

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
1. Congestive Heart Failure ¹	I0981, I130, I132, I110 I501, I5020, I5021, I5022, I5023, I5030, I5031, I5032, I5033, I5040, I5041, I5042, I5043, I509	Cardiac: 001-002, 215-236, 242-252, 253-254, 258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313	Cardiac: 001-002, 215-236, 242-252, 253-254, 258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313
2. Valvular disease	A5203, I050, I051, I052, I058, I059, I060, I061, I062, I068, I069, I070, I071, I072, I078, I079, I080,	Cardiac: 001-002, 215-236, 242-252, 253-254, 258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313	Cardiac: 001-002, 215-236, 242-252, 253-254, 258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313

¹ The comorbidity category Congestive Heart Failure shares diagnosis codes with Hypertension and Renal Failure (I110, I130, I132).

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I081, I082, I083, I088, I089, I091, I0989, I340, I341, I342, I348, I349, I350, I351, I352, I358, I359, I360, I361, I362, I368, I369, I370, I371, I372, I378, I379, I38, I39, Q230, Q231, Q232, Q233, Z952, Z953, Z954		
3. Pulmonary Circulation disorders	I2601, I2602,	Cardiac: 001-002, 215- 236, 242-252, 253-254,	Cardiac: 001-002, 215- 236, 242-252, 253-254,

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I2609, I2690, I2692, I2699, I270, I271, I2781, I2782, I2789, I279, I289, T800XXA, T82817A, T82818A	258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313 or COPD asthma 190-192, 202-203	258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313 or COPD asthma 190-192, 202-203
4. Peripheral vascular disease	I700, I701, I70201, I70202, I70203, I70208, I70209, I70211, I70212, I70213, I70218, I70219, I70221, I70222, I70223, I70228, I70229, I70231, I70232, I70233, I70234, I70235, I70238, I70239,	Peripheral vascular: 299-301	Peripheral vascular: 299-301

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I70241, I70242, I70243, I70244, I70245, I70248, I70249, I7025, I70261, I70262, I70263, I70268, I70269, I70291, I70292, I70293, I70298, I70299, I70301, I70302, I70303, I70308, I70309, I70311, I70312, I70313, I70318, I70319, I70321, I70322, I70323, I70328, I70329, I70331, I70332, I70333, I70334, I70335, I70338,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I70339, I70341, I70342, I70343, I70344, I70345, I70348, I70349, I7035, I70361, I70362, I70363, I70368, I70369, I70391, I70392, I70393, I70398, I70399, I70401, I70402, I70403, I70408, I70409, I70411, I70412, I70413, I70418, I70419, I70421, I70422, I70423, I70428, I70429, I70431, I70432, I70433, I70434, I70435,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I70438, I70439, I70441, I70442, I70443, I70444, I70445, I70448, I70449, I7045, I70461, I70462, I70463, I70468, I70469, I70491, I70492, I70493, I70498, I70499, I70501, I70502, I70503, I70508, I70509, I70511, I70512, I70513, I70518, I70519, I70521, I70522, I70523, I70528, I70529, I70531, I70532, I70533, I70534,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I70535, I70538, I70539, I70541, I70542, I70543, I70544, I70545, I70548, I70549, I7055, I70561, I70562, I70563, I70568, I70569, I70591, I70592, I70593, I70598, I70599, I70601, I70602, I70603, I70608, I70609, I70611, I70612, I70613, I70618, I70619, I70621, I70622, I70623, I70628, I70629, I70631, I70632, I70633,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I70634, I70635, I70638, I70639, I70641, I70642, I70643, I70644, I70645, I70648, I70649, I7065, I70661, I70662, I70663, I70668, I70669, I70691, I70692, I70693, I70698, I70699, I70701, I70702, I70703, I70708, I70709, I70711, I70712, I70713, I70718, I70719, I70721, I70722, I70723, I70728, I70729, I70731, I70732,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I70733, I70734, I70735, I70738, I70739, I70741, I70742, I70743, I70744, I70745, I70748, I70749, I7075, I70761, I70762, I70763, I70768, I70769, I70791, I70792, I70793, I70798, I70799, I708, I7090, I7091, I7092, I7100, I7101, I7102, I7103, I711, I712, I713, I714, I715, I716, I718, I719,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I720, I721, I722, I723, I724, I728, I729, I731, I7381, I7389, I739, I742, I743, I744, I76, I771, I7771, I7772, I7773, I7774, I7779, I790, I791, I798, K551, K558, K559, Z95820, Z95828		
Changes from 1.0 to 1.1	I725 I726 I7770 I7775 I7776 I7777		
5. Hypertension (combine	I130, I132,	Cardiac: 001-002, 215- 236, 242-252, 253-254,	Cardiac: 001-002, 215- 236, 242-252, 253-254,

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
uncomplicated and complicated) ²	I1310, I1311, I129, I150, I151, I120, I10, O10011, O10012, O10013, O10019, O1002, O1003, O10911, O10912, O10913, O10919, O1092, O1093, I674, O10111, O10112, O10113, O10119, O1012, O1013, O10211, O10212, O10213, O10219, O1022, O1023, O10311, O10312, O10313, O10319, O1032,	258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313 or Renal: 652, 656-661, 673-675, 682-700 or Hypertension: 077-079, 304-305	258-262, 265-267,268-274, 280-293, 296-298, 302-303, 306-313 or Renal: 652, 656-661, 673-675, 682-700 or Hypertension: 077-079, 304-305

² The comorbidity category Hypertension shares diagnosis codes with Congestive Heart Failure and Renal Failure (I110, I130, I132, I120, I1311).

