

Supplementary Table 7.1: Demographic and clinical characteristics at the first visit in a rheumatology outpatient clinic of those patients that were not discharged, that were discharged and were not readmitted or that were discharged and later readmitted

Variables*	No discharge	Without Outpatient Readmission	With Outpatient Readmission	p-value total
<b>Sex</b>	7310 (67.1)	11489 (69.3)	4445 (73.8)	8.29E-19
<b>Age at first visit, median (Q1-Q3)</b>	54.8 (41.7-69.7)	55.2 (43.6-69.2)	57.5 (46.4-71.1)	6.32E-21
<b>Diagnoses</b>				
No Diagnosis	2100 (19.3)	2389 (14.4)	796 (13.2)	6.58E-34
Tendinitis (Upper Extremities)	1335 (12.2)	2612 (15.8)	1066 (17.7)	6.27E-24
Back Pain	1013 (9.3)	2708 (16.3)	759 (12.6)	1.13E-62
Pain in Joint	917 (8.4)	2003 (12.1)	586 (9.7)	3.58E-22
Osteoarthritis of Knee	640 (5.9)	1484 (9)	549 (9.1)	5.45E-22
Tendinitis (Lower Extremities)	534 (4.9)	1171 (7.1)	510 (8.5)	1.82E-20
Osteoarthritis	406 (3.7)	1054 (6.4)	398 (6.6)	4.58E-23
Neck Pain	321 (2.9)	1079 (6.5)	335 (5.6)	3.87E-38
Chronic Polyarthritits	1011 (9.3)	175 (1.1)	293 (4.9)	4.21E-230
Tendinitis	391 (3.6)	739 (4.5)	272 (4.5)	7.29E-04
Osteoarthritis of Hand	247 (2.3)	865 (5.2)	247 (4.1)	1.05E-32
Crystal Arthropathies	467 (4.3)	442 (2.7)	247 (4.1)	5.66E-14
Muscle Disorders	181 (1.7)	748 (4.5)	186 (3.1)	4.21E-37
Peripheral Neuropathy	415 (3.8)	439 (2.6)	153 (2.5)	1.72E-08
Axial Neuropathy	366 (3.4)	448 (2.7)	168 (2.8)	0.005
Other connective tissue inflammatory diseases	581 (5.3)	222 (1.3)	137 (2.3)	8.94E-86
Osteoporosis	272 (2.5)	359 (2.2)	132 (2.2)	0.18
Gout	326 (3)	309 (1.9)	121 (2)	2.18E-09
Osteoarthritis of First Carpometacarpal Joint	98 (0.9)	376 (2.3)	149 (2.5)	1.09E-18
Osteoporosis Fracture	267 (2.4)	238 (1.4)	95 (1.6)	1.75E-09
Spondyloarthropathy	355 (3.3)	78 (0.5)	68 (1.1)	1.96E-77
Osteoarthritis of Hip	119 (1.1)	281 (1.7)	92 (1.5)	2.34E-04
Other non-Inflammatory Diseases	200 (1.8)	223 (1.3)	48 (0.8)	1.84E-07
Fibromyalgia	95 (0.9)	172 (1)	65 (1.1)	0.30
Deformity of Feet	42 (0.4)	202 (1.2)	61 (1)	6.69E-12
<b>Treatments</b>				
Analgesic 1st level	2745 (25.2)	5410 (32.6)	2055 (34.1)	3.72E-48
NSAIDs	2686 (24.6)	5110 (30.8)	2013 (33.4)	2.50E-40
Gastric protector	1634 (15)	2077 (12.5)	965 (16)	1.35E-13
Corticosteroid	1437 (13.2)	615 (3.7)	496 (8.2)	5.43E-184
Analgesic 2nd and 3rd level	732 (6.7)	1149 (6.9)	468 (7.8)	0.031
Calcium and Vitamin D	1057 (9.7)	728 (4.4)	353 (5.9)	1.00E-68
Benzodiazepine	510 (4.7)	1181 (7.1)	391 (6.5)	1.38E-15
Antiosteoporotic	281 (2.6)	296 (1.8)	121 (2)	3.65E-05
Colchicine	297 (2.7)	216 (1.3)	88 (1.5)	4.12E-18
Gabapentine	207 (1.9)	280 (1.7)	99 (1.6)	0.34

Other drugs	248 (2.3)	203 (1.2)	85 (1.4)	4.25E-11
NSAIDs Hard	274 (2.5)	153 (0.9)	90 (1.5)	1.56E-24
SYSADOA	90 (0.83)	293 (1.77)	94 (1.56)	
Antidepressant	127 (1.2)	162 (1)	73 (1.2)	0.19
Folic Acid	270 (2.5)	22 (0.1)	45 (0.7)	1.33E-80
DMARDs Oral Methotrexate	227 (2.1)	20 (0.1)	41 (0.7)	8.21E-66
Other DMARDs	215 (2)	16 (0.1)	32 (0.5)	1.47E-66
Lowering uric acid drugs	117 (1.1)	95 (0.6)	37 (0.6)	6.25E-06
DMARDs Antimalarial	174 (1.6)	9 (0.1)	41 (0.7)	7.49E-52
<b>Comorbidities</b>				
Hypertension	2289 (21)	3977 (24)	1552 (25.8)	3.81E-13
Dyslipidemia	1870 (17.2)	3336 (20.1)	1286 (21.4)	9.26E-13
Diabetes mellitus	818 (7.5)	1308 (7.9)	477 (7.9)	0.45
Hypothyroidism	588 (5.4)	990 (6)	374 (6.2)	0.051
Depression	410 (3.8)	763 (4.6)	309 (5.1)	5.30E-05
Cancer	491 (4.5)	708 (4.3)	251 (4.2)	0.52
Neurologic disease	341 (3.1)	590 (3.6)	181 (3)	0.048
Smoking habit	397 (3.6)	547 (3.3)	156 (2.6)	0.001
Articular prosthesis	342 (3.1)	543 (3.3)	209 (3.5)	0.50
Obesity	278 (2.6)	604 (3.6)	205 (3.4)	2.73E-06
Other arrhythmias	364 (3.3)	524 (3.2)	194 (3.2)	0.71
Anticoagulant	357 (3.3)	469 (2.8)	189 (3.1)	0.093
Other stomach-esophagus-bowel diseases	336 (3.1)	457 (2.8)	171 (2.8)	0.28
Biliary diseases	301 (2.8)	427 (2.6)	219 (3.6)	1.04E-04
Gynecology surgeries	286 (2.6)	463 (2.8)	167 (2.8)	0.69
Cholecystectomy	288 (2.6)	409 (2.5)	207 (3.4)	3.31E-04
Ischemic heart disease	315 (2.9)	437 (2.6)	147 (2.4)	0.19
Other colon diseases	302 (2.8)	398 (2.4)	179 (3)	0.030
Osteoporosis	213 (2)	451 (2.7)	204 (3.4)	4.67E-08
Appendicitis	292 (2.7)	398 (2.4)	155 (2.6)	0.34
Other virus infection	261 (2.4)	352 (2.1)	147 (2.4)	0.21
Asthma	254 (2.3)	346 (2.1)	156 (2.6)	0.065
Hiatal hernia	226 (2.1)	346 (2.1)	171 (2.8)	0.001
Back pain	221 (2)	365 (2.2)	143 (2.4)	0.32
Peripheral venous insufficiency	221 (2)	333 (2)	154 (2.6)	0.030
Other endocrine diseases	218 (2)	350 (2.1)	138 (2.3)	0.45
Atrial fibrillation	254 (2.3)	323 (1.9)	118 (2)	0.074
Other uterus diseases	206 (1.9)	337 (2)	152 (2.5)	0.019
Central peripheral systems diseases	234 (2.15)	314 (1.89)	142 (2.36)	0.070
Benign prostatic hypertrophy	211 (1.9)	355 (2.1)	110 (1.8)	0.25
Hematologic disease	220 (2)	302 (1.8)	120 (2)	0.45
Other infection	243 (2.2)	268 (1.6)	119 (2)	0.001
Allergy	208 (1.9)	293 (1.8)	120 (2)	0.47
Articular surgery non-prosthesis	194 (1.8)	306 (1.8)	121 (2)	0.57
Thyroid others	212 (1.9)	290 (1.7)	111 (1.8)	0.49
Pregnancy	208 (1.9)	292 (1.8)	110 (1.8)	0.67
Hyperuricemia	205 (1.9)	288 (1.7)	94 (1.6)	0.31
Helicobacter pylori infection	196 (1.8)	278 (1.7)	112 (1.9)	0.58
Cataract	205 (1.9)	266 (1.6)	113 (1.9)	0.16
Other musculoskeletal diseases	192 (1.8)	274 (1.7)	113 (1.9)	0.50

Other otorhinolaryngology diseases	194 (1.8)	271 (1.6)	101 (1.7)	0.66
Feet diseases	188 (1.7)	259 (1.6)	118 (2)	0.11
Alcoholic habit	207 (1.9)	246 (1.5)	103 (1.7)	0.029
Gastroesophageal reflux disease	167 (1.5)	278 (1.7)	103 (1.7)	0.57
Anxiety	131 (1.2)	277 (1.7)	131 (2.2)	6.09E-06
Chronic obstructive pulmonary disease	175 (1.6)	273 (1.6)	87 (1.4)	0.56
Non osteoporotic fracture	196 (1.8)	225 (1.4)	103 (1.7)	0.009
Column surgery	164 (1.5)	258 (1.6)	97 (1.6)	0.86
Other hip knee diseases	154 (1.4)	228 (1.4)	117 (1.9)	0.006
Other dermatological diseases	176 (1.6)	231 (1.4)	84 (1.4)	0.29
ORL surgeries	145 (1.3)	249 (1.5)	96 (1.6)	0.33
Other spine diseases	149 (1.4)	240 (1.4)	99 (1.6)	0.35
Osteoporotic fracture	164 (1.5)	224 (1.4)	98 (1.6)	0.26
Other respiratory diseases	167 (1.5)	219 (1.3)	87 (1.4)	0.34
Connective tissue disease	201 (1.8)	189 (1.1)	82 (1.4)	7.60E-06
Breast cancer	140 (1.3)	237 (1.4)	92 (1.5)	0.39
Migraine	141 (1.3)	238 (1.4)	78 (1.3)	0.54
Viral hepatitis	166 (1.5)	204 (1.2)	83 (1.4)	0.12
Cerebrovascular disease	148 (1.4)	221 (1.3)	78 (1.3)	0.94
Internal derangement of knee	118 (1.1)	227 (1.4)	83 (1.4)	0.087
Other eye diseases	141 (1.3)	197 (1.2)	90 (1.5)	0.19
Psoriasis	167 (1.5)	182 (1.1)	65 (1.1)	0.003
Anemia	146 (1.3)	182 (1.1)	77 (1.3)	0.17
Urological obstruction	140 (1.3)	186 (1.1)	67 (1.1)	0.42
Kidney failure	142 (1.3)	170 (1)	75 (1.2)	0.084
Other urological diseases	122 (1.1)	187 (1.1)	68 (1.1)	1.00
Non-specified valvulopathy	131 (1.2)	182 (1.1)	64 (1.1)	0.64
Other liver disease	127 (1.2)	177 (1.1)	69 (1.1)	0.73
Connective tissue benign tumour	115 (1.1)	182 (1.1)	76 (1.3)	0.45
Gastritis	104 (1)	178 (1.1)	80 (1.3)	0.078
Other ear diseases	104 (1)	173 (1)	76 (1.3)	0.17
Thyroidectomy	107 (1)	172 (1)	72 (1.2)	0.42
Other benign tumours	110 (1)	157 (0.9)	74 (1.2)	0.17
Knee surgery prosthesis	108 (1)	172 (1)	58 (1)	0.86
Colon abdomen surgeries	111 (1)	163 (1)	61 (1)	0.95
Shoulder elbow diseases	111 (1)	155 (0.9)	64 (1.1)	0.63
Other ovary diseases	115 (1.1)	142 (0.9)	55 (0.9)	0.24
Urological surgery	90 (0.8)	138 (0.8)	67 (1.1)	0.10
Glaucoma	84 (0.8)	137 (0.8)	71 (1.2)	0.016
Benign breast tumor	89 (0.8)	135 (0.8)	50 (0.8)	0.99
Statins	1408 (12.9)	2661 (16.1)	1056 (17.5)	1.04E-17
Diuretic	815 (7.5)	1341 (8.1)	551 (9.2)	6.71E-04
Proton-pump inhibitor medication	778 (7.1)	1172 (7.1)	565 (9.4)	8.39E-09
Angiotensin-converting-enzyme inhibitor	713 (6.5)	1167 (7)	462 (7.7)	0.021
Angiotensin II receptor blocker	588 (5.4)	1006 (6.1)	422 (7)	1.24E-04
Benzodiazepine	588 (5.4)	977 (5.9)	436 (7.2)	6.48E-06
Thyroid hormone	563 (5.2)	967 (5.8)	401 (6.7)	3.01E-04
Antidepressant medication	553 (5.1)	981 (5.9)	384 (6.4)	7.28E-04
Antiaggregant	570 (5.2)	900 (5.4)	354 (5.9)	0.20

