**Supplementary Tables**

**Supplementary Table A. Diagnostic or Treatment Procedures with Intra-arterial Administration of CM**

| **ICD** | **Procedure** | **Description** |
| --- | --- | --- |
| 9 | # 00.55 | INSRT DRG-ELUT STNT OTHR PERIPH STN |
| 9 | # 00.60 | INSERTION DRUG ELUD STNT FEMO ARTER |
| 9 | # 00.61 | PERCUTAN ANGIOPLSTY EXTRCRAIN VESS |
| 9 | # 00.62 | PERCUTAN ANGIOPLSTY INTRACRAIN VESS |
| 9 | # 00.63 | INSRT CAROTID ARTERY STENT, PERC |
| 9 | # 00.64 | PERCUTN INSERT OTHR EXTRACRAIN STNT |
| 9 | # 00.65 | INSRT INTRACRAN VASCULAR STNT PERCU |
| 9 | # 00.66 | PERCUTN TRANSLUM CORONRY ANGIOPLSTY |
| 9 | # 17.53 | PERCUTAN ATHERECTOMY EXTRACR VESSLS |
| 9 | # 17.54 | PERCUTAN ATHERECTOMY INTRACR VESSLS |
| 9 | # 17.55 | TRANSLUMINAL CORONARY ATHERECTOMY |
| 9 | # 17.56 | ATHERECTOMY OTHR NON-CORONARY VESSLS |
| 9 | # 35.05 | ENDOVASCULAR REPLACEMT AORTIC VALVE |
| 9 | # 35.06 | TRANSAPICAL REPLACEMNT AORTIC VALVE |
| 9 | # 35.09 | ENDOVASCLR REPLACE UNSPEC HEART VAL |
| 9 | # 35.96 | PERCUTANEOUS BALLOON VALVULOPLASTY |
| 9 | # 35.97 | PERCUTANEOUS MITRAL VALVE REPAIR |
| 9 | # 36.03 | OPEN CORONARY ARTERY ANGIOPLASTY |
| 9 | # 36.04 | INTRACORONARY THROMBOLYTIC INFUS |
| 9 | # 36.06 | INSRT NON-DRG-ELUT CRNRY ARTRY STNT |
| 9 | # 36.07 | INSRT DRG-ELUT CORONARY ARTERY STNT |
| 9 | # 36.09 | REMOVE CORONARY ARTERY OBSTRUCT NEC |
| 9 | # 36.34 | PERCU TRANSMYOCARDIAL REVASC |
| 9 | # 37.61 | PULSATION BALLOON IMPLANT |
| 9 | # 37.90 | INSRT LEFT ATRIAL APPENDAGE DEVICE |
| 9 | # 37.92 | THERAPEUTIC INJECTION TO HEART |
| 9 | # 39.50 | ANGIOPLSTY OTHR NON-CORONARY VESSEL |
| 9 | # 39.71 | ENDOVASC IMPLNT OTH/GRFT,ABDM AORTA |
| 9 | # 39.72 | ENDOVAS TOTAL EMBOLIZ HEAD/NCK VSLS |
| 9 | # 39.73 | ENDOVASC IMPLNT GRFT THORACIC AORTA |
| 9 | # 39.74 | ENDOVASC RMV OBST H/N VESSEL |
| 9 | # 39.75 | ENDOVASC EMBOL/OCCLUS VES HEAD/NECK |
| 9 | # 39.76 | ENDOVASC EMBOL/VES NECK/BIOACT COIL |
| 9 | # 39.78 | ENDOVASC IMPLANT BRANCH GRAFT AORTA |
| 9 | # 39.90 | INSRT NON-DRG-ELUT PERI NON-COR STN |
| 9 | # 44.44 | TRANSCATHETER EMBOLIZATION for gastric or duodenal bleeding |
| 9 | # 68.24 | UTERINE ARTERY EMBOLIZATION W/COILS |
| 9 | # 68.25 | UTERINE ARTERY EMBOLIZATON W/O COILS |
| 10 | 037(0-9)3(4-7)- | Dilation of (Upper) Artery with Intraluminal Device, Drug-Eluting, Percutaneous Approach |
| 10 | 037(A-F)3(4-7)- | Dilation of (Upper) Artery with Intraluminal Device, Drug-Eluting, Percutaneous Approach |
| 10 | 047-34- | Dilation of (Lower) Artery with Intraluminal Device, Drug-Eluting, Percutaneous Approach |
| 10 | 047(K,L)34- | Dilation of Femoral Artery with Drug-eluting Intraluminal Device, Percutaneous Approach |
| 10 | 037(H-Q)3Z- | Dilation of (Pre-cerebral) Artery (Common Carotid, Internal Carotid below the bifurcation, External Carotid, Vertebral), Percutaneous Approach |
| 10 | 037G3Z- | Dilation of Intracranial Artery, Percutaneous Approach |
