIC-OPEN	8208	FX NECK OF FEMUR NOS-CL
82013	FX BASE FEMORAL NCK-OPEN	8209	FX NECK OF FEMUR NOS-OPN

Denominator

Surgical discharges, ages 18 years and older, with any-listed ICD-9-CM procedure codes for an operating room procedure. Surgical discharges are defined by specific DRG or MS-DRG codes

See Patient Safety Indicators Appendices:

- Appendix A Operating Room Procedure Codes
- Appendix D Surgical Discharge DRGs
- Appendix E Surgical Discharge MS-DRGs

Exclude cases:

- with a principal ICD-9-CM diagnosis code (or secondary diagnosis present on admission) for hip fracture (see above)
- where the only operating room procedure is hip fracture repair
- where a procedure for hip fracture repair occurs before or on the same day as the first operating room procedure[†]
- with a principal ICD-9-CM diagnosis code for seizure
- with a principal ICD-9-CM diagnosis code for syncope
- with a principal ICD-9-CM diagnosis code for stroke and occlusion of arteries
- with a principal ICD-9-CM diagnosis code for coma
- with a principal ICD-9-CM diagnosis code for cardiac arrest
- with a principal ICD-9-CM diagnosis code for poisoning
- with a principal ICD-9-CM diagnosis code for trauma
- with a principal ICD-9-CM diagnosis code for delirium and other psychoses
- with a principal ICD-9-CM diagnosis code for anoxic brain injury
- with any-listed ICD-9-CM diagnosis codes for metastatic cancer
- with any-listed ICD-9-CM diagnosis codes for lymphoid malignancy
- with any-listed ICD-9-CM diagnosis codes for bone malignancy
- with any-listed ICD-9-CM diagnosis codes for self-inflicted injury
- MDC 8 (diseases and disorders of the musculoskeletal system and connective tissue)
- MDC14 (pregnancy, childbirth, and puerperium)
- with missing gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing), or principal diagnosis (DX1=missing)

See Patient Safety Indicators Appendices:

- Appendix G Trauma Diagnosis Codes
- Appendix K Self-Inflicted Injury Diagnosis Codes

ICD-9-CM Hip fracture repair procedure codes:

7855	INTERNAL FIXATION-FEMUR	7965	DEBRID OPN FX-FEMUR
7905	CL FX FEMUR REDUC-FEMUR	8151	TOTAL HIP REPLACEMENT
7915	CLOSED RED-INT FIX FEMUR	8152	PARTIAL HIP REPLACEMENT
7925	OPEN REDUCTION-FEMUR FX	8153	REVISE HIP REPLACEMENT NOS
7935	OPEN REDUC-INT FIX FEMUR		

ICD-9-CM Seizure diagnosis codes:

34500	GEN NONCV EP W/O INTR EP	34570	EPIL PAR CONT W/O INT EP
34501	GEN NONCONV EP W INTR EP	34571	EPIL PAR CONT W INTR EPI
34510	GEN CNV EPIL W/P INTR EP	34580	EPILEP NEC W/O INT EP
34511	GEN CNV EPIL W INTR EPIL	34581	EPILEPSY NEC W INTR EPIL
3452	PETIT MAL STATUS	34590	EPILEP NOS W/O INTR EPIL

[†] If day of procedure is not available in the input data file, the rate may be slightly lower than if the information was available.

3453	GRAND MAL STATUS	34591	EPILEPSY NOS W INTR EPIL
34540	PSYMOTR EPI W/O INT EPI	7803	CONVULSIONS (end 1997)
34541	PSYMOTR EPIL W INTR EPIL	78031	FEBRILE CONVÙLSIONS NOS
34550	PART EPIL W/O INTR EPIL	78032	COMPLX FEBRILE CONVULSNS
34551	PART EPIL W INTR EPIL	78033	POST TRAUMATIC SEIZURES
34560	INF SPASM W/O INTR EPIL	78039	CONVULSIONS NEC
34561	INF SPASM W/O INT EPIL		

ICD-9-CM Syncope diagnosis codes: 33701 CAROTID SINUS SYNDROME

7802 SYNCOPE AND COLLAPSE

ICD-9-CM Stroke and occlusion of arteries diagnosis codes:

430	SUBARACHNOID HEMORRHAGE	43391	OCCLUSION AND STENOSIS OF PRECEREBRAL ARTERIES,
			UNSPECIFIED PRECEREBRAL ARTERY
			WITH CEREBRAL INFARCTION
431	INTRACEREBRAL HEMORRHAGE	43401	CEREBRAL THROMBOSIS - WITH
			CEREBRAL INFARCTION
4320	NONTRAUMATIC EXTRADURAL	43411	CEREBRAL EMBOLISM - WITH
	HEMORRHAGE		CEREBRAL INFARCTION
4321	SUBDURAL HEMORRHAGE	43491	CEREBRAL ARTERY OCCLUSION,
			UNSPECIFIED - WITH CEREBRAL
			INFARCTION
4329	UNSPECIFIED INTRACRANIAL	4350	BASILAR ARTERY SYNDROME
	HEMORRHAGE		
43301	BASILAR ARTERY, WITH CEREBRAL INFARCTION	4351	VERTEBRAL ARTERY SYNDROM
43311	CAROTID ARTERY, WITH CEREBRAL INFARCTION	4353	VERTBROBASLR ARTERY SYND
43321	VERTEBRAL ARTERY - WITH	436	ACUTE, BUT ILL-DEFINED
	CEREBRAL INFARCTION		CEREBROVASCULAR DISEASE
43331	MULTIPLE AND BILATERAL WITH	99702	POSTOPERATIVE
	CEREBRAL INFARCTION		CEREBROVASCULAR ACCIDENT
43381	OTHER SPECIFIED PRECEBRAL		
	ARTERY WITH CEREBRAL		
	INFARCTION		

ICD-9-C	M Coma diagnosis codes:		
0700	HEPATITIS A WITH COMA	78001	GENERAL SYMPTOMS, ALTERATION OF CONSCIOUSNESS, COMA
07020	HPT B ACTE COMA WO DLTA	24920	SEC DM HPROS NT ST UNCNR
07021	HPT B ACTE COMA W DLTA	24921	SEC DM HPROSMLR UNCNTRLD
07022	HPT B CHRN COMA WO DLTA	24930	SEC DM OT CMA NT ST UNCN
07023	HPT B CHRN COMA W DLTA	24931	SEC DM OTH COMA UNCNTRLD
07041	HPT C ACUTE W HEPAT COMA	25020	DM HYPEROSMOL, TYPE 2 NT ST UNCN
07042	HPT DLT WO B W HPT COMA	25021	DM HYPEROSMOL, TYPE 1 NT ST UNCN
07043	HPT E W HEPAT COMA	25022	DIABETES HYPEROSMOLARITY, TYPE 2
07044	CHRNC HPT C W HEPAT COMA	25023	DM HYPEROSMOLARITY , TYPE 1, UNCN
07049	OTH VRL HEPAT W HPT COMA	25030	DIABETES WITH OTHER COMA, TYPE 2
			NOT STATED AS UNCONTROLLED
0706	VIRAL HEPAT NOS W COMA	25031	DIABETES WITH OTHER COMA, TYPE 1
			NOT STATED AS UNCONTROLLED
07071	HPT C W HEPATIC COMA NOS	25032	DIABETES MELLITUS, DIABETES WITH
			OTHER COMA, TYPE 11
			UNCONTROLLED
2510	OTHER DISORDERS OF PANCREATIC	25033	DIABETES MELLITUS, DIABETES WITH
	INTERNAL SECRETION,		OTHER COMA, TYPE 1 UNCONTROLLED
	HYPOGLYCEMIC COMA	70000	OFNIFRAL OVARDTONIO ALTERATIONI OF
5722	LIVER ABSCESS AND SEQUELAE OF	78003	GENERAL SYMPTOMS, ALTERATION OF
	CHRONIC LIVER DISEASE, HEPATIC		CONSCIOUSNESS PERSISTENT
	COMA		VEGETATIVE STATE

ICD-9-CM Cardiac arrest diagnosis code: 4275 CARDIAC ARREST

ICD-9-CM Poisoning diagnosis codes:

96500	POISONING-OPIUM NOS	9686	POIS-NERVE/PLEX-BLK ANES
96501	POISONING-HEROIN	9687	POISON-SPINAL ANESTHETIC
96502	POISONING-METHADONE	9689	POIS-LOCAL ANEST NEC/NOS
96509	POISONING-OPIATES NEC	9690	POISONING-ANTIDEPRESSANT
9656	POISONING-ANTIRHEUMATICS	96900	POISON-ANTIDEPRESNT NOS
9658	POIS-ANALGES/ANTIPYR NEC	96901	POIS MONOAMINE OXIDASE
9660	POISON-OXAZOLIDINE DERIV	96902	POIS SEROTN/NOREPINEPHRN
9661	POISON-HYDANTOIN DERIVAT	96903	POIS SEROTININ REUPTAKE
9662	POISONING-SUCCINIMIDES	96904	POIS TETRACYCLC ANDEPRES
9663	POIS-ANTICONVUL NEC/NOS	96905	POIS TRICYCLC ANTIDEPRES
9664	POIS-ANTI-PARKINSON DRUG	96909	POIS ANTIDEPRESSANTS NEC
9670	POISONING-BARBITURATES	9691	POIS-PHENOTHIAZINE TRANQ
9671	POISONING-CHLORAL HYDRAT	9692	POIS-BUTYROPHENONE TRANQ
9672	POISONING-PARALDEHYDE	9693	POISON-ANTIPSYCHOTIC NEC
9673	POISONING-BROMINE COMPND	9694	POIS-BENZODIAZEPINE TRAN
9674	POISONING-METHAQUALONE	9695	POISON-TRANQUILIZER NEC
9675	POISONING-GLUTETHIMIDE	9696	POISONING-HALLUCINOGENS
9676	POISON-MIX SEDATIVE NEC	9697	POISON-PSYCHOSTIMULANTS
9678	POIS-SEDATIVE/HYPNOT NEC	96970	POIS PSYCHOSTIMULANT NOS
9679	POIS-SEDATIVE/HYPNOT NOS	96971	POISONING BY CAFFEINE
9680	POIS-CNS MUSCLE DEPRESS	96972	POISONING BY AMPHETAMINE
9681	POISONING-HALOTHANE	96973	POISON BY METHYLPHENDATE
9682	POISON-GAS ANESTHET NEC	96979	POISON BY PSYCHOSTIM NEC
9683	POISON-INTRAVEN ANESTHET	9698	POISON-PSYCHOTROPIC NEC
9684	POIS-GEN ANESTH NEC/NOS	9699	POISON-PSYCHOTROPIC NOS
9685	POIS-TOPIC/INFILT ANESTH	9752	POIS-SKELET MUSCLE RELAX