Oral antidiabetics	537 (4.9)	923 (5.6)	336 (5.6)	0.049
Calcium	378 (3.5)	774 (4.7)	331 (5.5)	6.61E-10
Calcium antagonist	410 (3.8)	711 (4.3)	267 (4.4)	0.046
Beta-blocker	429 (3.9)	641 (3.9)	270 (4.5)	0.10
Other non-specified antihypertensive drugs	151 (1.4)	461 (2.8)	163 (2.7)	4.00E-14
Paracetamol	252 (2.3)	342 (2.1)	162 (2.7)	0.017
Biphosphonates	184 (1.7)	376 (2.3)	165 (2.7)	1.72E-05
Bronchodilator	202 (1.9)	288 (1.7)	128 (2.1)	0.16
Insulin	152 (1.4)	291 (1.8)	117 (1.9)	0.014
NSAIDs	199 (1.8)	198 (1.2)	131 (2.2)	4.39E-08
Benign prostatic hyperplasia medication	160 (1.5)	255 (1.5)	79 (1.3)	0.46
Lowering uric acid drugs	177 (1.6)	237 (1.4)	75 (1.2)	0.13
Inhaled corticosteroid	150 (1.4)	192 (1.2)	86 (1.4)	0.15
Gabapentin	130 (1.2)	196 (1.2)	91 (1.5)	0.12
Tramadol	118 (1.1)	198 (1.2)	81 (1.3)	0.32
Allergy medication	96 (0.9)	146 (0.9)	62 (1)	0.54
Ocular hypertension medication	90 (0.8)	135 (0.8)	75 (1.2)	0.006
Symptomatic slow action drugs	53 (0.49)	149 (0.9)	83 (1.38)	7.23E-09
Antiepileptics	91 (0.8)	138 (0.8)	47 (0.8)	0.92
Constipation medication	81 (0.7)	124 (0.7)	56 (0.9)	0.34
Metamizole	96 (0.9)	111 (0.7)	46 (0.8)	0.14
<b>Occupation</b>				
Active	6368 (58.4)	9641 (58.2)	3267 (54.3)	2.55E-15
Retired	2573 (23.6)	3747 (22.6)	1519 (25.2)	
Housework	1656 (15.2)	2763 (16.7)	1137 (18.9)	
Student	301 (2.8)	423 (2.6)	98 (1.6)	
<b>Distress</b>				
None	1696 (15.6)	3198 (19.3)	907 (15.1)	1.36E-57
Low	6738 (61.8)	10770 (65)	3899 (64.8)	
Moderate	2321 (21.3)	2501 (15.1)	1180 (19.6)	
High	143 (1.3)	105 (0.6)	35 (0.6)	
<b>Disability</b>				
None	3615 (33.2)	7207 (43.5)	2054 (34.1)	9.11E-120
Slight social	4264 (39.1)	6420 (38.7)	2724 (45.2)	
Severe social and slight physical	1680 (15.4)	1765 (10.6)	742 (12.3)	
Moderate decrease in mobility	841 (7.7)	741 (4.5)	348 (5.8)	
Severe decrease in mobility	364 (3.3)	322 (1.9)	119 (2)	
Almost dependent	126 (1.2)	113 (0.7)	34 (0.6)	
In bed	8 (0.1)	6 (0)	0 (0)	
<b>Rosser Classification Index</b>	98.6	98.6	98.6	
<b>median (Q1-Q3)</b>	(97.2 to 99.5)	(98.6 to 99.5)	(97.3 to 99.5)	1.33E-26

\* n (%) for all variables except indicated otherwise. Q1-Q3: First and third quartiles; NSAIDs: Nonsteroidal anti-inflammatory drugs; ORL: Otorhinolaryngology; SYSADOA: Symptomatic Slow-Acting Drugs for Osteoarthritis

Supplementary Table 7.2: Bivariable linear regression mixed models to assess the influence of demographic and clinical related variables in the health-related quality of life of the first visit of each episode, in patients attending a rheumatology outpatient clinic

Variable	Main effect diagnosis		Main effect Episode		Interaction		AIC
	Coef. (95% CI)	p-value	Coef. (95% CI)	p-value	Coef. (95% CI)	p-value	
Readmission visit			-0.09 (-0.19 to 0.01)	0.073			87532.1
Hip Osteoarthritis							87515.35
No diagnosis	Ref.						
In the first episode	-1.48 (-2.30 to -0.65)	4.79E-04					
In the second episode	-1.14 (-1.82 to -0.45)	0.001					
In both episodes	-1.10 (-1.96 to -0.23)	0.013					
Hip Osteoarthritis X Episode							87496.46
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-2.49 (-3.51 to -1.47)	1.63E-06	-0.09 (-0.19 to 0.01)	0.067	2.03 (0.84 to 3.21)	7.90E-04	
In the second episode	-0.32 (-1.16 to 0.52)	0.45			-1.63 (-2.60 to -0.65)	0.001	
In both episodes	-1.43 (-2.45 to -0.42)	0.006			0.67 (-0.39 to 1.73)	2.20E-01	
Knee Osteoarthritis							87477.71
No diagnosis	Ref.						
In the first episode	-0.64 (-1.06 to -0.22)	0.003					
In the second episode	-0.36 (-0.71 to -0.02)	0.038					
In both episodes	-1.25 (-1.57 to -0.93)	1.35E-14					
Knee Osteoarthritis X Episode							87463.86
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.38 (-0.89 to 0.14)	0.15	-0.09 (-0.19 to 0.02)	0.11	-0.52 (-1.11 to 0.07)	0.085	
In the second episode	-0.04 (-0.46 to 0.38)	0.84			-0.64 (-1.12 to -0.16)	0.009	
In both episodes	-1.52 (-1.89 to -1.15)	8.81E-16			0.54 (0.16 to 0.92)	0.005	
Hand Osteoarthritis							87531.58
No diagnosis	Ref.						

In the first episode	0.47 (-0.10 to 1.05)	0.11					
In the second episode	0.50 (-0.08 to 1.08)	0.09					
In both episodes	0.56 (0.05 to 1.08)	0.032					
Hand Osteoarthritis							87534
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.75 (0.05 to 1.45)	0.037	-0.07 (-0.17 to 0.03)	0.15	-0.55 (-1.36 to 0.25)	0.18	
In the second episode	0.61 (-0.10 to 1.31)	0.09			-0.22 (-1.02 to 0.58)	0.59	
In both episodes	0.65 (0.05 to 1.26)	0.033			-0.19 (-0.81 to 0.44)	0.56	
Osteoarthritis of First							87536.24
Carpometacarpal Joint							
No diagnosis	Ref.						
In the first episode	0.16 (-0.49 to 0.81)	0.64					
In the second episode	0.36 (-0.32 to 1.03)	0.3					
In both episodes	0.55 (-0.14 to 1.23)	0.12					
Osteoarthritis of First							87537.95
Carpometacarpal Joint							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.55 (-0.24 to 1.34)	0.17	-0.08 (-0.18 to 0.02)	0.12	-0.79 (-1.69 to 0.11)	0.084	
In the second episode	0.43 (-0.40 to 1.26)	0.31			-0.15 (-1.10 to 0.80)	0.75	
In both episodes	0.53 (-0.27 to 1.33)	0.19			0.03 (-0.82 to 0.87)	9.50E-01	
Osteoarthritis of							87512.37
Peripheral Joints							
No diagnosis	Ref.						
In the first episode	-0.76 (-1.21 to -0.32)	7.30E-04					
In the second episode	-0.43 (-0.87 to 0.00)	0.053					
In both episodes	-0.91 (-1.32 to -0.50)	1.26E-05					

Osteoarthritis of Peripheral Joints X Episode							87507.23
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.42 (-0.96 to 0.12)	0.13	-0.06 (-0.17 to 0.04)	0.22	-0.69 (-1.30 to -0.07)	0.029	
In the second episode	-0.12 (-0.65 to 0.41)	0.65			-0.62 (-1.21 to -0.02)	0.042	
In both episodes	-1.03 (-1.50 to -0.55)	2.24E-05			0.24 (-0.25 to 0.73)	3.30E-01	
Neck Pain X Episode							87537.89
No diagnosis	Ref.						
In the first episode	0.24 (-0.18 to 0.66)	0.26					
In the second episode	0.13 (-0.38 to 0.63)	0.63					
In both episodes	0.11 (-0.40 to 0.61)	0.67					
Neck Pain X Episode							87541.83
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.37 (-0.15 to 0.88)	0.17	-0.09 (-0.19 to 0.02)	0.1	-0.25 (-0.84 to 0.35)	0.41	
In the second episode	0.13 (-0.49 to 0.74)	0.69			0.00 (-0.69 to 0.70)	1.00E+00	
In both episodes	0.04 (-0.55 to 0.64)	0.88			0.13 (-0.51 to 0.77)	6.90E-01	
Feet deformities X Episode							87535.02
No diagnosis	Ref.						
In the first episode	-0.66 (-1.56 to 0.24)	0.15					
In the second episode	0.14 (-0.72 to 0.99)	0.76					
In both episodes	-0.82 (-1.85 to 0.22)	0.12					
Feet deformities X Episode							87536.73
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.37 (-1.46 to 0.72)	0.51	-0.09 (-0.19 to 0.01)	0.074	-0.58 (-1.83 to 0.66)	0.36	
In the second episode	0.21 (-0.84 to 1.25)	0.7			-0.14 (-1.34 to 1.05)	0.81	
In both episodes	-1.35 (-2.60 to -0.09)	0.036			1.06 (-0.35 to 2.47)	1.40E-01	
Pain in Joint							87517.8