| 10 | 037(K-L)3(D-G)- | Dilation of Internal Carotid Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 037G3Z- | Dilation of Intracranial Artery, Percutaneous Approach |
| 10 | 037(H-Q)3(D-G)- | Dilation of (Pre-cerebral) Artery (Common Carotid, Internal Carotid below the bifurcation, External Carotid, Vertebral) with Intraluminal Device, Percutaneous Approach |
| 10 | 037G3(D-G)- | Dilation of Intracranial Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 027(0-3)3Z- | Dilation of Coronary Artery, Percutaneous Approach |
| 10 | 03C(H-Q)3Z(6,Z) | Extirpation of Matter from (Pre-cerebral) Artery (Common Carotid, Internal Carotid below the bifurcation, External Carotid, Vertebral), Percutaneous Approach |
| 10 | 03CG3Z(6,Z) | Extirpation of Matter from Intracranial Artery, Percutaneous Approach |
| 10 | 02C(0-3)3Z- | Extirpation of Matter from Coronary Artery, Percutaneous Approach |
| 10 | X2C-361 | Extirpation of Matter from Coronary Artery using Orbital Atherectomy Technology, Percutaneous Approach, New Technology Group 1 |
| 10 | 03C(0-9)3Z- | Extirpation of Matter from (Upper) Artery, Percutaneous Approach |
| 10 | 03C(A-F)3Z- | Extirpation of Matter from (Upper) Artery, Percutaneous Approach |
| 10 | 03C(R-Y)3Z- | Extirpation of Matter from (Upper) Artery, Percutaneous Approach |
| 10 | 04C-3Z- | Extirpation of Matter from (Lower) Artery, Percutaneous Approach |
| 10 | 027(F-J)3ZZ | Dilation of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02N(F-J)3ZZ | Release (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02R(F-J)3-- | Replacement of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach  Replacement of Aortic Valve using Zooplastic Tissue, Rapid Deployment Technique, Percutaneous Approach, New Technology Group 2 |
| 10 | 027(F-J)-(4,D)Z | Dilation of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Open or Percutaneous Endoscopic Approach |
| 10 | 02B(F-J)(0,4)ZZ | Excision of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Open or Percutaneous Endoscopic Approach |
| 10 | 02R(F-J)(0,4)-Z | Replacement of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Open or Percutaneous Endoscopic Approach |
| 10 | 02U53JZ | Supplement Atrial Septum with Synthetic Substitute, Percutaneous Approach |
| 10 | 02UM3JZ | Supplement Ventricular Septum with Synthetic Substitute, Percutaneous Approach |
| 10 | 02UM4JZ | Supplement Ventricular Septum with Synthetic Substitute, Percutaneous Endoscopic Approach |
| 10 | 027(F-J)3ZZ | Dilation of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02UG3(7,8,J,K)Z | Supplement Mitral Valve, Percutaneous Approach |
| 10 | 027(F-J)-(4,D)Z | Dilation of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid) with Intraluminal Device |
| 10 | 02B(F-J)3ZZ | Excision of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02C(F-J)3ZZ | Extirpation of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02N(F-J)3ZZ | Release of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02Q(F-J)3ZZ | Repair of (Heart) Valve (Aortic, Mitral, Pulmonary, Tricuspid), Percutaneous Approach |