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	O1033, O10411, O10412, O10413, O10419, O1042, O1043, O111, O112, O113, O119, O161, O162, O163, O169, I110, I119, I152, I158, I159		
Changes from 1.0 to 1.1	I160 I161 I169 O114 O115 O164 O165 Deleted O152		
6. Paralysis	G041, G800, G801, G802, G804, G808, G809, G8100, G8101,	Cerebrovascular: 020-022, 034-039, 064-072	Cerebrovascular: 020-022, 034-039, 064-072

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	G8102, G8103, G8104, G8110, G8111, G8112, G8113, G8114, G8190, G8191, G8192, G8193, G8194, G8220, G8221, G8222, G8250, G8251, G8252, G8253, G8254, G830, G8310, G8311, G8312, G8313, G8314, G8320, G8321, G8322, G8323, G8324, G8330, G8331, G8332, G8333, G8334, G834, G835,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	G8381, G8382, G8383, G8384, G8389, G839, I69031, I69032, I69033, I69034, I69039, I69041, I69042, I69043, I69044, I69049, I69051, I69052, I69053, I69054, I69059, I69061, I69062, I69063, I69064, I69065, I69069, I69131, I69132, I69133, I69134, I69139, I69141, I69142, I69143, I69144, I69149, I69151, I69152,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I69153, I69154, I69159, I69161, I69162, I69163, I69164, I69165, I69169, I69231, I69232, I69233, I69234, I69239, I69241, I69242, I69243, I69244, I69249, I69251, I69252, I69253, I69254, I69259, I69261, I69262, I69263, I69264, I69265, I69269, I69331, I69332, I69333, I69334, I69339, I69341, I69342, I69343, I69344,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I69349, I69351, I69352, I69353, I69354, I69359, I69361, I69362, I69363, I69364, I69365, I69369, I69831, I69832, I69833, I69834, I69839, I69841, I69842, I69843, I69844, I69849, I69851, I69852, I69853, I69854, I69859, I69861, I69862, I69863, I69864, I69865, I69869, I69931, I69932, I69933, I69934, I69939, I69941,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	I69942, I69943, I69944, I69949, I69951, I69952, I69953, I69954, I69959, I69961, I69962, I69963, I69964, I69965, I69969, R532		
7. Other neurological disorders	E7500, E7501, E7502, E7509, E7510, E7511, E7519, E7523, E7525, E7529, E754, F842, G10, G110, G111, G112, G113, G114, G118, G119, G120, G121,	Nervous system: 020-042, 052-103	Nervous system: 020-042, 052-103

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	G1220, G1221, G1222, G1229, G128, G129, G132, G138, G20, G214, G2401, G2402, G2409, G242, G248, G254, G255, G2581, G300, G301, G308, G309, G3101, G3109, G311, G312, G3181, G3182, G3183, G3184, G3185, G3189, G319, G3281, G35, G361, G368, G369, G370,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	G371, G372, G373, G374, G375, G378, G379, G40001, G40009, G40011, G40019, G40101, G40109, G40111, G40119, G40201, G40209, G40211, G40219, G40301, G40309, G40311, G40319, G40401, G40409, G40411, G40419, G40501, G40509, G40801, G40802, G40803, G40804, G40811, G40812, G40813, G40814, G40821, G40822,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	G40823, G40824, G4089, G40901, G40909, G40911, G40919, G40A01, G40A09, G40A11, G40A19, G40B01, G40B09, G40B11, G40B19, G47411, G47419, G47421, G47429, G803, G890, G910, G911, G912, G913, G914, G918, G919, G937, G9389, G939, G94, O99350, O99351, O99352, O99353, O99354, O99355, P9160,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	P9161, P9162, P9163, R410, R4182, R4701, R5600, R5601, R561, R569		
8. Chronic pulmonary disease	J40, J410, J411, J418, J42, J430, J431, J432, J438, J439, J440, J441, J449, J4520, J4521, J4522, J4530, J4531, J4532, J4540, J4541, J4542, J4550, J4551, J4552, J45901, J45902, J45909,	COPD asthma: 190-192, 202-203	COPD asthma: 190-192, 202-203