No diagnosis		Ref.					
In the first episode		0.42 (0.07 to 0.78)	0.02				
In the second episode		0.53 (0.14 to 0.92)	0.008				
In both episodes		0.75 (0.36 to 1.13)	1.54E-04				
Pain in Joint							
X Episode		87517.79					
No diagnosis		Ref.	Ref.		Ref.		
In the first episode		0.65 (0.22 to 1.08)	0.003	-0.08 (-0.18 to 0.02)	0.13	-0.46 (-0.94 to 0.02)	0.059
In the second episode		0.53 (0.06 to 1.00)	0.028			0.01 (-0.52 to 0.54)	9.80E-01
In both episodes		0.62 (0.17 to 1.08)	0.007			0.25 (-0.23 to 0.73)	3.10E-01
Fibromyalgia		87517.19					
No diagnosis		Ref.					
In the first episode		-1.37 (-2.61 to -0.13)	0.03				
In the second episode		-1.56 (-2.38 to -0.74)	1.94E-04				
In both episodes		-1.45 (-2.25 to -0.65)	3.76E-04				
Fibromyalgia							
X Episode		87513.52					
No diagnosis		Ref.	Ref.		Ref.		
In the first episode		-2.21 (-3.74 to -0.68)	0.005	-0.08 (-0.18 to 0.02)	0.1	1.68 (-0.10 to 3.45)	6.40E-02
In the second episode		-0.93 (-1.92 to 0.06)	0.067			-1.27 (-2.38 to -0.15)	0.026
In both episodes		-1.40 (-2.33 to -0.48)	0.003			-0.10 (-1.03 to 0.82)	0.83
Back Pain		87533.07					
No diagnosis		Ref.					
In the first episode		-0.04 (-0.37 to 0.28)	0.8				
In the second episode		0.15 (-0.16 to 0.47)	0.33				
In both episodes		-0.33 (-0.64 to -0.02)	0.036				
Back Pain							
X Episode		87531.53					
No diagnosis		Ref.	Ref.		Ref.		
In the first episode		0.19 (-0.21 to 0.58)	0.35	-0.05 (-0.16 to 0.06)	0.34	-0.46 (-0.91 to -0.01)	0.046



In the second episode	0.33 (-0.05 to 0.71)	0.09			-0.34 (-0.78 to 0.09)	0.12	
In both episodes	-0.36 (-0.72 to 0.00)	0.052			0.06 (-0.32 to 0.43)	7.70E-01	
Muscle Disorders							87537.68
No diagnosis	Ref.						
In the first episode	0.31 (-0.22 to 0.85)	0.25					
In the second episode	0.21 (-0.37 to 0.79)	0.48					
In both episodes	0.00 (-0.76 to 0.76)	1					
Muscle Disorders							87540.86
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.50 (-0.15 to 1.14)	0.13	-0.08 (-0.18 to 0.02)	0.11	-0.37 (-1.10 to 0.36)	0.33	
In the second episode	0.12 (-0.59 to 0.83)	0.74			0.18 (-0.62 to 0.98)	6.60E-01	
In both episodes	0.16 (-0.73 to 1.06)	0.72			-0.33 (-1.28 to 0.63)	0.5	
Gout							87536.13
No diagnosis	Ref.						
In the first episode	-0.24 (-1.29 to 0.81)	0.65					
In the second episode	-0.75 (-1.72 to 0.21)	0.13					
In both episodes	0.23 (-0.46 to 0.92)	0.51					
Gout							87528.13
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.42 (-0.85 to 1.69)	0.52	-0.07 (-0.17 to 0.03)	0.17	-1.32 (-2.75 to 0.11)	0.07	
In the second episode	0.27 (-0.90 to 1.43)	0.65			-2.04 (-3.33 to -0.74)	0.002	
In both episodes	0.32 (-0.48 to 1.11)	0.44			-0.17 (-0.95 to 0.62)	0.68	
Other connective tissue inflammatory diseases							87536.45
No diagnosis	Ref.						
In the first episode	0.38 (-0.96 to 1.71)	0.58					
In the second episode	0.27 (-0.42 to 0.96)	0.45					
In both episodes	-0.35 (-0.91 to 0.21)	0.22					

(Dx) Other connective tissue inflammatory diseases							87536.12
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.81 (-0.81 to 2.43)	0.33	-0.08 (-0.18 to 0.02)	0.14	-0.87 (-2.72 to 0.98)	0.36	
In the second episode	0.07 (-0.76 to 0.91)	0.86			0.39 (-0.55 to 1.33)	4.20E-01	
In both episodes	-0.05 (-0.69 to 0.59)	0.88			-0.60 (-1.23 to 0.02)	0.058	
Crystal arthropathies							87514.29
No diagnosis	Ref.						
In the first episode	-0.68 (-1.21 to -0.14)	0.013					
In the second episode	-0.71 (-1.25 to -0.18)	0.009					
In both episodes	-1.10 (-1.60 to -0.61)	1.28E-05					
Crystal arthropathies X Episode							87503.51
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.59 (-1.24 to 0.07)	0.078	-0.09 (-0.19 to 0.01)	0.083	-0.18 (-0.93 to 0.56)	0.63	
In the second episode	-0.17 (-0.82 to 0.48)	0.61			-1.09 (-1.84 to -0.34)	0.004	
In both episodes	-1.51 (-2.09 to -0.93)	3.49E-07			0.81 (0.21 to 1.41)	0.009	
Other non-Inflammatory Diseases							87510.44
No diagnosis	Ref.						
In the first episode	-2.46 (-3.59 to -1.33)	1.92E-05					
In the second episode	-1.38 (-2.24 to -0.52)	0.002					
In both episodes	-1.55 (-2.67 to -0.43)	0.007					
Other non-Inflammatory Diseases X Episode							87499.55
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-2.38 (-3.75 to -1.01)	6.68E-04	-0.08 (-0.18 to 0.02)	0.13	-0.16 (-1.72 to 1.41)	0.85	
In the second episode	-0.23 (-1.27 to 0.82)	0.67			-2.30 (-3.48 to -1.11)	1.44E-04	
In both episodes	-1.95 (-3.29 to -0.62)	0.004			0.80 (-0.65 to 2.25)	2.80E-01	

Chronic polyarthritis							87531.62
No diagnosis	Ref.						
In the first episode	-0.68 (-1.38 to 0.02)	0.058					
In the second episode	-0.53 (-1.01 to -0.04)	0.034					
In both episodes	-0.26 (-0.68 to 0.15)	0.22					
Chronic polyarthritis							87505.77
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.23 (-0.62 to 1.09)	0.59	-0.09 (-0.20 to 0.01)	0.071	-1.82 (-2.79 to -0.84)	2.57E-04	
In the second episode	-0.17 (-0.75 to 0.42)	0.58			-0.72 (-1.37 to -0.06)	0.032	
In both episodes	-0.65 (-1.12 to -0.18)	0.007			0.78 (0.34 to 1.23)	5.84E-04	
Spondyloarthropathies							87536.08
No diagnosis	Ref.						
In the first episode	0.56 (-0.97 to 2.09)	0.47					
In the second episode	0.67 (-0.21 to 1.55)	0.14					
In both episodes	0.46 (-0.33 to 1.26)	0.25					
Spondyloarthropathies							87540.31
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.39 (-1.49 to 2.26)	0.69	-0.09 (-0.19 to 0.00)	0.061	0.34 (-1.83 to 2.52)	7.60E-01	
In the second episode	0.50 (-0.56 to 1.56)	0.35			0.33 (-0.84 to 1.51)	5.80E-01	
In both episodes	0.37 (-0.53 to 1.28)	0.42			0.18 (-0.69 to 1.04)	6.90E-01	
Axial Neuropathy							87519.2
No diagnosis	Ref.						
In the first episode	-0.43 (-1.07 to 0.21)	0.19					
In the second episode	-0.57 (-1.11 to -0.02)	0.041					
In both episodes	-1.26 (-1.85 to -0.68)	2.51E-05					
Axial Neuropathy							87511.86
X Episode							
No diagnosis	Ref.		Ref.		Ref.		

In the first episode	-0.62 (-1.41 to 0.17)	0.12	-0.10 (-0.20 to 0.00)	0.058	0.38 (-0.53 to 1.29)	4.20E-01	87537.63
In the second episode	-0.13 (-0.79 to 0.54)	0.71			-0.88 (-1.64 to -0.12)	0.024	
In both episodes	-1.70 (-2.39 to -1.02)	9.95E-07			0.88 (0.19 to 1.58)	1.30E-02	
Peripheral Neuropathy							87538.89
No diagnosis	Ref.						
In the first episode	-0.09 (-0.76 to 0.58)	0.79					
In the second episode	0.10 (-0.47 to 0.66)	0.73					87505.65
In both episodes	0.43 (-0.27 to 1.12)	0.23					
Peripheral Neuropathy							
X Episode							87509.31
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.24 (-0.57 to 1.05)	0.56	-0.09 (-0.19 to 0.01)	0.073	-0.66 (-1.58 to 0.27)	0.16	
In the second episode	-0.14 (-0.83 to 0.54)	0.68			0.48 (-0.29 to 1.26)	2.20E-01	87534.32
In both episodes	0.37 (-0.45 to 1.19)	0.37			0.11 (-0.76 to 0.98)	8.00E-01	
No Diagnoses							
No diagnosis	Ref.						87534.32
In the first episode	0.53 (0.24 to 0.81)	3.33E-04					
In the second episode	0.45 (0.01 to 0.89)	0.046					
In both episodes	0.94 (0.56 to 1.33)	1.51E-06					87534.32
No Diagnoses							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		87534.32
In the first episode	0.58 (0.23 to 0.93)	0.001	-0.07 (-0.18 to 0.03)	0.17	-0.11 (-0.50 to 0.28)	0.59	
In the second episode	0.59 (0.06 to 1.13)	0.03			-0.29 (-0.90 to 0.32)	0.35	
In both episodes	0.94 (0.49 to 1.39)	4.57E-05			0.01 (-0.47 to 0.48)	9.80E-01	
Osteoporosis							87534.32
No diagnosis	Ref.						
In the first episode	-0.04 (-0.96 to 0.88)	0.93					
In the second episode	-0.22 (-0.96 to 0.53)	0.57					87534.32
In both episodes	0.73 (0.05 to 1.42)	0.036					

Osteoporosis								87519.95
X Episode								
No diagnosis	Ref.		Ref.			Ref.		
In the first episode	1.03 (-0.11 to 2.16)	0.076	-0.09 (-0.19 to 0.01)	0.074	-2.13 (-3.44 to -0.82)	0.001		
In the second episode	-1.00 (-1.90 to -0.09)	0.03			1.56 (0.53 to 2.59)	0.003		
In both episodes	0.78 (-0.02 to 1.58)	0.056			-0.09 (-0.92 to 0.74)	0.82		
Osteoporosis Fracture								87528.63
No diagnosis	Ref.							
In the first episode	-1.92 (-3.28 to -0.57)	0.005						
In the second episode	-0.78 (-1.55 to 0.00)	0.049						
In both episodes	-0.23 (-0.97 to 0.50)	0.53						
Osteoporosis Fracture								87527.72
X Episode								
No diagnosis	Ref.		Ref.			Ref.		
In the first episode	-1.51 (-3.14 to 0.12)	0.069	-0.09 (-0.18 to 0.01)	0.09	-0.82 (-2.63 to 0.99)	0.38		
In the second episode	-0.29 (-1.22 to 0.64)	0.54			-0.97 (-2.02 to 0.07)	0.067		
In both episodes	-0.50 (-1.35 to 0.35)	0.25			0.53 (-0.32 to 1.39)	2.20E-01		
Tendinitis								87536.21
No diagnosis	Ref.							
In the first episode	-0.01 (-0.50 to 0.48)	0.97						
In the second episode	0.04 (-0.49 to 0.57)	0.87						
In both episodes	0.50 (-0.06 to 1.06)	0.081						
Tendinitis								87539.84
X Episode								
No diagnosis	Ref.		Ref.			Ref.		
In the first episode	0.10 (-0.50 to 0.70)	0.74	-0.09 (-0.19 to 0.01)	0.071	-0.22 (-0.90 to 0.46)	0.53		
In the second episode	-0.09 (-0.73 to 0.55)	0.78			0.27 (-0.46 to 1.00)	4.70E-01		
In both episodes	0.42 (-0.24 to 1.07)	0.21			0.16 (-0.52 to 0.85)	6.40E-01		
Tendinitis (Lower Extremities)								87536.87
No diagnosis	Ref.							