| 10 | 02VG3ZZ | Restriction of Mitral Valve, Percutaneous Approach |
| 10 | 027(0-3)0Z- | Dilation of Coronary Artery, Open Approach |
| 10 | 3E07-1- | Introduction of Thrombolytic into Coronary Artery |
| 10 | 3E07-PZ | Introduction of Platelet Inhibitor into Coronary Artery |
| 10 | 027(0-3)3(D-G)- | Dilation of Coronary Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 027(0-3)3(4-7)- | Dilation of Coronary Artery with Drug-eluting Intraluminal Device, Percutaneous Approach |
| 10 | 027(0-3)4Z- | Dilation of Coronary Artery, Percutaneous Endoscopic Approach |
| 10 | 025(6,7,8,K,L)4ZZ | Destruction of Atrium, Ventricle, Conduction Mechanism, Percutaneous Endoscopic Approach |
| 10 | 02B(6,7,8,K,L)4ZZ | Excision of Atrium, Ventricle, Conduction Mechanism, Percutaneous Endoscopic Approach |
| 10 | 5A02-10 | Assistance with Cardiac Output using Balloon Pump |
| 10 | 02HA3R- | Insertion of External Heart Assist System into Heart, Percutaneous Approach |
| 10 | 5A0221D | Assistance with Cardiac Output using Impeller pump, Continuous |
| 10 | 02L7-DK | Occlusion of Left Atrial Appendage with Intraluminal Device |
| 10 | 3E07-GC | Introduction of Other Therapeutic Substance into Coronary Artery |
| 10 | 3E08-GC | Introduction of Other Therapeutic Substance into Heart |
| 10 | 037(0-9)3Z- | Dilation of (Upper) Artery, Percutaneous Approach |
| 10 | 037(A-F)3Z- | Dilation of (Upper) Artery, Percutaneous Approach |
| 10 | 037(R-Y)3Z- | Dilation of (Upper) Artery, Percutaneous Approach |
| 10 | 047-3Z- | Dilation of (Lower) Artery, Percutaneous Approach |
| 10 | 04V03(D,E,F)(6,Z) | Restriction of Abdominal Aorta with Intraluminal Device, Percutaneous Approach |
| 10 | 03L(G-Q)3DZ | Occlusion of Artery (Pre-Cerebral, Intracranial) with Intraluminal Device, Percutaneous Approach |
| 10 | 03V(G-Q)3DZ | Restriction of Artery (Pre-Cerebral, Intracranial) with Intraluminal Device, Percutaneous Approach |
| 10 | 02V(W,X)3(D,E,F)Z | Restriction of Thoracic Aorta (Ascending, Arch, Descending) with Intraluminal Device, Percutaneous Approach |
| 10 | 03C(G-Q)3Z- | Extirpation of Matter from Artery (Pre-Cerebral, Intracranial), Percutaneous Approach |
| 10 | 03L(G-Q)3DZ | Occlusion of Artery (Pre-Cerebral, Intracranial) with Intraluminal Device, Percutaneous Approach |
| 10 | 03V(G-Q)3DZ | Restriction of Artery (Pre-Cerebral, Intracranial) with Intraluminal Device, Percutaneous Approach |
| 10 | 03L(G-Q)3BZ | Occlusion of Artery (Pre-Cerebral, Intracranial) with Bioactive Intraluminal Device, Percutaneous Approach |
| 10 | 03V(G-Q)3BZ | Restriction of Artery (Pre-Cerebral, Intracranial) with Bioactive Intraluminal Device, Percutaneous Approach |
| 10 | 02V(W,X)3(E,F)Z | Restriction of Thoracic Aorta (Ascending, Arch, Descending) with Branched or Fenestrated Intraluminal Device, Percutaneous Approach |
| 10 | 04V03(E,F)(6,Z) | Restriction of Abdominal Aorta with Branched or Fenestrated Intraluminal Device, Percutaneous Approach |