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	J45990, J45991, J45998, J470, J471, J479, J60, J61, J620, J628, J630, J631, J632, J633, J634, J635, J636, J64, J660, J661, J662, J668, J670, J671, J672, J673, J674, J675, J676, J677, J678, J679, J684		
Changes from 1.0 to 1.1	Removed J65		
9. Diabetes without chronic complications	E0800, E0801, E0810, E0811, E089,	Diabetes: 637-639	Diabetes: 637-639

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E0900, E0901, E0910, E0911, E099, E1010, E1011, E109, E1100, E1101, E119, E1300, E1301, E1310, E1311, E139, O24011, O24012, O24013, O24019, O2402, O2403, O24111, O24112, O24113, O24119, O2412, O2413, O24311, O24312, O24313, O24319, O2432, O2433, O24811, O24812, O24813, O24819, O2482,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	O2483, O24911, O24912, O24913, O24919, O2492, O2493		
10. Diabetes with chronic complications	E0821, E0822, E0829, E08311, E08319, E08321, E08329, E08331, E08339, E08341, E08349, E08351, E08359, E0836, E0839, E0840, E0841, E0842, E0843, E0844, E0849, E0851, E0852, E0859, E08610, E08618, E08620, E08621, E08622, E08628, E08630,	Diabetes: 637-639	Diabetes: 637-639

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E08638, E08641, E08649, E0865, E0869, E088, E0921, E0922, E0929, E09311, E09319, E09321, E09329, E09331, E09339, E09341, E09349, E09351, E09359, E0936, E0939, E0940, E0941, E0942, E0943, E0944, E0949, E0951, E0952, E0959, E09610, E09618, E09620, E09621, E09622, E09628, E09630, E09638, E09641,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E09649, E0965, E0969, E098, E1021, E1022, E1029, E10311, E10319, E10321, E10329, E10331, E10339, E10341, E10349, E10351, E10359, E1036, E1039, E1040, E1041, E1042, E1043, E1044, E1049, E1051, E1052, E1059, E10610, E10618, E10620, E10621, E10622, E10628, E10630, E10638, E10641, E10649, E1065,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E1069, E108, E1121, E1122, E1129, E11311, E11319, E11321, E11329, E11331, E11339, E11341, E11349, E11351, E11359, E1136, E1139, E1140, E1141, E1142, E1143, E1144, E1149, E1151, E1152, E1159, E11610, E11618, E11620, E11621, E11622, E11628, E11630, E11638, E11641, E11649, E1165, E1169, E118,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E1321, E1322, E1329, E13311, E13319, E13321, E13329, E13331, E13339, E13341, E13349, E13351, E13359, E1336, E1339, E1340, E1341, E1342, E1343, E1344, E1349, E1351, E1352, E1359, E13610, E13618, E13620, E13621, E13622, E13628, E13630, E13638, E13641, E13649, E1365, E1369, E138, P702		
Changes from 1.0 to 1.1	E083211		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E083212 E083213 E083219 E083291 E083292 E083293 E083299 E083311 E083312 E083313 E083319 E083391 E083392 E083393 E083399 E083411 E083412 E083413 E083419 E083491 E083492 E083493 E083499 E083511 E083512 E083513 E083519 E083521 E083522 E083523 E083529 E083531 E083532 E083533 E083539 E083541 E083542 E083543 E083549		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E083551 E083552 E083553 E083559 E083591 E083592 E083593 E083599 E0837X1 E0837X2 E0837X3 E0837X9 E093211 E093212 E093213 E093219 E093291 E093292 E093293 E093299 E093311 E093312 E093313 E093319 E093391 E093392 E093393 E093399 E093411 E093412 E093413 E093419 E093491 E093492 E093493 E093499 E093511 E093512 E093513		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E093519 E093521 E093522 E093523 E093529 E093531 E093532 E093533 E093539 E093541 E093542 E093543 E093549 E093551 E093552 E093553 E093559 E093591 E093592 E093593 E093599 E0937X1 E0937X2 E0937X3 E0937X9 E103211 E103212 E103213 E103219 E103291 E103292 E103293 E103299 E103311 E103312 E103313 E103319 E103391 E103392		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E103393 E103399 E103411 E103412 E103413 E103419 E103491 E103492 E103493 E103499 E103511 E103512 E103513 E103519 E103521 E103522 E103523 E103529 E103531 E103532 E103533 E103539 E103541 E103542 E103543 E103549 E103551 E103552 E103553 E103559 E103591 E103592 E103593 E103599 E1037X1 E1037X2 E1037X3 E1037X9 E113211		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E113212 E113213 E113219 E113291 E113292 E113293 E113299 E113311 E113312 E113313 E113319 E113391 E113392 E113393 E113399 E113411 E113412 E113413 E113419 E113491 E113492 E113493 E113499 E113511 E113512 E113513 E113519 E113521 E113522 E113523 E113529 E113531 E113532 E113533 E113539 E113541 E113542 E113543 E113549		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E113551 E113552 E113553 E113559 E113591 E113592 E113593 E113599 E1137X1 E1137X2 E1137X3 E1137X9 E133211 E133212 E133213 E133219 E133291 E133292 E133293 E133299 E133311 E133312 E133313 E133319 E133391 E133392 E133393 E133399 E133411 E133412 E133413 E133419 E133491 E133492 E133493 E133499 E133511 E133512 E133513		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E133519 E133521 E133522 E133523 E133529 E133531 E133532 E133533 E133539 E133541 E133542 E133543 E133549 E133551 E133552 E133553 E133559 E133591 E133592 E133593 E133599 E1337X1 E1337X2 E1337X3 E1337X9		
11. Hypothyroidism	E000, E001, E002, E009, E018, E02, E030, E031, E032, E033, E038, E039, E890	Thyroid endocrine: 625- 627, 643-645	Thyroid endocrine: 625- 627, 643-645