ICD-9-CM Delirium and other psychoses diagnosis codes:

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2900	SENILE DEMENTIA UNCOMP	29541	AC SCHIZOPHRENIA-SUBCHR
29010	PRESENILE DEMENTIA	29542	AC SCHIZOPHRENIA-CHR
29011	PRESENILE DELIRIUM	29543	AC SCHIZO-SUBCHR/EXACERB
29012	PRESENILE DELUSION	29544	AC SCHIZOPHR-CHR/EXACERB
29013	PRESENILE DEPRESSION	29545	AC SCHIZOPHRENIA-REMISS
29020	SENILE DELUSION	29550	LATENT SCHIZOPHREN-UNSP
29021	SENILE DEPRESSIVE	29551	LAT SCHIZOPHREN-SUBCHR
2903	SENILE DELIRIUM	29552	LATENT SCHIZOPHREN-CHR
29040	ARTERIOSCLER DEMENT NOS	29553	LAT SCHIZO-SUBCHR/EXACER
29041	ARTERIOSCLER DELIRIUM	29554	LATENT SCHIZO-CHR/EXACER
29042	ARTERIOSCLER DELUSION	29555	LAT SCHIZOPHREN-REMISS
29043	ARTERIOSCLER DEPRESSIVE	29560	RESID SCHIZOPHREN-UNSP
2908	SENILE PSYCHOSIS NEC	29561	RESID SCHIZOPHREN-SUBCHR
2909	SENILE PSYCHOT COND NOS	29562	RESIDUAL SCHIZOPHREN-CHR
2910	DELIRIUM TREMENS	29563	RESID SCHIZO-SUBCHR/EXAC
2911	ALCOHOL AMNESTIC SYND	29564	RESID SCHIZO-CHR/EXACERB
2912	ALCOHOLIC DEMENTIA NEC	29565	RESID SCHIZOPHREN-REMISS
2913	ALCOHOL HALLUCINOSIS	29570	SCHIZOAFFECTIVE-UNSPEC
2914	PATHOLOGIC ALCOHOL INTOX	29571	SCHIZOAFFECTIVE-SUBCHR
2915	ALCOHOLIC JEALOUSY	29572	SCHIZOAFFECTIVE-CHRONIC
2918	ALCOHOLIC PSYCHOSIS NEC	29573	SCHIZOAFF-SUBCHR/EXACER
29181	ALCOHOL WITHDRAWAL	29574	SCHIZOAFFECT-CHR/EXACER
29189	ALCOHOLIC PSYCHOSIS NEC	29575	SCHIZOAFFECTIVE-REMISS
2919	ALCOHOLIC PSYCHOSIS NOS	29580	SCHIZOPHRENIA NEC-UNSPEC
2920	DRUG WITHDRAWAL SYNDROME	29581	SCHIZOPHRENIA NEC-SUBCHR
29211	DRUG PARANOID STATE	29582	SCHIZOPHRENIA NEC-CHR
29212	DRUG HALLUCINOSIS	29583	SCHIZO NEC-SUBCHR/EXACER
2922	PATHOLOGIC DRUG INTOX	29584	SCHIZO NEC-CHR/EXACERB
29281	DRUG-INDUCED DELIRIUM	29585	SCHIZOPHRENIA NEC-REMISS
29282	DRUG-INDUCED DEMENTIA	29590	SCHIZOPHRENIA NOS-UNSPEC