| 10 | 037(0-9)3(D-G)- | Dilation of (Upper) Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 037(A-F)3(D-G)- | Dilation of (Upper) Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 037(R-Y)3(D-G)- | Dilation of (Upper) Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 047-3D- | Dilation of (Lower) Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 04L23DZ | Occlusion of Gastric Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 04L33DZ | Occlusion of Hepatic Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 04L43DZ | Occlusion of Splenic Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 04L53DZ | Occlusion of Superior Mesenteric Artery with Intraluminal Device, Percutaneous Approach |
| 10 | 04LE-DT | Occlusion of Right Uterine Artery with Intraluminal Device |
| 10 | 04LF-DU | Occlusion of Left Uterine Artery with Intraluminal Device |
| 10 | 04LE-ZT | Occlusion of Right Uterine Artery |
| 10 | 04LF-ZU | Occlusion of Left Uterine Artery |
| 10 | 02PAXDZ | Removal of Intraluminal Device from Heart, External Approach |

**Supplementary Table B. Coding for Comorbidity-based Groups**

|  |  |  |
| --- | --- | --- |
| **Comorbidity** | **ICD-9 Coding** | **ICD-10 Coding** |
| Diabetes | Elixhauser Comorbidity Index Categories: Diabetes Uncomplicated and Complicated | Elixhauser Comorbidity Index Categories: Diabetes Uncomplicated and Complicated |
| Chronic Kidney Disease Stage 1 | 585.1 | N18.1 |
| Chronic Kidney Disease Stage 2 | 585.2 | N18.2 |
| Chronic Kidney Disease Stage 3 | 585.3 | N18.3 |
| Chronic Kidney Disease Stage 4 | 585.4 | N18.4 |
| Chronic Kidney Disease Unspecified | 249.4, 250.4, 585.9 | E08.22, E09.22, E10.22, E11.22, E13.22, I12.9, I13.0, I13.10, N18.9 |
| Congestive Heart Failure | Elixhauser Comorbidity Index Category: Congestive Heart Failure | Elixhauser Comorbidity Index Category: Congestive Heart Failure |
|  |  |  |
| Chronic Total Occlusion | 414.2, 440.2 | I25.82, I70.92 |

**Supplementary Table C. Elixhauser Comorbidity Index**

| **Comorbidity** | **ICD-9 Coding** | **ICD-10 Coding** |
| --- | --- | --- |
| Congestive Heart Failure | 398.91, 402.01, 402.11, 402.91, 404.01, 404.03, 404.11, 404.13, 404.91, 404.93, 425.4–425.9, 428.x | I09.9#, I11.0#, I13.0#, I13.2#, I25.5#, I42.0#, I42.5#, I42.6#, I42.7#, I42.8#, I42.9#, I43.#, I50.#, P29.0# |
| Cardiac Arrhythmia | 426.0, 426.13, 426.7, 426.9, 426.10, 426.12, 427.0–427.4, 427.6–427.9, 785.0, 996.01, 996.04, V45.0, V53.3 | I44.1#, I44.2#, I44.3#, I45.6#, I45.9#, I47.#, I48.#, I49.#, R00.0#, R00.1#, R00.8#, T82.1#, Z45.0#, Z95.0# |
| Valvular Disease | 093.2, 394.x–397.x, 424.x, 746.3–746.6, V42.2, V43.3 | A52.0#, I05.#, I06.#, I07.#, I08.#, I09.1#, I09.8#, I34.#, I35.#, I36.#, I37.#, I38.#, I39.#, Q23.0#, Q23.1#, Q23.2#, Q23.3#, Z95.2#, Z95.4# |
| Pulmonary Circulation Disorders | 415.0, 415.1, 416.x, 417.0, 417.8, 417.9 | I26.#, I27.#, I28.0#, I28.8#, I28.9# |