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
12. Renal failure³	<i>I132,</i> <i>I1311,</i> <i>I120,</i> N183, N184, N185, N186, N189, N19, Z4901, Z4902, Z9115, Z940, Z992	Kidney transplant, Renal failure/dialysis: 652, 682-685	Kidney transplant, Renal failure/dialysis: 652, 682-685
13. Liver disease	B180, B181, B182, I8500, I8501, I8510, I8511, K700, K702, K7030, K7031, K7040, K7041, K709, K7210, K7211, K7290, K7291, K730, K731, K732,	Liver: 420-425, 432-434, 441-446	Liver: 420-425, 432-434, 441-446

³ The comorbidity category Renal Failure shares diagnosis codes with Hypertension and Congestive Heart Failure (I120, I1311, I132).

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	K738, K739, K740, K741, K742, K743, K744, K745, K7460, K7469, K754, K7581, K760, K766, K7689, K769, Z944		
14. Chronic Peptic ulcer disease (includes bleeding only if obstruction is also present)	K254, K255, K256, K257, K259, K264, K265, K266, K267, K269, K274, K275, K276, K277, K279, K284, K285, K286, K287, K289	GI Hemorrhage or ulcer: 377-384	GI Hemorrhage or ulcer: 377-384

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
15. HIV and AIDS (Acquired immune deficiency syndrome)	B20	HIV: 969-970, 974-977	HIV: 969-970, 974-977
16. Lymphoma	C8100, C8101, C8102, C8103, C8104, C8105, C8106, C8107, C8108, C8109, C8110, C8111, C8112, C8113, C8114, C8115, C8116, C8117, C8118, C8119, C8120, C8121, C8122, C8123, C8124, C8125, C8126, C8127, C8128, C8129, C8130, C8131, C8132, C8133, C8134,	Leukemia/lymphoma: 820-830, 834-849	Leukemia/lymphoma: 820-830, 834-849

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8135, C8136, C8137, C8138, C8139, C8140, C8141, C8142, C8143, C8144, C8145, C8146, C8147, C8148, C8149, C8170, C8171, C8172, C8173, C8174, C8175, C8176, C8177, C8178, C8179, C8190, C8191, C8192, C8193, C8194, C8195, C8196, C8197, C8198, C8199, C8200, C8201, C8202, C8203,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8204, C8205, C8206, C8207, C8208, C8209, C8210, C8211, C8212, C8213, C8214, C8215, C8216, C8217, C8218, C8219, C8220, C8221, C8222, C8223, C8224, C8225, C8226, C8227, C8228, C8229, C8230, C8231, C8232, C8233, C8234, C8235, C8236, C8237, C8238, C8239, C8240, C8241, C8242,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8243, C8244, C8245, C8246, C8247, C8248, C8249, C8250, C8251, C8252, C8253, C8254, C8255, C8256, C8257, C8258, C8259, C8260, C8261, C8262, C8263, C8264, C8265, C8266, C8267, C8268, C8269, C8280, C8281, C8282, C8283, C8284, C8285, C8286, C8287, C8288, C8289, C8290, C8291,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8292, C8293, C8294, C8295, C8296, C8297, C8298, C8299, C8300, C8301, C8302, C8303, C8304, C8305, C8306, C8307, C8308, C8309, C8310, C8311, C8312, C8313, C8314, C8315, C8316, C8317, C8318, C8319, C8330, C8331, C8332, C8333, C8334, C8335, C8336, C8337, C8338, C8339, C8350,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8351, C8352, C8353, C8354, C8355, C8356, C8357, C8358, C8359, C8370, C8371, C8372, C8373, C8374, C8375, C8376, C8377, C8378, C8379, C8380, C8381, C8382, C8383, C8384, C8385, C8386, C8387, C8388, C8389, C8390, C8391, C8392, C8393, C8394, C8395, C8396, C8397, C8398, C8399,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8400, C8401, C8402, C8403, C8404, C8405, C8406, C8407, C8408, C8409, C8410, C8411, C8412, C8413, C8414, C8415, C8416, C8417, C8418, C8419, C8440, C8441, C8442, C8443, C8444, C8445, C8446, C8447, C8448, C8449, C8460, C8461, C8462, C8463, C8464, C8465, C8466, C8467, C8468,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8469, C8470, C8471, C8472, C8473, C8474, C8475, C8476, C8477, C8478, C8479, C8490, C8491, C8492, C8493, C8494, C8495, C8496, C8497, C8498, C8499, C84A0, C84A1, C84A2, C84A3, C84A4, C84A5, C84A6, C84A7, C84A8, C84A9, C84Z0, C84Z1, C84Z2, C84Z3, C84Z4, C84Z5, C84Z6, C84Z7,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C84Z8, C84Z9, C8510, C8511, C8512, C8513, C8514, C8515, C8516, C8517, C8518, C8519, C8520, C8521, C8522, C8523, C8524, C8525, C8526, C8527, C8528, C8529, C8580, C8581, C8582, C8583, C8584, C8585, C8586, C8587, C8588, C8589, C8590, C8591, C8592, C8593, C8594, C8595, C8596,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C8597, C8598, C8599, C860, C861, C862, C863, C864, C865, C866, C880, C882, C883, C884, C888, C889, C9000, C9001, C9002, C9010, C9011, C9012, C9020, C9021, C9022, C9030, C9031, C9032, C960, C962, C964, C969, C96A, C96Z, D47Z9		
17. Metastatic cancer	C770, C771, C772,	Cancer, Lymphoma: 054, 055, 146-148, 180-182, 374-376, 435-437, 542-	Cancer, Lymphoma: 054, 055, 146-148, 180-182, 374-376, 435-437, 542-