29283 29284 29285 29289 2929 2930 2931 29381 29382 29383 29384 29389 2940 2941	DRUG AMNESTIC SYNDROME DRUG DEPRESSIVE SYNDROME DRUG INDUCED SLEEP DISOR DRUG MENTAL DISORDER NEC DRUG MENTAL DISORDER NOS ACUTE DELIRIUM SUBACUTE DELIRIUM ORGANIC DELUSIONAL SYND ORGANIC HALLUCINOSIS SYN ORGANIC AFFECTIVE SYND ORGANIC ANXIETY SYNDROME TRANSIENT ORG MENTAL NEC TRANSIENT ORG MENTAL NOS AMNESTIC SYNDROME DEMENTIA IN OTH DISEASES	29591 29592 29593 29594 29595 29630 29631 29632 29633 29634 29635 29640 29641 29642	SCHIZOPHRENIA NOS-SUBCHR SCHIZOPHRENIA NOS-CHR SCHIZO NOS-SUBCHR/EXACER SCHIZO NOS-CHR/EXACERB SCHIZOPHRENIA NOS-REMISS RECURR DEPR PSYCHOS-UNSP RECURR DEPR PSYCHOS-MILD RECURR DEPR PSYCHOS-MOD RECUR DEPR PSYCH-SEVERE REC DEPR PSYCH-PSYCHOTIC RECUR DEPR PSYC-PART REM RECUR DEPR PSYC-FULL REM BIPOL AFF, MANIC-UNSPEC BIPOLAR AFF, MANIC-MILD BIPOLAR AFFEC, MANIC-MOD
00440	DEMENTIA MUO DELIAM DIOT	00040	DIDOL AFE MANUO OF VEDE
29410	DEMENTIA W/O BEHAV DIST	29643	BIPOL AFF, MANIC-SEVERE
29411	DEMENTIA W BEHAVIOR DIST	29644	BIPOL MANIC-SEV W PSYCH
29420	DEMENTIA, UNSPECIFIED W/O	29645	BIPOL AFF MANIC-PART REM
29421	BEHAVIORAL DISTURBANCE DEMENTIA,UNSPECIFIED WITH BEHAVIORAL DISTURBANCE	29646	BIPOL AFF MANIC-FULL REM
2948	ORGANIC BRAIN SYND NEC	2967	BIPOLAR AFFECTIVE NOS
2949	ORGANIC BRAIN SYND NOS	29680	MANIC-DEPRESSIVE NOS
29500	SIMPL SCHIZOPHREN-UNSPEC	29681	ATYPICAL MANIC DISORDER
29501	SIMPL SCHIZOPHREN-SUBCHR	29682	ATYPICAL DEPRESSIVE DIS
29501	SIMPLE SCHIZOPHREN-CHR	29689	MANIC-DEPRESSIVE NEC
29503	SIMP SCHIZ-SUBCHR/EXACER	29690	AFFECTIVE PSYCHOSIS NOS
29504	SIMPL SCHIZO-CHR/EXACERB	2970	PARANOID STATE, SIMPLE
29505	SIMPL SCHIZOPHREN-REMISS	2971	PARANOIA
29510	HEBEPHRENIA-UNSPEC	2972	PARAPHRENIA
29511	HEBEPHRENIA-SUBCHRONIC	2973	SHARED PARANOID DISORDER
29512	HEBEPHRENIA-CHRONIC	2978	PARANOID STATES NEC
29513	HEBEPHREN-SUBCHR/EXACERB	2979	PARANOID STATE NOS
29514	HEBEPHRENIA-CHR/EXACERB	2980	REACT DEPRESS PSYCHOSIS
29515	HEBEPHRENIA-REMISSION	2981	EXCITATIV TYPE PSYCHOSIS
29520	CATATONIA-UNSPEC	2982	REACTIVE CONFUSION
29521	CATATONIA-SUBCHRONIC	2983	ACUTE PARANOID REACTION
29522	CATATONIA-CHRONIC	2984	PSYCHOGEN PARANOID PSYCH
29523	CATATONIA-SUBCHR/EXACERB	2988	REACT PSYCHOSIS NEC/NOS
29524	CATATONIA-CHR/EXACERB	2989	PSYCHOSIS NOS
29525	CATATONIA-REMISSION	29900	INFANTILE AUTISM-ACTIVE
29530	PARANOID SCHIZO-UNSPEC	29901	INFANTILE AUTISM-RESID
29531	PARANOID SCHIZO-SUBCHR	29910	DISINTEGR PSYCH-ACTIVE
29532	PARANOID SCHIZO-CHRONIC	29911	DISINTEGR PSYCH-RESIDUAL
29533	PARAN SCHIZO-SUBCHR/EXAC	29980	CHILD PSYCHOS NEC-ACTIVE
29534	PARAN SCHIZO-CHR/EXACERB	29981	CHILD PSYCHOS NEC-RESID
29535	PARANOID SCHIZO-REMISS	29990	CHILD PSYCHOS NOS-ACTIVE
29540	AC SCHIZOPHRENIA-UNSPEC	29991	CHILD PSYCHOS NOS-RESID

ICD-9-CM Anoxic brain injury diagnosis code: 3481 ANOXIC BRAIN DAMAGE

ICD-9-CM Metastatic cancer diagnosis codes:

1960	MAL NEO LYMPH-HEAD/NECK	1981	SEC MALIG NEO URIN NEC
1961	MAL NEO LYMPH-INTRATHOR	1982	SECONDARY MALIG NEO SKIN
1962	MAL NEO LYMPH INTRA-ABD	1983	SEC MAL NEO BRAIN/SPINE
1963	MAL NEO LYMPH-AXILLA/ARM	1984	SEC MALIG NEO NERVE NEC
1965	MAL NEO LYMPH-INGUIN/LEG	1985	SECONDARY MALIG NEO BONE
1966	MAL NEO LYMPH-INTRAPELV	1986	SECOND MALIG NEO OVARY
1968	MAL NEO LYMPH NODE-MULT	1987	SECOND MALIG NEO ADRENAL

1969	MAL NEO LYMPH NODE NOS	19881	SECOND MALIG NEO BREAST
1970	SECONDARY MALIG NEO LUNG	19882	SECOND MALIG NEO GENITAL
1971	SEC MAL NEO MEDIASTINUM	19889	SECONDARY MALIG NEO NEC
1972	SECOND MALIG NEO PLEURA	1990	MALIGNANT NEOPLASM WITHOUT
			SPECIFICATION OF SITE,
			DISSEMINATED
1973	SEC MALIG NEO RESP NEC	20970	SEC NEUROENDO TUMOR NOS
1974	SEC MALIG NEO SM BOWEL	20971	SEC NEUROEND TU DIST LYM
1975	SEC MALIG NEO LG BOWEL	20972	SEC NEUROEND TUMOR-LIVER
1976	SEC MAL NEO PERITONEUM	20973	SEC NEUROENDO TUMOR-BONE
1977	SECOND MALIG NEO LIVER	20974	SEC NEUROENDO TU-PERITON
1978	SEC MAL NEO GI NEC	20975	SECONDARY MERKEL CELL CA
1980	SECOND MALIG NEO KIDNEY	20979	SEC NEUROEND TU OTH SITE

ICD-9-CM Lymphoid malignancy diagnosis codes:

20000	RETCLSRC UNSP XTRNDL ORG	20251	LETTERER-SIWE DIS HEAD
			LETTERER-SIWE DISTIEAD LETTERER-SIWE DISTIEAD
20001	RETICULOSARCOMA HEAD	20252	
20002	RETICULOSARCOMA THORAX	20253	LETTERER-SIWE DIS ABDOM
20003	RETICULOSARCOMA ABDOM	20254	LETTERER-SIWE DIS AXILLA
20004	RETICULOSARCOMA AXILLA	20255	LETTERER-SIWE DIS INGUIN
20005	RETICULOSARCOMA INGUIN	20256	LETTERER-SIWE DIS PELVIC
20006	RETICULOSARCOMA PELVIC	20257	LETTERER-SIWE DIS SPLEEN
20007	RETICULOSARCOMA SPLEEN	20258	LETTERER-SIWE DIS MULT
20008	RETICULOSARCOMA MULT	20260	MLG MAST UNSP XTRNDL ORG
20010	LYMPHSRC UNSP XTRNDL ORG	20261	MAL MASTOCYTOSIS HEAD
20011	LYMPHOSARCOMA HEAD	20262	MAL MASTOCYTOSIS THORAX
20012	LYMPHOSARCOMA THORAX	20263	MAL MASTOCYTOSIS ABDOM
20013	LYMPHOSARCOMA ABDOM	20264	MAL MASTOCYTOSIS AXILLA