In the first episode	0.00 (-0.37 to 0.37)	0.99					
In the second episode	0.23 (-0.12 to 0.58)	0.19					
In both episodes	0.17 (-0.18 to 0.52)	0.33					
Tendinitis (Lower Extremities)							87533.79
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.37 (-0.08 to 0.83)	0.11	-0.06 (-0.17 to 0.04)	0.23	-0.75 (-1.28 to -0.22)	0.005	
In the second episode	0.25 (-0.18 to 0.68)	0.25			-0.03 (-0.52 to 0.46)	0.9	
In both episodes	0.15 (-0.26 to 0.56)	0.48			0.05 (-0.38 to 0.48)	8.10E-01	
Tendinitis (Upper Extremities)							87535.28
No diagnosis	Ref.						
In the first episode	-0.23 (-0.54 to 0.08)	0.14					
In the second episode	0.14 (-0.16 to 0.44)	0.36					
In both episodes	0.05 (-0.20 to 0.30)	0.71					
Tendinitis (Upper Extremities)							87534.68
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.10 (-0.48 to 0.27)	0.59	-0.07 (-0.18 to 0.04)	0.21	-0.26 (-0.69 to 0.17)	0.23	
In the second episode	0.32 (-0.05 to 0.68)	0.09			-0.35 (-0.77 to 0.07)	0.1	
In both episodes	-0.02 (-0.32 to 0.27)	0.87			0.14 (-0.15 to 0.44)	3.40E-01	
Admission-readmission pair							
1 <sup>st</sup>	Ref.						
2 <sup>nd</sup>	-0.12 (-0.28 to 0.03)	0.12					87534.98
3 <sup>rd</sup>	-0.14 (-0.40 to 0.12)	0.29					
4 <sup>th</sup>	-0.24 (-0.65 to 0.17)	0.25					
≥5 <sup>th</sup>	-0.57 (-1.11 to -0.02)	0.042					
Admission-readmission pair							87533.37
X Episode							
1 <sup>st</sup>	Ref.		Ref.			Ref.	
2 <sup>nd</sup>	0.04 (-0.17 to 0.24)	0.73	-0.04 (-0.15 to 0.07)	0.48	-0.32 (-0.58 to -0.05)	0.018	

3 <sup>rd</sup>	-0.27 (-0.61 to 0.08)	0.13			0.25 (-0.19 to 0.69)	2.70E-01	
4 <sup>th</sup>	-0.20 (-0.74 to 0.35)	0.48			-0.09 (-0.81 to 0.62)	0.8	
5 <sup>th</sup>	-0.33 (-1.03 to 0.37)	0.35			-0.47 (-1.35 to 0.41)	0.3	
Number of common diagnosis between episodes							87524.25
0	Ref.						
1	-0.01 (-0.17 to 0.15)	0.88					
2	-0.44 (-0.78 to -0.10)	0.011					
>2	-0.96 (-1.59 to -0.33)	0.003					
Number of common diagnosis between episodes							87492.92
X Episode							
0	Ref.		Ref.			Ref.	
1	-0.30 (-0.49 to -0.11)	0.002	-0.50 (-0.68 to -0.33)	1.67E-08	0.57 (0.35 to 0.78)	1.97E-07	
2	-0.83 (-1.24 to -0.42)	7.82E-05			0.77 (0.31 to 1.22)	9.16E-04	
>2	-1.68 (-2.45 to -0.92)	1.46E-05			1.45 (0.59 to 2.30)	9.30E-04	
Time for previous discharge							87528.24
0-2 months	Ref.						
2-12 months	0.19 (0.03 to 0.36)	0.024					
>12 months	0.27 (0.09 to 0.45)	0.004					
Time for previous discharge X Episode							
0-2 months	Ref.		Ref.			Ref.	
2-12 months	0.23 (0.02 to 0.43)	0.031	0.17 (-0.01 to 0.35)	0.057	-0.07 (-0.30 to 0.17)	0.59	87487.96
>12 months	0.64 (0.42 to 0.86)	1.46E-08			-0.73 (-0.98 to -0.49)	5.81E-09	
Women	-0.16 (-0.37 to 0.04)	0.12					87532.93
Age at first visit at the clinic	-0.04 (-0.04 to -0.03)	5.44E-40					87362.51
Age at first visit of episode	-0.04 (-0.04 to -0.03)	1.05E-44					87340.93
Calendar year at first visit	-0.09 (-0.12 to -0.06)	8.01E-10					87497.62
Allergy	0.53 (-0.05 to 1.12)	0.074					87532.12

Anemia	-0.87 (-1.58 to -0.17)	0.016	87529.46
Atrial fibrillation	-2.05 (-2.62 to -1.49)	7.03E-13	87483.86
Other arrhythmias	-1.58 (-2.02 to -1.13)	3.61E-12	87487.07
Cholecystectomy	0.24 (-0.19 to 0.66)	0.28	87534.12
Biliary diseases	0.17 (-0.25 to 0.59)	0.43	87534.67
Breast cancer	-0.24 (-0.92 to 0.43)	0.48	87534.81
Cancer	-0.57 (-0.97 to -0.17)	0.005	87527.4
Ischemic heart disease	-0.54 (-1.06 to -0.02)	0.042	87531.17
Cataract	-0.33 (-0.89 to 0.23)	0.24	87533.95
Articular surgery non-prosthesis	-0.09 (-0.63 to 0.46)	0.75	87535.21
Articular prosthesis	-0.43 (-0.84 to -0.01)	0.043	87531.22
Colon abdomen surgeries	-1.20 (-1.99 to -0.42)	0.003	87526.29
Gynecology surgeries	-0.14 (-0.64 to 0.35)	0.58	87535
ORL surgeries	0.51 (-0.15 to 1.17)	0.13	87533.03
Other colon diseases	-1.06 (-1.53 to -0.60)	7.43E-06	87515.24
Other dermatological diseases	0.36 (-0.32 to 1.04)	0.3	87534.22
Psoriasis	0.59 (-0.13 to 1.32)	0.11	87532.75
Diabetes mellitus	-1.01 (-1.31 to -0.71)	4.75E-11	87492.16
Appendicitis	-0.17 (-0.69 to 0.35)	0.51	87534.88
Dyslipidemia	-0.24 (-0.44 to -0.04)	0.018	87529.74
Hematologic disease	-1.04 (-1.61 to -0.47)	3.57E-04	87522.59
Neurologic disease	-2.53 (-2.97 to -2.09)	1.19E-29	87408.07
Connective tissue disease	-0.58 (-1.24 to 0.09)	0.089	87532.42
Asthma	-0.17 (-0.69 to 0.34)	0.51	87534.87
Chronic obstructive pulmonary disease	-0.84 (-1.53 to -0.15)	0.016	87529.53
Other respiratory diseases	-1.81 (-2.45 to -1.16)	4.56E-08	87505.46
Hiatal hernia	-0.52 (-1.00 to -0.05)	0.031	87530.65
Gastroesophageal reflux disease	-0.52 (-1.14 to 0.10)	0.1	87532.6



Other stomach-esophagus-bowel diseases	0.06 (-0.41 to 0.53)	0.79	87535.24
Gastritis	-0.96 (-1.63 to -0.29)	0.005	87527.49
Anticoagulant	-2.14 (-2.58 to -1.71)	5.68E-22	87442.93
Pregnancy	0.75 (0.17 to 1.34)	0.011	87528.89
Benign breast tumor	0.89 (0.08 to 1.71)	0.032	87530.7
Other ovary diseases	-0.22 (-1.08 to 0.63)	0.61	87535.04
Other uterus diseases	0.04 (-0.47 to 0.56)	0.87	87535.28
Glaucoma	-0.61 (-1.34 to 0.12)	0.1	87532.64
Alcoholic habit	-0.03 (-0.65 to 0.60)	0.93	87535.3
Smoking habit	-0.15 (-0.63 to 0.33)	0.54	87534.93
Viral hepatitis	0.45 (-0.29 to 1.19)	0.23	87533.86
Other liver disease	-1.35 (-2.05 to -0.65)	1.66E-04	87521.14
Benign prostatic hypertrophy	-0.37 (-0.99 to 0.24)	0.23	87533.89
Hypertension	-0.77 (-0.96 to -0.58)	3.00E-15	87473.29
Other infection	-0.86 (-1.41 to -0.31)	0.002	87526.01
Other virus infection	0.16 (-0.39 to 0.70)	0.58	87534.99
Kidney failure	-2.40 (-3.12 to -1.68)	6.26E-11	87492.63
Peripheral venous insufficiency	-0.30 (-0.81 to 0.22)	0.26	87534.04
Migraine	-0.45 (-1.13 to 0.24)	0.2	87533.67
Other hip knee diseases	-0.19 (-0.74 to 0.36)	0.49	87534.83
Column surgery	-0.71 (-1.34 to -0.07)	0.03	87530.59
Back pain	-0.52 (-1.03 to -0.01)	0.046	87531.33
Other spine diseases	-1.22 (-1.84 to -0.59)	1.29E-04	87520.66
Non osteoporotic fracture	-0.24 (-0.82 to 0.34)	0.42	87534.64
Osteoporotic fracture	-0.30 (-0.91 to 0.30)	0.33	87534.34
Shoulder elbow diseases	-0.67 (-1.36 to 0.01)	0.055	87531.61
Hyperuricemia	-0.02 (-0.67 to 0.64)	0.96	87535.3
Osteoporosis	-0.29 (-0.73 to 0.15)	0.2	87533.67
Other musculoskeletal diseases	-0.81 (-1.40 to -0.23)	0.007	87527.95

Feet diseases	-1.38 (-1.92 to -0.84)	6.01E-07	87510.43
Knee surgery prosthesis	-1.78 (-2.54 to -1.02)	4.11E-06	87514.12
Internal derangement of knee	0.13 (-0.51 to 0.76)	0.69	87535.15
Central peripheral systems diseases	-0.87 (-1.36 to -0.38)	5.01E-04	87523.2
Obesity	-0.53 (-0.96 to -0.10)	0.016	87529.54
Other ear diseases	-0.70 (-1.44 to 0.05)	0.068	87531.96
Other eye diseases	0.13 (-0.53 to 0.78)	0.7	87535.16
Other otorhinolaryngology diseases	-0.44 (-1.04 to 0.15)	0.15	87533.19
Cerebrovascular disease	-2.16 (-2.84 to -1.48)	3.68E-10	87496.08
Other endocrine diseases	-0.28 (-0.81 to 0.25)	0.3	87534.23
Anxiety	-0.71 (-1.26 to -0.15)	0.012	87529.06
Depression	-1.01 (-1.38 to -0.65)	3.85E-08	87505.11
Hypothyroidism	-0.31 (-0.65 to 0.03)	0.071	87532.04
Thyroid others	-0.39 (-1.00 to 0.22)	0.21	87533.72
Thyroidectomy	-0.87 (-1.61 to -0.13)	0.021	87529.97
Connective tissue benign tumour	0.06 (-0.66 to 0.78)	0.86	87535.28
Other benign tumours	-0.21 (-0.90 to 0.48)	0.55	87534.95
Helicobacter pylori infection	-0.76 (-1.36 to -0.16)	0.013	87529.11
Urological obstruction	0.12 (-0.61 to 0.85)	0.74	87535.2
Other urological diseases	-0.67 (-1.38 to 0.03)	0.061	87531.8
Urological surgery	-1.22 (-1.95 to -0.49)	0.001	87524.66
Non-specified valvulopathy	-0.15 (-0.91 to 0.61)	0.69	87535.15
NSAIDs	-0.52 (-1.08 to 0.04)	0.071	87532.04
Allergy medication	-0.20 (-0.98 to 0.57)	0.6	87535.04
Metamizole	-2.15 (-2.95 to -1.34)	1.78E-07	87508.07
Paracetamol	-1.61 (-2.07 to -1.16)	3.65E-12	87487.13
Tramadol	-1.21 (-1.82 to -0.60)	9.49E-05	87520.09
Antiaggregant	-0.61 (-0.94 to -0.27)	3.79E-04	87522.68