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C773, C774, C775, C778, C779, C7800, C7801, C7802, C781, C782, C7830, C7839, C784, C785, C786, C787, C7880, C7889, C7900, C7901, C7902, C7910, C7911, C7919, C792, C7931, C7932, C7940, C7949, C7951, C7952, C7960, C7961, C7962, C7970, C7971, C7972, C7981, C7982,	544, 582-583, 597-599, 656-658, 686-688, 715- 716, 722-724, 736-741, 754-756, 826-830, 843- 849	544, 582-583, 597-599, 656-658, 686-688, 715- 716, 722-724, 736-741, 754-756, 826-830, 843- 849

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C7989, C799, C7B00, C7B01, C7B02, C7B03, C7B04, C7B09, C7B1, C7B8, C800, C801, R180		
18. Solid tumor without metastasis	C000, C001, C002, C003, C004, C005, C006, C008, C009, C01, C020, C021, C022, C023, C024, C028, C029, C030, C031, C039, C040, C041, C048, C049, C050,	Cancer, Lymphoma: 054, 055, 146-148, 180-182, 374-376, 435-437, 542-544, 582-583, 597-599, 656-658, 686-688, 715-716, 722-724, 736-741, 754-756, 826-830, 843-849	Cancer, Lymphoma: 054, 055, 146-148, 180-182, 374-376, 435-437, 542-544, 582-583, 597-599, 656-658, 686-688, 715-716, 722-724, 736-741, 754-756, 826-830, 843-849