20014	LYMPHOSARCOMA AXILLA	20265	MAL MASTOCYTOSIS INGUIN
20015	LYMPHOSARCOMA INGUIN	20266	MAL MASTOCYTOSIS PELVIC
20016	LYMPHOSARCOMA PELVIC	20267	MAL MASTOCYTOSIS SPLEEN
20017	LYMPHOSARCOMA SPLEEN	20268	MAL MASTOCYTOSIS MULT
20017	LYMPHOSARCOMA MULT	20280	OTH LYMP UNSP XTRNDL ORG
	BRKT TMR UNSP XTRNDL ORG	20280	
20020			LYMPHOMAS NEC HEAD
20021	BURKITTS TUMOR HEAD	20282	LYMPHOMAS NEC THORAX
20022	BURKITTS TUMOR THORAX	20283	LYMPHOMAS NEC ABDOM
20023	BURKITTS TUMOR ABDOM	20284	LYMPHOMAS NEC AXILLA
20024	BURKITTS TUMOR AXILLA	20285	LYMPHOMAS NEC INGUIN
20025	BURKITTS TUMOR INGUIN	20286	LYMPHOMAS NEC PELVIC
20026	BURKITTS TUMOR PELVIC	20287	LYMPHOMAS NEC SPLEEN
20027	BURKITTS TUMOR SPLEEN	20288	LYMPHOMAS NEC MULT
20028	BURKITTS TUMOR MULT	20290	UNSP LYM UNSP XTRNDL ORG
20080	OTH VARN UNSP XTRNDL ORG	20291	LYMPHOID MAL NEC HEAD
20081	MIXED LYMPHOSARC HEAD	20292	LYMPHOID MAL NEC THORAX
20082	MIXED LYMPHOSARC THORAX	20293	LYMPHOID MAL NEC ABDOM
20083	MIXED LYMPHOSARC ABDOM	20294	LYMPHOID MAL NEC AXILLA
20084	MIXED LYMPHOSARC AXILLA	20295	LYMPHOID MAL NEC INGUIN
20085	MIXED LYMPHOSARC INGUIN	20296	LYMPHOID MAL NEC PELVIC
20086	MIXED LYMPHOSARC PELVIC	20297	LYMPHOID MAL NEC SPLEEN
20087	MIXED LYMPHOSARC SPLEEN	20298	LYMPHOID MAL NEC MULT
20088	MIXED LYMPHOSARC MULT	2030	MULTIPLE MYELOMA
20100	HDGK PRG UNSP XTRNDL ORG	20300	MULT MYELM W/O REMISSION
20100	HODGKINS PARAGRAN HEAD	20301	MULT MYELM W REMISSION
20101	HODGKINS PARAGRAN THORAX	20301	MULT MYELOMA IN RELAPSE
20102	HODGKINS PARAGRAN ABDOM	20302	PLASMA CELL LEUKEMIA
20104	HODGKINS PARAGRAN AXILLA	20310	PLSM CELL LEUK W/O RMSON
20105	HODGKINS PARAGRAN INGUIN	20311	PLSM CELL LEUK W RMSON
20106	HODGKINS PARAGRAN PELVIC	20312	PLSM CEL LEUK IN RELAPSE
20107	HODGKINS PARAGRAN SPLEEN	2038	IMMUNOPROLIFERAT NEO NEC
20108	HODGKINS PARAGRAN MULT	20380	OTH IMNPRFL NPL W/O RMSN
20110	HDGK GRN UNSP XTRNDL ORG	20381	OTH IMNPRFL NPL W RMSN
20111	HODGKINS GRANULOM HEAD	20382	OTH IMNPRLF NEO-RELAPSE