Antiepileptics	-0.64 (-1.42 to 0.14)	0.11	87532.71
Biphosphonates	-0.04 (-0.51 to 0.44)	0.88	87535.28
Calcium	-0.24 (-0.58 to 0.09)	0.15	87533.28
Oral antidiabetics	-0.71 (-1.04 to -0.37)	3.83E-05	87518.36
Insulin	-1.20 (-1.78 to -0.61)	6.91E-05	87519.49
Statins	-0.32 (-0.53 to -0.11)	0.003	87526.2
Constipation medication	-1.08 (-1.88 to -0.29)	0.008	87528.21
Gabapentin	-1.05 (-1.63 to -0.48)	3.60E-04	87522.59
Lowering uric acid drugs	-0.84 (-1.51 to -0.17)	0.014	87529.21
Benign prostatic hyperplasia medication	-0.38 (-1.10 to 0.34)	0.3	87534.24
Thyroid hormone	-0.33 (-0.65 to -0.01)	0.044	87531.27
Angiotensin II receptor blocker	-0.30 (-0.61 to 0.00)	0.052	87531.54
Beta-blocker	-0.40 (-0.78 to -0.02)	0.037	87530.97
Calcium antagonist	-0.66 (-1.04 to -0.28)	6.74E-04	87523.75
Diuretic	-0.33 (-0.60 to -0.05)	0.02	87529.87
Other non-specified antihypertensive drugs	-0.29 (-0.80 to 0.23)	0.28	87534.13
Angiotensin-converting-enzyme inhibitor	-0.51 (-0.80 to -0.21)	7.47E-04	87523.94
Ocular hypertension medication	-0.22 (-0.94 to 0.51)	0.56	87534.96
Proton-pump inhibitor medication	-0.63 (-0.90 to -0.36)	3.85E-06	87514
Bronchodilator	-0.43 (-0.99 to 0.13)	0.13	87533.06
Inhaled corticosteroid	-0.38 (-1.08 to 0.32)	0.29	87534.17
Antidepressant medication	-0.71 (-1.02 to -0.41)	5.12E-06	87514.54
Benzodiazepine	-0.59 (-0.90 to -0.29)	1.04E-04	87520.26
Symptomatic slow action drugs for osteoarthritis	0.16 (-0.51 to 0.82)	0.64	87535.09

CI: Confidence interval; Coef: Coefficient; Ref: Reference category

Supplementary Table 7.3: Multivariable linear regression mixed model to assess the influence of demographic and clinical related variables in the health-related quality of life of the first visit of each episode, in patients attending a rheumatology outpatient clinic

Variables	Main effect		Interaction	
	Coef. (95% CI)	p-value	Coef. (95% CI)	p-value
Women	-0.24 (-0.45 to -0.04)	0.022		
Age at first visit	-0.02 (-0.02 to -0.01)	8.00E-10		
Calendar year of first visit	-0.06 (-0.09 to -0.03)	3.00E-04		
Readmission	0.15 (0.00 to 0.29)	0.045		
Admission-readmission pair				
1	Ref.		Ref.	
2	0.33 (0.13 to 0.54)	0.002	-0.39 (-0.65 to -0.13)	0.003
3	0.16 (-0.18 to 0.51)	0.35	0.13 (-0.31 to 0.56)	0.58
4	0.42 (-0.13 to 0.96)	0.13	-0.31 (-1.02 to 0.40)	0.40
5	0.36 (-0.34 to 1.06)	0.31	-0.67 (-1.54 to 0.20)	0.13
Osteoarthritis of Hip				
No diagnosis	Ref.		Ref.	
First episode	-2.38 (-3.38 to -1.37)	3.50E-06	2.35 (1.17 to 3.52)	8.90E-05
Second episode	-0.33 (-1.16 to 0.50)	0.43	-1.28 (-2.25 to -0.31)	0.010
Both episodes	-1.11 (-2.10 to -0.12)	0.029	0.63 (-0.43 to 1.68)	0.24
Osteoarthritis of Knee				
No diagnosis	Ref.		Ref.	
First episode	-0.002 (-0.51 to 0.51)	1.00	-0.36 (-0.95 to 0.23)	0.23
Second episode	0.14 (-0.27 to 0.56)	0.50	-0.44 (-0.92 to 0.05)	0.076
Both episodes	-1.10 (-1.47 to -0.72)	7.60E-09	0.56 (0.18 to 0.95)	0.004
Osteoarthritis of Hand				
No diagnosis	Ref.			
First episode	0.52 (-0.05 to 1.08)	0.072		
Second episode	0.45 (-0.12 to 1.02)	0.12		
Both episodes	0.60 (0.10 to 1.10)	0.018		
Osteoarthritis of Peripheral Joints				
No diagnosis	Ref.			
First episode	-0.40 (-0.84 to 0.03)	0.070		
Second episode	-0.26 (-0.69 to 0.17)	0.24		
Both episodes	-0.49 (-0.89 to -0.08)	0.018		
Fibromyalgia				
No diagnosis	Ref.		Ref.	
First episode	-2.04 (-3.54 to -0.54)	0.008	1.86 (0.11 to 3.62)	0.037
Second episode	-1.16 (-2.14 to -0.19)	0.020	-1.10 (-2.20 to 0.00)	0.050
Both episodes	-1.57 (-2.48 to -0.66)	6.90E-04	-0.05 (-0.97 to 0.86)	0.91
Gout				
No diagnosis	Ref.		Ref.	
First episode	0.46 (-0.78 to 1.71)	0.47	-0.99 (-2.40 to 0.43)	0.17
Second episode	0.19 (-0.95 to 1.33)	0.74	-1.73 (-3.02 to -0.45)	0.008
Both episodes	0.22 (-0.56 to 1.00)	0.58	-0.14 (-0.92 to 0.63)	0.72
Crystal Arthropathies				

No diagnosis	Ref.		Ref.	
First episode	-0.29 (-0.94 to 0.35)	0.37	0.10 (-0.65 to 0.84)	0.80
Second episode	0.01 (-0.63 to 0.65)	0.97	-0.86 (-1.60 to -0.11)	0.024
Both episodes	-1.12 (-1.70 to -0.55)	1.20E-04	0.74 (0.15 to 1.34)	0.015
Other non-Inflammatory Diseases				
No diagnosis	Ref.		Ref.	
First episode	-1.75 (-3.10 to -0.41)	0.010	-0.09 (-1.63 to 1.45)	0.91
Second episode	-0.34 (-1.36 to 0.69)	0.52	-2.11 (-3.29 to -0.94)	4.00E-04
Both episodes	-1.85 (-3.16 to -0.55)	0.005	0.94 (-0.49 to 2.37)	0.20
Chronic Polyarthritis				
No diagnosis	Ref.		Ref.	
First episode	0.10 (-0.74 to 0.94)	0.82	-1.51 (-2.48 to -0.55)	0.002
Second episode	-0.27 (-0.85 to 0.30)	0.35	-0.65 (-1.30 to 0.00)	0.050
Both episodes	-0.73 (-1.20 to -0.26)	0.002	0.78 (0.33 to 1.23)	7.20E-04
Axial Neuropathy				
No diagnosis	Ref.		Ref.	
First episode	-0.73 (-1.50 to 0.05)	0.065	0.54 (-0.36 to 1.44)	0.24
Second episode	-0.13 (-0.78 to 0.52)	0.70	-0.74 (-1.50 to 0.02)	0.055
Both episodes	-1.75 (-2.42 to -1.08)	2.80E-07	0.80 (0.11 to 1.49)	0.023
No diagnosis				
No diagnosis	Ref.			
First episode	0.39 (0.10 to 0.68)	0.009		
Second episode	0.22 (-0.21 to 0.66)	0.32		
Both episodes	0.40 (0.01 to 0.78)	0.044		
Osteoporosis				
No diagnosis	Ref.		Ref.	
First episode	1.11 (0.00 to 2.22)	0.050	-1.66 (-2.95 to -0.36)	0.012
Second episode	-0.91 (-1.80 to -0.02)	0.044	1.73 (0.71 to 2.74)	8.50E-04
Both episodes	0.89 (0.10 to 1.67)	0.026	-0.17 (-0.99 to 0.65)	0.69
Tendinitis (Lower Extremities)				
No diagnosis	Ref.		Ref.	
First episode	0.42 (-0.03 to 0.87)	0.065	-0.61 (-1.13 to -0.08)	0.024
Second episode	0.26 (-0.16 to 0.69)	0.23	0.13 (-0.36 to 0.62)	0.60
Both episodes	0.21 (-0.20 to 0.61)	0.32	-0.02 (-0.44 to 0.41)	0.94
Diabetes mellitus	-0.33 (-0.63 to -0.03)	0.030		
Anticoagulant	-1.18 (-1.62 to -0.74)	1.30E-07		
Cerebrovascular disease	-1.07 (-1.73 to -0.41)	0.002		
Other respiratory diseases	-0.98 (-1.61 to -0.34)	0.003		
Other colon diseases	-0.61 (-1.07 to -0.16)	0.008		
Pregnancy	0.76 (0.19 to 1.33)	0.009		
Benign breast tumor	0.88 (0.09 to 1.67)	0.030		
Neurologic disease	-2.13 (-2.56 to -1.70)	2.90E-22		
Depression	-0.69 (-1.05 to -0.34)	1.30E-04		
Viral hepatitis	-0.95 (-1.63 to -0.26)	0.007		
Other infection	-0.71 (-1.25 to -0.18)	0.009		
Paracetamol	-0.82 (-1.27 to -0.37)	3.40E-04		
Knee surgery prosthesis	-0.77 (-1.51 to -0.03)	0.042		
Feet diseases	-0.99 (-1.52 to -0.46)	2.30E-04		
Allergy	0.62 (0.06 to 1.19)	0.030		

Kidney failure	-1.50 (-2.21 to -0.80)	2.80E-05
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CI: Confidence interval; Coef: Coefficient; Ref: Reference category

Supplementary Table 7.4: Bivariable linear regression mixed model to assess the influence of demographic and clinical related variables in the difference in health-related quality of life between the last and the first visit of an episode, in patients attending a rheumatology outpatient clinic

Variable	Main effect diagnosis		Main effect Episode		Interaction		AIC
	Coef. (95% CI)	p-value	Coef. (95% CI)	p-value	Coef. (95% CI)	p-value	
Readmission episode			-0.84 (-1.28 to -0.40)	1.70E-04			9226.46
Osteoarthritis of peripheral joints							
No diagnosis	Ref.						
In the first episode	0.42 (-1.75 to 2.59)	0.71					9244.01
In the second episode	-0.46 (-2.17 to 1.25)	0.6					
In both episodes	-0.12 (-1.26 to 1.01)	0.83					
Osteoarthritis of peripheral joints X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-1.38 (-4.23 to 1.46)	0.34	-1.04 (-1.50 to -0.58)	9.77E-06	3.59 (-0.10 to 7.29)	0.057	9229.92
In the second episode	-1.49 (-3.73 to 0.75)	0.19			2.07 (-0.83 to 4.98)	0.16	
In both episodes	-0.95 (-2.42 to 0.52)	0.21			1.65 (-0.23 to 3.52)	0.085	
Knee Osteoarthritis							
No diagnosis	Ref.						
In the first episode	-0.02 (-1.85 to 1.80)	0.98					9241.24
In the second episode	0.80 (-0.32 to 1.92)	0.16					
In both episodes	0.62 (-0.35 to 1.58)	0.21					
Knee Osteoarthritis X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.73 (-3.12 to 1.65)	0.55	-1.01 (-1.49 to -0.53)	3.52E-05	1.43 (-1.65 to 4.51)	0.36	9230.52
In the second episode	-0.16 (-1.63 to 1.31)	0.83			1.92 (0.02 to 3.82)	0.047	
In both episodes	0.45 (-0.80 to 1.70)	0.48			0.34 (-1.24 to 1.91)	0.67	