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C051, C052, C058, C059, C060, C061, C062, C0680, C0689, C069, C07, C080, C081, C089, C090, C091, C098, C099, C100, C101, C102, C103, C104, C108, C109, C110, C111, C112, C113, C118, C119, C12, C130, C131, C132, C138, C139, C140, C142,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C148, C153, C154, C155, C158, C159, C160, C161, C162, C163, C164, C165, C166, C168, C169, C170, C171, C172, C173, C178, C179, C180, C181, C182, C183, C184, C185, C186, C187, C188, C189, C19, C20, C210, C211, C212, C218, C220, C221,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C222, C223, C224, C227, C228, C229, C23, C240, C241, C248, C249, C250, C251, C252, C253, C254, C257, C258, C259, C260, C261, C269, C300, C301, C310, C311, C312, C313, C318, C319, C320, C321, C322, C323, C328, C329, C33, C3400, C3401,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C3402, C3410, C3411, C3412, C342, C3430, C3431, C3432, C3480, C3481, C3482, C3490, C3491, C3492, C37, C380, C381, C382, C383, C384, C388, C390, C399, C4000, C4001, C4002, C4010, C4011, C4012, C4020, C4021, C4022, C4030, C4031, C4032, C4080, C4081, C4082, C4090,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C4091, C4092, C410, C411, C412, C413, C414, C419, C430, C4310, C4311, C4312, C4320, C4321, C4322, C4330, C4331, C4339, C434, C4351, C4352, C4359, C4360, C4361, C4362, C4370, C4371, C4372, C438, C439, C450, C451, C452, C457, C470, C4710, C4711, C4712, C4720,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C4721, C4722, C473, C474, C475, C476, C478, C479, C480, C481, C482, C488, C490, C4910, C4911, C4912, C4920, C4921, C4922, C493, C494, C495, C496, C498, C499, C4A0, C4A10, C4A11, C4A12, C4A20, C4A21, C4A22, C4A30, C4A31, C4A39, C4A4, C4A51, C4A52, C4A59,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C4A60, C4A61, C4A62, C4A70, C4A71, C4A72, C4A8, C4A9, C50011, C50012, C50019, C50021, C50022, C50029, C50111, C50112, C50119, C50121, C50122, C50129, C50211, C50212, C50219, C50221, C50222, C50229, C50311, C50312, C50319, C50321, C50322, C50329, C50411, C50412, C50419, C50421, C50422, C50429, C50511,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C50512, C50519, C50521, C50522, C50529, C50611, C50612, C50619, C50621, C50622, C50629, C50811, C50812, C50819, C50821, C50822, C50829, C50911, C50912, C50919, C50921, C50922, C50929, C510, C511, C512, C518, C519, C52, C530, C531, C538, C539, C540, C541, C542, C543, C548, C549,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C55, C561, C562, C569, C5700, C5701, C5702, C5710, C5711, C5712, C5720, C5721, C5722, C573, C574, C577, C578, C579, C58, C600, C601, C602, C608, C609, C61, C6200, C6201, C6202, C6210, C6211, C6212, C6290, C6291, C6292, C6300, C6301, C6302, C6310, C6311,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C6312, C632, C637, C638, C639, C641, C642, C649, C651, C652, C659, C661, C662, C669, C670, C671, C672, C673, C674, C675, C676, C677, C678, C679, C680, C681, C688, C689, C6900, C6901, C6902, C6910, C6911, C6912, C6920, C6921, C6922, C6930, C6931,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C6932, C6940, C6941, C6942, C6950, C6951, C6952, C6960, C6961, C6962, C6980, C6981, C6982, C6990, C6991, C6992, C700, C701, C709, C710, C711, C712, C713, C714, C715, C716, C717, C718, C719, C720, C721, C7220, C7221, C7222, C7230, C7231, C7232, C7240, C7241,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C7242, C7250, C7259, C729, C73, C7400, C7401, C7402, C7410, C7411, C7412, C7490, C7491, C7492, C750, C751, C752, C753, C754, C755, C758, C759, C760, C761, C762, C763, C7640, C7641, C7642, C7650, C7651, C7652, C768, C7A00, C7A010, C7A011, C7A012, C7A019, C7A020,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	C7A021, C7A022, C7A023, C7A024, C7A025, C7A026, C7A029, C7A090, C7A091, C7A092, C7A093, C7A094, C7A095, C7A096, C7A098, D030, D0310, D0311, D0312, D0320, D0321, D0322, D0330, D0339, D034, D0351, D0352, D0359, D0360, D0361, D0362, D0370, D0371, D0372, D038, D039, E3121, E3122, E3123		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
Changes from 1.0 to 1.1	C49A0 C49A1 C49A2 C49A3 C49A4 C49A5 C49A9		
19. Rheumatoid arthritis/collagen vascular diseases	L900, L940, L941, L943, M0500, M05011, M05012, M05019, M05021, M05022, M05029, M05031, M05032, M05039, M05041, M05042, M05049, M05051, M05052, M05059, M05061, M05062, M05069, M05071, M05072, M05079, M0509, M0510, M05111, M05112, M05119, M05121,	Connective tissue: 545- 547	Connective tissue: 545- 547