20112	HODOKING CDANI II OM THODAY	2040	ACLITE I VMDHOID I ELIKEMIA
20112	HODGKINS GRANULOM THORAX	2040	ACUTE LYMPHOID LEUKEMIA
20113	HODGKINS GRANULOM ABDOM	20400	ACT LYM LEUK W/O RMSION
20114	HODGKINS GRANULOM AXILLA	20401	ACT LYM LEUK W RMSION
20115	HODGKINS GRANULOM INGUIN	20402	ACT LYMP LEUK IN RELAPSE
20116	HODGKINS GRANULOM PELVIC	2041	CHR LYMPHOID LEUKEMIA
20117	HODGKINS GRANULOM SPLEEN	20410	CHR LYM LEUK W/O RMSION
20118	HODGKINS GRANULOM MULT	20411	CHR LYM LEUK W RMSION
20120	HDGK SRC UNSP XTRNDL ORG	20412	CHR LYMP LEUK IN RELAPSE
20121	HODGKINS SARCOMA HEAD	2042	SUBAC LYMPHOID LEUKEMIA
20122	HODGKINS SARCOMA THORAX	20420	SBAC LYM LEUK W/O RMSION
20123	HODGKINS SARCOMA ABDOM	20421	SBAC LYM LEUK W RMSION
20124	HODGKINS SARCOMA AXILLA	20422	SBAC LYM LEUK IN RELAPSE
20125	HODGKINS SARCOMA INGUIN	2048	LYMPHOID LEUKEMIA NEC
20126	HODGKINS SARCOMA PELVIC	20480	OTH LYM LEUK W/O RMSION
20127	HODGKINS SARCOMA SPLEEN	20481	OTH LYM LEUK W RMSION
20128	HODGKINS SARCOMA MULT	20482	OTH LYM LEUK IN RELAPSE
20140	LYM-HST UNSP XTRNDL ORGN	2049	LYMPHOID LEUKEMIA NOS
20141	HODG LYMPH-HISTIO HEAD	20490	UNS LYM LEUK W/O RMSION
20142	HODG LYMPH-HISTIO THORAX	20491	UNS LYM LEUK W RMSION
20143	HODG LYMPH-HISTIO ABDOM	20492	LYMP LEUK NOS RELAPSE
20144	HODG LYMPH-HISTIO AXILLA	2050	ACUTE MYELOID LEUKEMIA
20145	HODG LYMPH-HISTIO INGUIN	20500	ACT MYL LEUK W/O RMSION
20146	HODG LYMPH-HISTIO PELVIC	20501	ACT MYL LEUK W RMSION
20147	HODG LYMPH-HISTIO SPLEEN	20502	ACT MYEL LEUK IN RELAPSE
20148	HODG LYMPH-HISTIO MULT	2051	CHRONIC MYELOID LEUKEMIA
20150	NDR SCLR UNSP XTRNDL ORG	20510	CHR MYL LEUK W/O RMSION
20151	HODG NODUL SCLERO HEAD	20511	CHR MYL LEUK W RMSION
20152	HODG NODUL SCLERO THORAX	20512	CHR MYEL LEUK IN RELAPSE
20153	HODG NODUL SCLERO ABDOM	2052	SUBACUT MYELOID LEUKEMIA
20154	HODG NODUL SCLERO AXILLA	20520	SBAC MYL LEUK W/O RMSION
20155	HODG NODUL SCLERO INGUIN	20521	SBAC MYL LEUK W RMSION
20156	HODG NODUL SCLERO PELVIC	20522	SBAC MYL LEUK IN RELAPSE
20157	HODG NODUL SCLERO SPLEEN	2053	MYELOID SARCOMA
20158	HODG NODUL SCLERO MULT	20530	MYL SRCOMA W/O RMSION
20160	MXD CELR UNSP XTRNDL ORG	20531	MYL SRCOMA W RMSION
20161	HODGKINS MIX CELL HEAD	20532	MYEL SARCOMA IN RELAPSE
20162	HODGKINS MIX CELL THORAX	2058	MYELOID LEUKEMIA NEC
20163	HODGKINS MIX CELL ABDOM	20580	OTH MYL LEUK W/O RMSION
20164	HODGKINS MIX CELL AXILLA	20581	OTH MYL LEUK W RMSION
20165	HODGKINS MIX CELL INGUIN	20582	OTH MYEL LEUK IN RELAPSE
20166	HODGKINS MIX CELL PELVIC	2059	MYELOID LEUKEMIA NOS
20167	HODGKINS MIX CELL SPLEEN	20590	UNS MYL LEUK W/O RMSION
20168	HODGKINS MIX CELL MULT	20591	UNS MYL LEUK W RMSION
20170	LYM DPLT UNSP XTRNDL ORG	20592	MYEL LEUK NOS IN RELAPSE
20171	HODG LYMPH DEPLET HEAD	2060	ACUTE MONOCYTIC LEUKEMIA
20172	HODG LYMPH DEPLET THORAX	20600	ACT MONO LEUK W/O RMSION
20173	HODG LYMPH DEPLET ABDOM	20601	ACT MONO LEUK W RMSION
20174	HODG LYMPH DEPLET AXILLA	20602	ACT MONO LEUK IN RELAPSE
20175	HODG LYMPH DEPLET INGUIN	2061	CHR MONOCYTIC LEUKEMIA
20176	HODG LYMPH DEPLET PELVIC	20610	CHR MONO LEUK W/O RMSION
20177	HODG LYMPH DEPLET SPLEEN	20611	CHR MONO LEUK W RMSION
20178	HODG LYMPH DEPLET MULT	20612	CHR MONO LEUK IN RELAPSE
20190	HDGK DIS UNSP XTRNDL ORG	2062	SUBAC MONOCYTIC LEUKEMIA
20191	HODGKINS DIS NOS HEAD	20620	SBAC MONO LEUK W/O RMSON
20192	HODGKINS DIS NOS THORAX	20621	SBAC MONO LEUK W RMSION
20193	HODGKINS DIS NOS ABDOM	20622	SBAC MONO LEU IN RELAPSE
20194	HODGKINS DIS NOS AXILLA	2068	MONOCYTIC LEUKEMIA NEC
20195	HODGKINS DIS NOS INGUIN	20680	OTH MONO LEUK W/O RMSION
20196	HODGKINS DIS NOS PELVIC	20681	OTH MONO LEUK W RMSION
20197	HODGKINS DIS NOS SPLEEN	20682	OTH MONO LEUK IN RELAPSE
20198	HODGKINS DIS NOS MULT	2069	MONOCYTIC LEUKEMIA NOS
202	OTH MAL NEOPL LYMPH	20690	UNS MONO LEUK W/O RMSION
20200	NDLR LYM UNSP XTRNDL ORG		
20200	INDER FINI ONOL VIKINDE OKO	20691	UNS MONO LEUK W RMSION