Neck Pain								
No diagnosis		Ref.						
In the first episode		-0.17 (-1.92 to 1.58)	0.85	9244.36				
In the second episode		-0.16 (-1.62 to 1.31)	0.83					
In both episodes		0.22 (-1.72 to 2.15)	0.83					
Neck Pain								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		-0.70 (-3.00 to 1.60)	0.55	-0.92 (-1.38 to -0.46)	7.92E-05	1.04 (-1.95 to 4.04)	0.5	9236.89
In the second episode		-0.69 (-2.60 to 1.23)	0.48			1.06 (-1.43 to 3.54)	0.4	
In both episodes		-0.27 (-2.81 to 2.26)	0.83			0.98 (-2.31 to 4.28)	0.56	
Pain in Joint								
No diagnosis		Ref.						
In the first episode		-0.02 (-1.07 to 1.02)	0.96	9242.78				
In the second episode		-0.09 (-1.26 to 1.09)	0.89					
In both episodes		-0.74 (-1.86 to 0.37)	0.19					
Pain in Joint								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		-1.09 (-2.46 to 0.28)	0.12	-0.95 (-1.44 to -0.47)	1.10E-04	2.13 (0.36 to 3.90)	0.019	9230.86
In the second episode		0.04 (-1.50 to 1.58)	0.96			-0.26 (-2.24 to 1.73)	0.8	
In both episodes		-0.60 (-2.05 to 0.85)	0.42			-0.28 (-2.15 to 1.58)	0.76	
Back Pain								
No diagnosis		Ref.						
In the first episode		-0.32 (-1.55 to 0.92)	0.61	9243.79				
In the second episode		-0.32 (-1.34 to 0.70)	0.54					
In both episodes		0.12 (-0.81 to 1.05)	0.8					
Back Pain								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		



In the first episode	-0.08 (-1.69 to 1.54)	0.93	-0.90 (-1.39 to -0.41)	3.45E-04	-0.49 (-2.58 to 1.61)	0.65	9236.65
In the second episode	-0.70 (-2.04 to 0.64)	0.3			0.76 (-0.99 to 2.51)	0.4	
In both episodes	-0.03 (-1.25 to 1.18)	0.96			0.29 (-1.27 to 1.86)	0.71	
Axial Neuropathy							
No diagnosis	Ref.						
In the first episode	-0.31 (-2.30 to 1.68)	0.76					9242.96
In the second episode	0.53 (-0.81 to 1.87)	0.44					
In both episodes	0.74 (-0.83 to 2.32)	0.36					
Axial Neuropathy							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.10 (-2.71 to 2.51)	0.94	-0.82 (-1.27 to -0.36)	4.42E-04	-0.44 (-3.83 to 2.96)	0.8	9224.23
In the second episode	-0.65 (-2.40 to 1.10)	0.47			2.35 (0.08 to 4.61)	0.042	
In both episodes	2.66 (0.61 to 4.71)	0.011			-3.83 (-6.46 to -1.20)	0.004	
Peripheral Neuropathy							
No diagnosis	Ref.						
In the first episode	1.59 (-0.34 to 3.53)	0.11					9241.62
In the second episode	-0.18 (-1.78 to 1.41)	0.82					
In both episodes	-0.34 (-1.93 to 1.24)	0.67					
Peripheral Neuropathy							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	0.59 (-1.95 to 3.13)	0.65	-0.92 (-1.38 to -0.47)	7.34E-05	2.01 (-1.28 to 5.30)	0.23	9233.43
In the second episode	-0.38 (-2.47 to 1.70)	0.72			0.40 (-2.30 to 3.10)	0.77	
In both episodes	-0.91 (-2.97 to 1.15)	0.39			1.13 (-1.51 to 3.77)	0.4	
No Diagnoses							
No diagnosis	Ref.						
In the first episode	-0.20 (-1.04 to 0.63)	0.63					9242.54
In the second episode	-0.84 (-2.28 to 0.60)	0.26					
In both episodes	-0.48 (-1.65 to 0.69)	0.42					

No Diagnoses								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-0.56 (-1.64 to 0.53)	0.32	-1.04 (-1.53 to -0.55)	3.27E-05	0.70 (-0.71 to 2.11)	0.33	9232.98	
In the second episode	-1.62 (-3.50 to 0.27)	0.09			1.57 (-0.87 to 4.01)	0.21		
In both episodes	-1.07 (-2.59 to 0.44)	0.16			1.18 (-0.74 to 3.11)	0.23		
Osteoporosis								
No diagnosis	Ref.							
In the first episode	-0.73 (-3.01 to 1.55)	0.53					9243.76	
In the second episode	-0.60 (-2.61 to 1.41)	0.56						
In both episodes	-0.03 (-1.97 to 1.92)	0.98						
Osteoporosis								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-0.69 (-3.67 to 2.30)	0.65	-0.95 (-1.40 to -0.50)	3.28E-05	-0.08 (-3.95 to 3.80)	0.97	9231.32	
In the second episode	-2.04 (-4.67 to 0.59)	0.13			2.87 (-0.54 to 6.28)	0.1		
In both episodes	-1.61 (-4.12 to 0.90)	0.21			3.17 (-0.01 to 6.34)	0.051		
Tendinitis								
No diagnosis	Ref.							
In the first episode	1.20 (-0.29 to 2.69)	0.11					9241.99	
In the second episode	0.02 (-1.49 to 1.53)	0.98						
In both episodes	0.06 (-1.29 to 1.42)	0.93						
Tendinitis								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-0.31 (-2.26 to 1.64)	0.76	-0.95 (-1.41 to -0.49)	5.43E-05	3.02 (0.49 to 5.55)	0.019	9230.29	
In the second episode	0.12 (-1.86 to 2.10)	0.91			-0.21 (-2.79 to 2.37)	0.87		
In both episodes	-0.20 (-1.97 to 1.57)	0.83			0.52 (-1.75 to 2.79)	0.65		
Tendinitis (Lower Extremities)								
No diagnosis	Ref.							

In the first episode	0.31 (-1.15 to 1.77)	0.68						9244.11
In the second episode	0.13 (-0.99 to 1.26)	0.82						
In both episodes	-0.17 (-1.15 to 0.80)	0.73						
Tendinitis (Lower Extremities)								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-0.30 (-2.22 to 1.62)	0.76	-0.96 (-1.44 to -0.48)	1.00E-04	1.22 (-1.27 to 3.71)	0.34		9236.1
In the second episode	0.11 (-1.36 to 1.58)	0.88			0.04 (-1.86 to 1.94)	0.97		
In both episodes	-0.61 (-1.87 to 0.64)	0.34			0.88 (-0.71 to 2.47)	0.28		
Tendinitis (Upper Extremities)								
No diagnosis	Ref.							
In the first episode	0.20 (-0.98 to 1.37)	0.74						9243.28
In the second episode	0.51 (-0.49 to 1.51)	0.32						
In both episodes	0.22 (-0.52 to 0.95)	0.56						
Tendinitis (Upper Extremities)								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-1.06 (-2.60 to 0.48)	0.18	-1.20 (-1.72 to -0.68)	5.45E-06	2.51 (0.52 to 4.50)	0.013		9227.96
In the second episode	0.35 (-0.96 to 1.66)	0.6			0.32 (-1.37 to 2.02)	0.71		
In both episodes	-0.42 (-1.37 to 0.53)	0.39			1.26 (0.06 to 2.46)	0.039		
Chronic polyarthritis								
No diagnosis	Ref.							
In the first episode	-0.56 (-2.19 to 1.08)	0.51						9242.7
In the second episode	0.29 (-0.94 to 1.53)	0.64						
In both episodes	-0.42 (-1.20 to 0.36)	0.3						
Chronic polyarthritis								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-0.28 (-2.41 to 1.86)	0.8	-0.58 (-1.07 to -0.09)	0.021	-0.56 (-3.32 to 2.20)	0.69		9226.69
In the second episode	0.00 (-1.61 to 1.62)	1			0.58 (-1.51 to 2.66)	0.59		

In both episodes	0.58 (-0.43 to 1.58)	0.26			-1.98 (-3.25 to -0.71)	0.002	
Crystal arthropathies							
No diagnosis	Ref.						
In the first episode	0.09 (-1.39 to 1.57)	0.9					9233.2
In the second episode	0.45 (-1.01 to 1.91)	0.55					
In both episodes	2.02 (0.84 to 3.21)	7.90E-04					
Crystal arthropathies							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.50 (-2.44 to 1.45)	0.62	-0.82 (-1.29 to -0.35)	5.73E-04	1.19 (-1.35 to 3.72)	0.36	9222.9
In the second episode	0.03 (-1.89 to 1.94)	0.98			0.85 (-1.64 to 3.33)	0.5	
In both episodes	2.87 (1.32 to 4.41)	2.69E-04			-1.69 (-3.68 to 0.29)	0.09	
Folic Acid							
No diagnosis	Ref.						
In the first episode	-1.00 (-3.28 to 1.28)	0.39					9242.6
In the second episode	-0.06 (-1.34 to 1.23)	0.93					
In both episodes	-0.53 (-1.45 to 0.39)	0.26					
Folic Acid							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-0.75 (-3.74 to 2.24)	0.62	-0.75 (-1.23 to -0.27)	0.002	-0.48 (-4.37 to 3.41)	0.81	9234.94
In the second episode	-0.08 (-1.76 to 1.60)	0.93			0.04 (-2.14 to 2.22)	0.97	
In both episodes	-0.03 (-1.23 to 1.16)	0.96			-0.98 (-2.51 to 0.55)	0.21	
NSAIDs Hard							
No diagnosis	Ref.						
In the first episode	0.87 (-0.69 to 2.42)	0.27					9242.34
In the second episode	0.58 (-1.96 to 3.13)	0.65					
In both episodes	-0.83 (-2.88 to 1.21)	0.42					
NSAIDs Hard							
X Episode							

No diagnosis		Ref.		Ref.		Ref.		
In the first episode		0.19 (-1.85 to 2.22)	0.86	-0.89 (-1.34 to -0.44)	1.14E-04	1.36 (-1.28 to 4.00)	0.31	9234.91
In the second episode		0.95 (-2.40 to 4.29)	0.58			-0.72 (-5.06 to 3.62)	0.74	
In both episodes		-1.28 (-3.94 to 1.38)	0.35			0.89 (-2.53 to 4.31)	0.61	
Analgesic 1st level								
No diagnosis		Ref.						
In the first episode		0.47 (-0.60 to 1.54)	0.39					9240.22
In the second episode		0.78 (0.01 to 1.56)	0.049					
In both episodes		0.13 (-0.47 to 0.74)	0.66					
Analgesic 1st level								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		0.32 (-1.08 to 1.72)	0.66	-0.57 (-1.28 to 0.14)	0.11	0.30 (-1.52 to 2.12)	0.75	9231.27
In the second episode		0.79 (-0.23 to 1.81)	0.13			-0.01 (-1.33 to 1.31)	0.99	
In both episodes		0.51 (-0.28 to 1.29)	0.2			-0.74 (-1.74 to 0.26)	0.15	
SYSADOA								
No diagnosis		Ref.						
In the first episode		-0.04 (-2.07 to 1.99)	0.97					9243.55
In the second episode		-0.78 (-2.60 to 1.05)	0.4					
In both episodes		-0.59 (-2.78 to 1.61)	0.6					
SYSADOA								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		-1.20 (-3.85 to 1.45)	0.38	-0.90 (-1.35 to -0.45)	8.98E-05	2.31 (-1.11 to 5.72)	0.19	9235.57
In the second episode		-1.12 (-3.51 to 1.26)	0.36			0.68 (-2.40 to 3.77)	0.66	
In both episodes		-0.75 (-3.62 to 2.12)	0.61			0.33 (-3.38 to 4.04)	0.86	
Calcium and Vitamin D								
No diagnosis		Ref.						
In the first episode		-0.40 (-1.96 to 1.16)	0.61					9241.32
In the second episode		-0.32 (-1.17 to 0.54)	0.47					