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M05122, M05129, M05131, M05132, M05139, M05141, M05142, M05149, M05151, M05152, M05159, M05161, M05162, M05169, M05171, M05172, M05179, M0519, M0520, M05211, M05212, M05219, M05221, M05222, M05229, M05231, M05232, M05239, M05241, M05242, M05249, M05251, M05252, M05259, M05261, M05262, M05269, M05271, M05272,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M05279, M0529, M0530, M05311, M05312, M05319, M05321, M05322, M05329, M05331, M05332, M05339, M05341, M05342, M05349, M05351, M05352, M05359, M05361, M05362, M05369, M05371, M05372, M05379, M0539, M0540, M05411, M05412, M05419, M05421, M05422, M05429, M05431, M05432, M05439, M05441, M05442, M05449, M05451,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M05452, M05459, M05461, M05462, M05469, M05471, M05472, M05479, M0549, M0550, M05511, M05512, M05519, M05521, M05522, M05529, M05531, M05532, M05539, M05541, M05542, M05549, M05551, M05552, M05559, M05561, M05562, M05569, M05571, M05572, M05579, M0559, M0560, M05611, M05612, M05619, M05621, M05622, M05629,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M05631, M05632, M05639, M05641, M05642, M05649, M05651, M05652, M05659, M05661, M05662, M05669, M05671, M05672, M05679, M0569, M0570, M05711, M05712, M05719, M05721, M05722, M05729, M05731, M05732, M05739, M05741, M05742, M05749, M05751, M05752, M05759, M05761, M05762, M05769, M05771, M05772, M05779, M0579,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M0580, M05811, M05812, M05819, M05821, M05822, M05829, M05831, M05832, M05839, M05841, M05842, M05849, M05851, M05852, M05859, M05861, M05862, M05869, M05871, M05872, M05879, M0589, M059, M0600, M06011, M06012, M06019, M06021, M06022, M06029, M06031, M06032, M06039, M06041, M06042, M06049, M06051, M06052,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M06059, M06061, M06062, M06069, M06071, M06072, M06079, M0608, M0609, M061, M0620, M06211, M06212, M06219, M06221, M06222, M06229, M06231, M06232, M06239, M06241, M06242, M06249, M06251, M06252, M06259, M06261, M06262, M06269, M06271, M06272, M06279, M0628, M0629, M0630, M06311, M06312, M06319, M06321,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M06322, M06329, M06331, M06332, M06339, M06341, M06342, M06349, M06351, M06352, M06359, M06361, M06362, M06369, M06371, M06372, M06379, M0638, M0639, M064, M0680, M06811, M06812, M06819, M06821, M06822, M06829, M06831, M06832, M06839, M06841, M06842, M06849, M06851, M06852, M06859, M06861, M06862, M06869,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M06871, M06872, M06879, M0688, M0689, M069, M0800, M08011, M08012, M08019, M08021, M08022, M08029, M08031, M08032, M08039, M08041, M08042, M08049, M08051, M08052, M08059, M08061, M08062, M08069, M08071, M08072, M08079, M0808, M0809, M081, M0820, M08211, M08212, M08219, M08221, M08222, M08229, M08231,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M08232, M08239, M08241, M08242, M08249, M08251, M08252, M08259, M08261, M08262, M08269, M08271, M08272, M08279, M0828, M0829, M083, M0840, M08411, M08412, M08419, M08421, M08422, M08429, M08431, M08432, M08439, M08441, M08442, M08449, M08451, M08452, M08459, M08461, M08462, M08469, M08471, M08472, M08479,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M0848, M0880, M08811, M08812, M08819, M08821, M08822, M08829, M08831, M08832, M08839, M08841, M08842, M08849, M08851, M08852, M08859, M08861, M08862, M08869, M08871, M08872, M08879, M0888, M0889, M0890, M08911, M08912, M08919, M08921, M08922, M08929, M08931, M08932, M08939, M08941, M08942, M08949, M08951,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M08952, M08959, M08961, M08962, M08969, M08971, M08972, M08979, M0898, M0899, M1200, M12011, M12012, M12019, M12021, M12022, M12029, M12031, M12032, M12039, M12041, M12042, M12049, M12051, M12052, M12059, M12061, M12062, M12069, M12071, M12072, M12079, M1208, M1209, M320, M3210, M3211, M3212, M3213,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M3214, M3215, M3219, M328, M329, M3300, M3301, M3302, M3309, M3310, M3311, M3312, M3319, M3320, M3321, M3322, M3329, M3390, M3391, M3392, M3399, M340, M341, M342, M3481, M3482, M3483, M3489, M349, M3500, M3501, M3502, M3503, M3504, M3509, M351, M353, M355, M358,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M359, M360, M368, M450, M451, M452, M453, M454, M455, M456, M457, M458, M459, M4600, M4601, M4602, M4603, M4604, M4605, M4606, M4607, M4608, M4609, M461, M4650, M4651, M4652, M4653, M4654, M4655, M4656, M4657, M4658, M4659, M4680, M4681, M4682, M4683, M4684,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	M4685, M4686, M4687, M4688, M4689, M4690, M4691, M4692, M4693, M4694, M4695, M4696, M4697, M4698, M4699, M488X1, M488X2, M488X3, M488X4, M488X5, M488X6, M488X7, M488X8, M488X9, M4980, M4981, M4982, M4983, M4984, M4985, M4986, M4987, M4988, M4989		
20. Coagulation deficiency	D65, D66, D67, D680,	Coagulation disorders: 813	Coagulation disorders: 813

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	D681, D682, D68311, D68312, D68318, D6832, D684, D688, D689, D691, D693, D6941, D6942, D6949, D6951, D6959, D696, D7582, O99111, O99112, O99113, O99119, O9912, O9913		
21. Obesity	E6601, E6609, E661, E662, E668, E669, O99210, O99211, O99212, O99213, O99214, O99215, R939, Z6830,	Nutrition/metabolic: 619- 621, 640-641	Nutrition/metabolic: 619- 621, 640-641

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	Z6831, Z6832, Z6833, Z6834, Z6835, Z6836, Z6837, Z6838, Z6839, Z6841, Z6842, Z6843, Z6844, Z6845, Z6854		
22. Weight loss	E40, E41, E42, E43, E440, E441, E45, E46, E640, R634, R636	Nutrition/metabolic: 640-641	Nutrition/metabolic: 640-641
23. Fluid and electrolyte disorders	E860, E861, E869, E870, E871, E872, E873, E874, E875, E876, E8770,	Nutrition/metabolic: 640-641	Nutrition/metabolic: 640-641