20201	NODULAR LYMPHOMA HEAD	20692	MONO LEUK NOS RELAPSE
20202	NODULAR LYMPHOMA THORAX	2070	ACUTE ERYTHREMIA
20203	NODULAR LYMPHOMA ABDOM	20700	ACT ERTH/ERYLK W/O RMSON
20204	NODULAR LYMPHOMA AXILLA	20701	ACT ERTH/ERYLK W RMSON
20205	NODULAR LYMPHOMA INGUIN	20702	AC ERTH/ERYLK IN RELAPSE
20206	NODULAR LYMPHOMA PELVIC	2071	CHRONIC ERYTHREMIA
20207	NODULAR LYMPHOMA SPLEEN	20710	CHR ERYTHRM W/O REMISION
20208	NODULAR LYMPHOMA MULT	20711	CHR ERYTHRM W REMISION
20210	MYCS FNG UNSP XTRNDL ORG	20712	CHR ERYTHRMIA IN RELAPSE
20211	MYCOSIS FUNGOIDES HEAD	2072	MEGAKARYOCYTIC LEUKEMIA
20212	MYCOSIS FUNGOIDES THORAX	20720	MGKRYCYT LEUK W/O RMSION
20213	MYCOSIS FUNGOIDES ABDOM	20721	MGKRYCYT LEUK W RMSION
20214	MYCOSIS FUNGOIDES AXILLA	20722	MGKRYCYT LEUK IN RELAPSE
20215	MYCOSIS FUNGOIDES INGUIN	2078	SPECIFIED LEUKEMIA NEC
20216	MYCOSIS FUNGOIDES PELVIC	20780	OTH SPF LEUK W/O REMSION
20217	MYCOSIS FUNGOIDES SPLEEN	20781	OTH SPF LEUK W REMSION
20217	MYCOSIS FUNGOIDES MULT	20782	OTH SPF LEUK IN RELAPSE
20210	SZRY DIS UNSP XTRNDL ORG	20702	ACT LEUK UNS CL W/O RMSN
20221	SEZARYS DISEASE HEAD	20800	ACT LEUK UNS CL W/O RMSN
20221	SEZARYS DISEASE THORAX	20801	ACT LEUK UNS CL W RMSON
20222	SEZARYS DISEASE ABDOM	20801	AC LEUK UNS CL W RMSON AC LEUK UNS CL RELAPSE
20224	SEZARYS DISEASE AXILLA SEZARYS DISEASE INGUIN	2081 20810	CHRONIC LEUKEMIA NOS CHR LEUK UNS CL W/O RMSN
20225			
20226	SEZARYS DISEASE PELVIC	20811	CHR LEUK UNS CL W RMSON
20227	SEZARYS DISEASE SPLEEN	20812	CH LEU UNS CL IN RELAPSE
20228	SEZARYS DISEASE MULT	2082	SUBACUTE LEUKEMIA NOS
20230	MLG HIST UNSP XTRNDL ORG	20820	SBAC LEUK UNS CL W/O RMS
20231	MAL HISTIOCYTOSIS HEAD	20821	SBAC LEUK UNS CL W RMSON
20232	MAL HISTIOCYTOSIS THORAX	20822	SBAC LEU UNS CL-RELAPSE
20233	MAL HISTIOCYTOSIS ABDOM	2088	LEUKEMIA-UNSPEC CELL NEC
20234	MAL HISTIOCYTOSIS AXILLA	20880	OTH LEUK UNS CL W/O RMSN
20235	MAL HISTIOCYTOSIS INGUIN	20881	OTH LEUK UNS CL W RMSON
20236	MAL HISTIOCYTOSIS PELVIC	20882	OTH LEUK UNS CL-RELAPSE
20237	MAL HISTIOCYTOSIS SPLEEN	2089	LEUKEMIA-UNSPEC CELL NOS
20238	MAL HISTIOCYTOSIS MULT	20890	LEUKEMIA NOS W/O REMSION
20240	LK RTCTL UNSP XTRNDL ORG	20891	LEUKEMIA NOS W REMISSION
20241	HAIRY-CELL LEUKEM HEAD	20892	LEUKEMIA NOS IN RELAPSE
20242	HAIRY-CELL LEUKEM THORAX	20970	SEC NEUROENDO TUMOR NOS
20243	HAIRY-CELL LEUKEM ABDOM	20971	SEC NEUROEND TU DIST LYM
20244	HAIRY-CELL LEUKEM AXILLA	20972	SEC NEUROEND TUMOR-LIVER
20245	HAIRY-CELL LEUKEM INGUIN	20973	SEC NEUROENDO TUMOR-BONE
20246	HAIRY-CELL LEUKEM PELVIC	20974	SEC NEUROENDO TU-PERITON
20247	HAIRY-CELL LEUKEM SPLEEN	20975	SECONDARY MERKEL CELL CA
20248	HAIRY-CELL LEUKEM MULT	20979	SEC NEUROEND TU OTH SITE
20250	LTR-SIWE UNSP XTRNDL ORG	_30.0	
20200	ETT SITTE STOP ATTRIBLE ONG		

ICD-9-CM Bone malignancy diagnosis codes:

	0 7 0		
1700	MAL NEO SKULL/FACE BONE	1705	MAL NEO BONES WRIST/HAND
1701	MALIGNANT NEO MANDIBLE	1706	MAL NEO PELVIC GIRDLE
1702	MALIG NEO VERTEBRAE	1707	MAL NEO LONG BONES LEG
1703	MAL NEO RIBS/STERN/CLAV	1708	MAL NEO BONES ANKLE/FOOT
1704	MAL NEO LONG BONES ARM	1709	MALIG NEOPL BONE NOS