In both episodes	-0.58 (-1.23 to 0.08)	0.086						
Calcium and Vitamin D								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	-1.15 (-3.20 to 0.89)	0.27	-0.81 (-1.35 to -0.26)	0.004	1.50 (-1.16 to 4.16)	0.27	9233.17	
In the second episode	-0.38 (-1.51 to 0.74)	0.5			0.15 (-1.31 to 1.60)	0.84		
In both episodes	-0.36 (-1.21 to 0.49)	0.4			-0.43 (-1.51 to 0.65)	0.44		
Colchicine								
No diagnosis	Ref.							
In the first episode	0.66 (-1.49 to 2.81)	0.55					9223.82	
In the second episode	0.47 (-1.14 to 2.09)	0.56						
In both episodes	3.09 (1.77 to 4.42)	4.98E-06						
Colchicine								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	0.52 (-2.31 to 3.35)	0.72	-0.78 (-1.23 to -0.32)	9.20E-04	0.29 (-3.41 to 4.00)	0.88	9215.05	
In the second episode	0.38 (-1.74 to 2.51)	0.72			0.19 (-2.58 to 2.95)	0.9		
In both episodes	4.00 (2.28 to 5.71)	4.95E-06			-1.81 (-3.98 to 0.36)	0.1		
DMARDs Antimalarial								
No diagnosis	Ref.							
In the first episode	-0.08 (-1.88 to 1.73)	0.94					9243.59	
In the second episode	0.54 (-0.69 to 1.77)	0.39						
In both episodes	-0.20 (-1.39 to 1.00)	0.75						
DMARDs Antimalarial								
X Episode								
No diagnosis	Ref.		Ref.		Ref.			
In the first episode	0.44 (-1.93 to 2.82)	0.72	-0.87 (-1.34 to -0.40)	2.59E-04	-1.03 (-4.12 to 2.06)	0.51	9236.47	
In the second episode	0.13 (-1.48 to 1.75)	0.87			0.81 (-1.27 to 2.90)	0.44		
In both episodes	-0.31 (-1.87 to 1.24)	0.69			0.24 (-1.77 to 2.25)	0.82		
DMARDs Oral Methotrexate								

No diagnosis		Ref.						
In the first episode		-0.53 (-2.46 to 1.41)	0.59					9240.69
In the second episode		-0.20 (-1.56 to 1.17)	0.78					
In both episodes		-0.96 (-1.95 to 0.03)	0.057					
DMARDs Oral Methotrexate								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		-0.22 (-2.75 to 2.32)	0.87	-0.70 (-1.17 to -0.23)	0.004	-0.61 (-3.91 to 2.68)	0.72	9229.38
In the second episode		-0.41 (-2.19 to 1.38)	0.66			0.42 (-1.90 to 2.73)	0.72	
In both episodes		-0.02 (-1.31 to 1.26)	0.97			-1.86 (-3.49 to -0.23)	0.025	
Gabapentine								
No diagnosis		Ref.						
In the first episode		-1.66 (-3.51 to 0.20)	0.08					9241.34
In the second episode		-0.15 (-1.12 to 0.82)	0.76					
In both episodes		0.18 (-1.47 to 1.83)	0.83					
Gabapentine								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		-3.06 (-5.50 to -0.62)	0.014	-0.80 (-1.27 to -0.34)	7.61E-04	2.83 (-0.35 to 6.01)	0.081	9228.6
In the second episode		0.03 (-1.24 to 1.29)	0.97			-0.35 (-1.99 to 1.29)	0.68	
In both episodes		1.47 (-0.68 to 3.62)	0.18			-2.59 (-5.36 to 0.17)	0.066	
Gastric Protector								
No diagnosis		Ref.						
In the first episode		-0.05 (-1.05 to 0.95)	0.92					9243.62
In the second episode		-0.10 (-1.01 to 0.81)	0.83					
In both episodes		-0.32 (-1.00 to 0.35)	0.35					
Gastric Protector								
X Episode								
No diagnosis		Ref.		Ref.		Ref.		
In the first episode		-0.10 (-1.41 to 1.21)	0.88	-0.89 (-1.45 to -0.33)	0.002	0.09 (-1.60 to 1.79)	0.91	9237.43

In the second episode	-0.26 (-1.44 to 0.93)	0.67			0.31 (-1.23 to 1.84)	0.69	
In both episodes	-0.34 (-1.22 to 0.54)	0.45			0.04 (-1.08 to 1.15)	0.95	
Analgesic 2nd and 3rd level							
No diagnosis	Ref.						
In the first episode	-0.43 (-1.77 to 0.90)	0.52					9239.44
In the second episode	0.56 (-0.26 to 1.38)	0.18					
In both episodes	-0.64 (-1.48 to 0.21)	0.14					
Analgesic 2nd and 3rd level							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-1.15 (-2.90 to 0.59)	0.2	-0.73 (-1.24 to -0.22)	0.005	1.44 (-0.83 to 3.71)	0.21	9216.82
In the second episode	0.11 (-0.96 to 1.17)	0.85			0.90 (-0.49 to 2.28)	0.2	
In both episodes	0.58 (-0.52 to 1.67)	0.3			-2.44 (-3.84 to -1.04)	6.27E-04	
Other Osteoporotics							
No diagnosis	Ref.						
In the first episode	-0.51 (-2.68 to 1.66)	0.65					9238.12
In the second episode	-0.77 (-1.98 to 0.43)	0.21					
In both episodes	-1.22 (-2.27 to -0.17)	0.023					
Other Osteoporotics							
X Episode							
No diagnosis	Ref.		Ref.		Ref.		
In the first episode	-1.08 (-3.93 to 1.77)	0.46	-0.87 (-1.34 to -0.40)	2.91E-04	1.12 (-2.59 to 4.83)	0.55	9231.36
In the second episode	-0.58 (-2.17 to 1.00)	0.47			-0.36 (-2.42 to 1.70)	0.73	
In both episodes	-1.43 (-2.79 to -0.08)	0.038			0.43 (-1.29 to 2.14)	0.63	
Benzodiazepine							
No diagnosis	Ref.						
In the first episode	-0.68 (-1.96 to 0.61)	0.3					9242.78
In the second episode	0.15 (-0.89 to 1.19)	0.77					
In both episodes	-0.49 (-1.78 to 0.80)	0.46					



Benzodiazepine								
X Episode								
	No diagnosis	Ref.		Ref.		Ref.		
	In the first episode	-0.38 (-2.06 to 1.30)	0.66	-0.91 (-1.39 to -0.43)	1.85E-04	-0.59 (-2.77 to 1.59)	0.6	9234.94
	In the second episode	-0.19 (-1.55 to 1.17)	0.78			0.68 (-1.07 to 2.44)	0.45	
	In both episodes	-1.02 (-2.69 to 0.66)	0.23			1.05 (-1.10 to 3.20)	0.34	
Corticosteroids								
	No diagnosis	Ref.						
	In the first episode	1.25 (0.22 to 2.27)	0.017					9237.89
	In the second episode	0.56 (-0.33 to 1.45)	0.22					
	In both episodes	0.07 (-0.60 to 0.73)	0.84					
Corticosteroids								
X Episode								
	No diagnosis	Ref.		Ref.		Ref.		
	In the first episode	2.27 (0.92 to 3.61)	9.50E-04	-0.38 (-0.94 to 0.18)	0.19	-2.05 (-3.80 to -0.30)	0.022	9222.88
	In the second episode	0.79 (-0.37 to 1.95)	0.18			-0.48 (-1.99 to 1.04)	0.54	
	In both episodes	0.71 (-0.15 to 1.56)	0.11			-1.28 (-2.37 to -0.18)	0.022	
NSAIDs								
	No diagnosis	Ref.						
	In the first episode	-0.58 (-1.44 to 0.27)	0.18					9241.65
	In the second episode	0.31 (-0.52 to 1.14)	0.47					
	In both episodes	0.01 (-0.62 to 0.64)	0.97					
NSAIDs								
X Episode								
	No diagnosis	Ref.		Ref.		Ref.		
	In the first episode	-1.07 (-2.19 to 0.05)	0.06	-1.59 (-2.22 to -0.96)	7.50E-07	0.98 (-0.47 to 2.43)	0.18	9224.64
	In the second episode	-0.49 (-1.57 to 0.60)	0.38			1.59 (0.18 to 3.00)	0.027	
	In both episodes	-0.77 (-1.58 to 0.04)	0.063			1.56 (0.53 to 2.60)	0.003	
Other BIO								
	No diagnosis	Ref.						

	In the first episode	-0.83 (-3.40 to 1.73)	0.53					9243.54
	In the second episode	0.10 (-1.02 to 1.21)	0.87					
	In both episodes	-0.42 (-1.55 to 0.71)	0.47					
Other BIO								
X Episode								
	No diagnosis	Ref.		Ref.		Ref.		
	In the first episode	-0.82 (-4.18 to 2.54)	0.63	-0.85 (-1.32 to -0.38)	4.20E-04	-0.03 (-4.37 to 4.32)	0.99	9237.42
	In the second episode	-0.02 (-1.48 to 1.45)	0.98			0.23 (-1.67 to 2.13)	0.81	
	In both episodes	-0.35 (-1.81 to 1.11)	0.64			-0.14 (-1.99 to 1.70)	0.88	
Other Drugs								
	No diagnosis	Ref.						
	In the first episode	3.19 (1.80 to 4.58)	7.20E-06					9216.99
	In the second episode	-0.21 (-1.10 to 0.69)	0.65					
	In both episodes	-1.43 (-2.58 to -0.28)	0.015					
Other Drugs								
X Episode								
	No diagnosis	Ref.		Ref.		Ref.		
	In the first episode	5.61 (3.79 to 7.44)	1.51E-09	-0.51 (-0.99 to -0.03)	0.036	-4.86 (-7.22 to -2.50)	5.61E-05	9188.37
	In the second episode	-0.10 (-1.27 to 1.07)	0.87			-0.19 (-1.71 to 1.34)	0.81	
	In both episodes	-0.10 (-1.59 to 1.39)	0.89			-2.68 (-4.60 to -0.77)	0.006	
Women								
Admission-readmission pair								
	1 <sup>st</sup>	Ref.						
	2 <sup>nd</sup>	-0.78 (-1.57 to 0.01)	0.053					9232.43
	≥3 <sup>rd</sup>	-2.88 (-4.97 to -0.79)	0.007					
Admission-readmission pair								
X Episode								
	1 <sup>st</sup>	Ref.		Ref.		Ref.		
	2 <sup>nd</sup>	-0.78 (-1.84 to 0.28)	0.15	-0.82 (-1.28 to -0.35)	6.1E-04	-0.01 (-1.43 to 1.42)	0.99	9223.31
	≥3 <sup>rd</sup>	-1.95 (-4.73 to 0.83)	0.17			-1.87 (-5.56 to 1.83)	0.32	