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	E8771, E8779, E878		
24. Blood loss anemia	D500, O9081, O99011, O99012, O99013, O99019, O9902, O9903	Anemia: 808-812	Anemia: 808-812
25. Deficiency anemias	D501, D508, D509, D510, D511, D512, D513, D518, D519, D520, D521, D528, D529, D530, D531, D532, D538, D539, D630, D631, D638, D649	Anemia: 808-812	Anemia: 808-812
26. Alcohol abuse	F1010, F10120, F10121,	Alcohol or drug: 894-897	Alcohol or drug: 894-897

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F10129, F1014, F10150, F10151, F10159, F10180, F10181, F10182, F10188, F1019, F1020, F1021, F10220, F10221, F10229, F10230, F10231, F10232, F10239, F1024, F10250, F10251, F10259, F1026, F1027, F10280, F10281, F10282, F10288, F1029, F10921, F1094, F10950, F10951, F10959, F1096, F1097, F10980, F10981,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F10982, F10988, F1099		
27. Drug abuse	F1110, F11120, F11122, F11129, F1114, F11159, F11181, F11182, F11188, F1119, F1120, F1121, F11220, F11221, F11222, F11229, F1123, F1124, F11250, F11251, F11259, F11281, F11282, F11288, F1129, F1190, F11922, F1193, F1194, F11959, F11981, F11982, F11988, F1199, F1210,	Alcohol or drug: 894-897	Alcohol or drug: 894-897

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F12122, F12159, F12180, F12188, F1219, F1220, F1221, F12220, F12221, F12222, F12229, F12250, F12251, F12259, F12280, F12288, F1229, F1290, F12922, F12959, F12980, F12988, F1299, F1310, F13120, F1314, F13159, F13180, F13181, F13182, F13188, F1319, F1320, F1321, F13220, F13221, F13229, F13230, F13231,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F13232, F13239, F1324, F13250, F13251, F13259, F1326, F1327, F13280, F13281, F13282, F13288, F1329, F1390, F13930, F13931, F13932, F13939, F1394, F13959, F1396, F1397, F13980, F13981, F13982, F13988, F1399, F1410, F14120, F14122, F1414, F14159, F14180, F14181, F14182, F14188, F1419, F1420, F1421,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F14220, F14221, F14222, F14229, F1423, F1424, F14250, F14251, F14259, F14280, F14281, F14282, F14288, F1429, F1490, F14922, F1494, F14959, F14980, F14981, F14982, F14988, F1499, F1510, F15120, F15122, F1514, F15159, F15180, F15181, F15182, F15188, F1519, F1520, F1521, F15220, F15221, F15222, F15229,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F1523, F1524, F15250, F15251, F15259, F15280, F15281, F15282, F15288, F1529, F1590, F15922, F1593, F1594, F15959, F15980, F15981, F15982, F15988, F1599, F1610, F16120, F16122, F1614, F16159, F16180, F16183, F16188, F1619, F1620, F1621, F16220, F16221, F16229, F1624, F16250, F16251, F16259, F16280,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F16283, F16288, F1629, F1690, F1694, F16959, F16980, F16983, F16988, F1699, F1810, F18120, F1814, F18159, F1817, F18180, F18188, F1819, F1820, F1821, F18220, F18221, F18229, F1824, F18250, F18251, F18259, F1827, F18280, F18288, F1829, F1890, F1894, F18959, F1897, F18980, F18988, F1899, F1910,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F19120, F19122, F1914, F19159, F1916, F1917, F19180, F19181, F19182, F19188, F1919, F1920, F1921, F19220, F19221, F19222, F19229, F19230, F19231, F19232, F19239, F1924, F19250, F19251, F19259, F1926, F1927, F19280, F19281, F19282, F19288, F1929, F1990, F19922, F19930, F19931, F19932, F19939, F1994,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F19959, F1996, F1997, F19980, F19981, F19982, F19988, F1999, F550, F551, F552, F553, F554, F558, O99320, O99321, O99322, O99323, O99324, O99325		
28. Psychoses	F200, F201, F202, F203, F205, F2081, F2089, F209, F22, F23, F24, F250, F251, F258, F259, F28, F29, F3010,	Psychoses: 885	Psychoses: 885

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F3011, F3012, F3013, F302, F303, F304, F308, F309, F310, F3110, F3111, F3112, F3113, F312, F3130, F3131, F3132, F314, F315, F3160, F3161, F3162, F3163, F3164, F3170, F3171, F3172, F3173, F3174, F3175, F3176, F3177, F3178, F3181, F3189, F319, F324, F325, F3340,		

Table 2 Definitions of Comorbidities, Elixhauser Comorbidity Software version 1.1/ 2017	ICD-10- CM Diagnosis Codes:	V33 MS-DRGs	V34 MS-DRGs
	F3341, F3342, F348, F349, F39, F4489, F843		
Changes from 1.0 to 1.1	F3481 F3489		
29. Depression	F320, F321, F322, F323, F328, F329, F330, F331, F332, F333, F338, F339, F341, F4321	Depressive neurosis: 881	Depressive neurosis: 881
Changes from 1.0 to 1.1	F3281 F3289		