Time from previous discharge								
0-2 months	Ref.							
2-12 months	0.30 (-0.36 to 0.95)	0.37						9241.14
>12 months	0.42 (-0.30 to 1.14)	0.26						
Time from previous discharge								
X Episode								
0-2 months	Ref.		Ref.		Ref.			
2-12 months	0.40 (-0.46 to 1.25)	0.36	-1.28 (-2.19 to -0.38)	0.005	-0.20 (-1.30 to 0.90)	0.72	9216.79	
>12 months	-0.51 (-1.45 to 0.43)	0.29			1.85 (0.64 to 3.06)	0.003		
Number of common diagnosis								
between episodes								
None								
1	-0.33 (-1.12 to 0.45)	0.41					9242.8	
2	-0.49 (-1.45 to 0.46)	0.31						
3	0.01 (-1.46 to 1.48)	0.99						
≥4	1.35 (-0.83 to 3.53)	0.23						
Number of common diagnosis								
between episodes								
X Episode								
None								
1	0.62 (-0.41 to 1.64)	0.24	0.58 (-0.61 to 1.78)	0.34	-1.89 (-3.21 to -0.58)	0.005	9225.49	
2	0.19 (-1.05 to 1.43)	0.76			-1.37 (-2.96 to 0.23)	0.09		
3	0.21 (-1.71 to 2.12)	0.83			-0.39 (-2.88 to 2.10)	0.76		
≥4	0.21 (-2.64 to 3.06)	0.89			2.25 (-1.45 to 5.95)	0.23		
Rosser classification index at the								
first visit of the episode	-0.56 (-0.60 to -0.52)	1.4E-166					8640.35	
Rosser classification index at the first								
visit of the episode	-0.59 (-0.64 to -0.55)	1.5E-147	-15.03 (-23.27 to -6.80)	3.48E-04	0.15 (0.06 to 0.23)	6.31E-04	8617.63	
X Episode								

Rosser classification index at the last visit of the episode	0.46 (0.42 to 0.51)	4.85E-84					8905.15
Rosser classification index at the last visit of the episode	0.20 (0.13 to 0.27)	2.45E-09	-45.24 (-53.66 to -36.82)	6.26E-26	0.46 (0.37 to 0.54)	2.38E-25	8796.48
X Episode							
Age at first visit of episode	0.02 (0.00 to 0.03)	0.044					9236.44
Age at first visit at the clinic	0.02 (0.00 to 0.03)	0.053					9236.76
Calendar year at first visit	-0.02 (-0.13 to 0.10)	0.8					9240.43
Anemia	3.92 (2.17 to 5.66)	1.07E-05					9221.28
Other arrhythmias	-1.75 (-3.01 to -0.49)	0.007					9233.14
Atrial fibrillation	-2.10 (-3.64 to -0.56)	0.008					9233.4
Biliary diseases	1.67 (0.49 to 2.85)	0.005					9232.82
Cholecystectomy	1.69 (0.45 to 2.92)	0.007					9233.36
Breast cancer	0.90 (-0.88 to 2.69)	0.32					9239.51
Ischemic heart disease	-1.58 (-3.03 to -0.13)	0.032					9235.92
Cataract	1.03 (-0.49 to 2.55)	0.18					9238.72
Other colon diseases	3.48 (2.12 to 4.84)	5.43E-07					9215.92
Other dermatological diseases	-0.28 (-2.21 to 1.64)	0.77					9240.41
Psoriasis	-0.52 (-2.15 to 1.10)	0.53					9240.1
Diabetes mellitus	1.57 (0.70 to 2.43)	3.76E-04					9227.94
Appendicitis	3.42 (1.73 to 5.12)	7.69E-05					9225.03
Dyslipidemia	-0.50 (-1.14 to 0.14)	0.13					9238.16
Asthma	-0.11 (-1.70 to 1.47)	0.89					9240.47
Chronic obstructive pulmonary disease	-0.62 (-2.75 to 1.52)	0.57					9240.17
Other respiratory diseases	0.37 (-1.07 to 1.81)	0.62					9240.24
Hiatal hernia	0.83 (-0.50 to 2.16)	0.22					9238.98
Gastroesophageal reflux disease	0.47 (-1.40 to 2.34)	0.62					9240.25
Gastritis	1.67 (-0.34 to 3.68)	0.1					9237.85
Pregnancy	-0.38 (-1.96 to 1.19)	0.64					9240.27

Benign breast tumor	-0.53 (-3.18 to 2.12)	0.7	9240.34
Other ovary diseases	4.72 (2.46 to 6.99)	4.40E-05	9223.95
Other uterus diseases	-0.32 (-1.81 to 1.16)	0.67	9240.31
Glaucoma	-0.30 (-2.60 to 1.99)	0.79	9240.43
Alcoholic habit	0.31 (-1.24 to 1.85)	0.7	9240.34
Smoking habit	0.29 (-0.91 to 1.48)	0.64	9240.28
Viral hepatitis	-1.14 (-3.03 to 0.75)	0.24	9239.11
Other liver disease	-0.94 (-2.91 to 1.03)	0.35	9239.62
Benign prostatic hypertrophy	0.32 (-1.52 to 2.15)	0.74	9240.38
Hypertension	-0.18 (-0.78 to 0.41)	0.55	9240.13
Other infection	-0.25 (-1.68 to 1.18)	0.73	9240.38
Other virus infection	-2.51 (-3.94 to -1.08)	5.87E-04	9228.98
Kidney failure	1.91 (-0.39 to 4.22)	0.1	9237.87
Peripheral venous insufficiency	3.64 (2.06 to 5.22)	5.95E-06	9220.24
Migraine	-0.93 (-3.20 to 1.34)	0.42	9239.85
Column surgery	1.38 (-0.91 to 3.66)	0.24	9239.1
Back pain	0.23 (-1.17 to 1.63)	0.75	9240.39
Non osteoporotic fracture	0.26 (-1.18 to 1.70)	0.72	9240.37
Osteoporosis	-1.69 (-3.20 to -0.18)	0.028	9235.72
Feet diseases	1.15 (-0.38 to 2.68)	0.14	9238.34
Knee surgery prosthesis	-1.37 (-3.48 to 0.75)	0.21	9238.9
Internal derangement of knee	1.33 (-0.66 to 3.31)	0.19	9238.77
Central peripheral systems diseases	0.09 (-1.30 to 1.48)	0.9	9240.48
Obesity	0.85 (-0.51 to 2.21)	0.22	9238.98
Other ear diseases	2.68 (0.46 to 4.90)	0.018	9234.92
Other eye diseases	-0.45 (-2.50 to 1.60)	0.67	9240.31
Other otorhinolaryngology diseases	0.53 (-1.58 to 2.64)	0.62	9240.25
Cerebrovascular disease	-3.84 (-5.93 to -1.75)	3.19E-04	9227.83

Anxiety	1.07 (-0.64 to 2.78)	0.22	9239
Depression	-0.66 (-1.79 to 0.46)	0.25	9239.16
Hypothyroidism	1.01 (-0.11 to 2.13)	0.077	9237.37
Thyroid others	-2.67 (-4.79 to -0.55)	0.014	9234.43
Thyroidectomy	6.93 (4.69 to 9.17)	1.29E-09	9204.55
Connective tissue benign tumour	-0.13 (-2.01 to 1.74)	0.89	9240.47
Other benign tumours	-0.11 (-2.19 to 1.96)	0.91	9240.48
Other urological diseases	-0.36 (-2.69 to 1.98)	0.76	9240.4
Non-specified valvulopathy	0.65 (-1.36 to 2.67)	0.53	9240.09
NSAIDs	1.11 (-1.12 to 3.34)	0.33	9239.54
Metamizole	1.69 (-0.52 to 3.91)	0.13	9238.24
Paracetamol	-0.28 (-1.52 to 0.96)	0.66	9240.3
Tramadol	1.60 (-0.65 to 3.84)	0.16	9238.56
Antiaggregant	-0.40 (-1.35 to 0.55)	0.41	9239.81
Antiepileptics	0.80 (-1.42 to 3.02)	0.48	9240
Biphosphonates	-1.95 (-3.48 to -0.42)	0.012	9234.31
Calcium	-0.55 (-1.58 to 0.48)	0.29	9239.39
Oral antidiabetics	1.61 (0.67 to 2.54)	7.46E-04	9229.19
Insulin	2.63 (1.08 to 4.18)	8.91E-04	9229.55
Statins	-0.37 (-1.02 to 0.28)	0.27	9239.26
Constipation medication	0.43 (-1.62 to 2.48)	0.68	9240.33
Gabapentin	-1.19 (-2.71 to 0.34)	0.13	9238.18
Lowering uric acid drugs	1.77 (-0.08 to 3.62)	0.061	9236.98
Benign prostatic hyperplasia medication	1.43 (-0.73 to 3.59)	0.2	9238.82
Thyroid hormone	1.09 (0.03 to 2.15)	0.044	9236.46
Angiotensin II receptor blocker	-0.31 (-1.33 to 0.70)	0.55	9240.13
Beta-blocker	-1.15 (-2.25 to -0.05)	0.041	9236.31
Calcium antagonist	-0.42 (-1.54 to 0.69)	0.46	9239.94
Diuretic	-0.90 (-1.74 to -0.07)	0.034	9236.03

Other non-specified antihypertensive drugs	-0.54 (-2.42 to 1.34)	0.58	9240.18
Angiotensin-converting-enzyme inhibitor	-0.93 (-1.81 to -0.05)	0.039	9236.29
Ocular hypertension medication	-0.24 (-2.65 to 2.18)	0.85	9240.46
Proton-pump inhibitor medication	-0.36 (-1.11 to 0.39)	0.34	9239.6
Bronchodilator	0.21 (-1.36 to 1.78)	0.8	9240.43
Inhaled corticosteroid	0.10 (-1.87 to 2.07)	0.92	9240.48
Antidepressant medication	-1.06 (-1.99 to -0.13)	0.026	9235.57
Benzodiazepine	-0.39 (-1.34 to 0.55)	0.41	9239.83
Symptomatic slow action drugs for osteoarthritis	-0.80 (-2.77 to 1.18)	0.43	9239.87
Allergy	-0.15 (-1.90 to 1.60)	0.87	9240.47
Cancer	1.17 (0.11 to 2.23)	0.031	9235.87
Articular surgery non-prosthesis	0.96 (-0.68 to 2.59)	0.25	9239.18
Articular prosthesis	-1.29 (-2.44 to -0.13)	0.029	9235.71
Colon abdomen surgeries	0.92 (-1.02 to 2.87)	0.35	9239.63
Gynecology surgeries	-0.28 (-1.66 to 1.09)	0.69	9240.33
ORL surgeries	0.17 (-1.84 to 2.18)	0.87	9240.47
Hematologic disease	1.69 (0.27 to 3.11)	0.02	9235.08
Neurologic disease	-0.33 (-1.81 to 1.15)	0.66	9240.3
Connective tissue disease	-0.28 (-2.04 to 1.47)	0.75	9240.39
Other stomach-esophagus-bowel diseases	-0.05 (-1.39 to 1.30)	0.95	9240.49
Anticoagulant	-1.25 (-2.40 to -0.10)	0.033	9235.94
Other hip knee diseases	-1.02 (-2.61 to 0.58)	0.21	9238.93
Other spine diseases	-0.30 (-2.38 to 1.78)	0.78	9240.41
Shoulder elbow diseases	-1.34 (-3.05 to 0.37)	0.13	9238.16
Other musculoskeletal diseases	0.05 (-1.70 to 1.79)	0.96	9240.49
Other endocrine diseases	1.65 (0.16 to 3.15)	0.03	9235.83

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CI: Confidence interval; Coef: Coefficient; Ref: Reference category