| Peripheral Vascular Disorders | 093.0, 437.3, 440.x, 441.x, 093.0, 437.3, 440.x, 441.x, 443.1– 443.9, 447.1, 557.1, 557.9, V43.4 | I70.#, I71.#, I73.1#, I73.8#, I73.9#, I77.1#, I79.0#, I79.2#, K55.1#, K55.8#, K55.9#, Z95.8#, Z95.9# |
| Hypertension (Uncomplicated) | 401.x | I10.# |
| Hypertension (Complicated) | 402.x–405.x | I11.#, I12.#, I13.#, I15.# |
| Paralysis | 334.1, 342.x, 343.x, 344.0–344.6, 344.9 | G04.1#, G11.4#, G80.1#, G80.2#, G81.#, G82.#, G83.0#, G83.1#, G83.2#, G83.3#, G83.4#, G83.9# |
| Other Neurological Disorders | 331.9, 332.0, 332.1, 333.4, 333.5, 333.92, 334.x–335.x, 336.2, 340.x, 341.x, 345.x, 348.1, 348.3, 780.3, 784.3 | G10.#, G11.#, G12.#, G13.#, G20.#, G21.#, G22.#, G25.4#, G25.5#, G31.2#, G31.8#, G31.9#, G32.#, G35.#, G36.#, G37.#, G40.#, G41.#, G93.1#, G93.4#, R47.0#, R56.# |
| Chronic Pulmonary Disease | 416.8, 416.9, 490.x –505.x, 506.4, 508.1, 508.8 | I27.8#, I27.9#, J40.#, J41.#, J42.#, J43.#, J44.#, J45.#, J46.#, J47.#, J60.#, J61.#, J62.#, J63.#, J64.#, J65.#, J66.#, J67.#, J68.4#, J70.1#, J70.3# |
| Diabetes (Uncomplicated) | 250.0–250.3 | E10.0#, E10.1#, E10.9#, E11.0#, E11.1#, E11.9#, E12.0#, E12.1#, E12.9#, E13.0#, E13.1#, E13.9#, E14.0#, E14.1#, E14.9# |
| Diabetes (Complicated) | 250.4–250.9 | E10.2#, E10.3#, E10.4#, E10.5#, E10.6#, E10.7#, E10.8#, E11.2#, E11.3#, E11.4#, E11.5#, E11.6#, E11.7#, E11.8#, E12.2#, E12.3#, E12.4#, E12.5#, E12.6#, E12.7#, E12.8#, E13.2#, E13.3#, E13.4#, E13.5#, E13.6#, E13.7#, E13.8#, E14.2#, E14.3#, E14.4#, E14.5#, E14.6#, E14.7#, E14.8# |
| Hypothyroidism | 240.9, 243.x, 244.x, 246.1, 246.8 | E00.#, E01.#, E02.#, E03.#, E89.0# |
| Renal Failure | 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 585.x, 586.x, 588.0, V42.0, V45.1, V56.x | I12.0#, I13.1#, N18.#, NI9.#, N25.0#, Z49.0#, Z49.1#, Z49.2#, Z94.0#, Z99.2# |
| Liver Disease | 070.22, 070.23, 070.32, 070.33, 070.44, 070.54, 070.6, 070.9, 456.0–456.2, 570.x, 571.x, 572.2–572.8, 573.3, 573.4, 573.8, 573.9, V42.7 | B18.#, I85.#, I86.4#, I98.2#, K70.#, K71.1#, K71.3#, K71.4#, K71.5#, K71.7#, K72.#, K73.#, K74.#, K76.0#, K76.2#, K76.3#, K76.4#, K76.5#, K76.6#, K76.7#, K76.8#, K76.9#, Z94.4# |
| Peptic Ulcer Disease (excluding bleeding) | 531.7, 531.9, 532.7, 532.9, 533.7, 533.9, 534.7, 534.9 | K25.7#, K25.9#, K26.7#, K26.9#, K27.7#, K27.9#, K28.7#, K28.9# |
| AIDS/HIV | 042.x–044.x | B20.#, B21.#, B22.#, B24.# |
| Lymphoma | 200.x–202.x, 203.0, 238.6 | C81.#, C82.#, C83.#, C84.#, C85.#, C88.#, C96.#, C90.0#, C90.2# |
| Metastatic Cancer | 196.x–199.x | C77.#, C78.#, C79.#, C80.# |
| Solid Tumor without Metastasis | 140.x–172.x, 174.x–195.x | C0#, C1#, C20.#, C21.#, C22.#, C23.#, C24.#, C25.#, C26.#, C30.#, C31.#, C32.#, C33.#, C34.#, C37.#, C38.#, C39.#, C40.#, C41.#, C43.#, C45.#, C46.#, C47.#, C48.#, C49.#, C50.#, C51.#, C52.#, C53.#, C54.#, C55.#, C56.#, C57.#, C58.#, C6#, C70.#, C71.#, C72.#, C73.#, C74.#, C75.#, C76.#, C97.# |
| Rheumatoid Arthritis Collagen | 446.x, 701.0, 710.0–710.4, 710.8, 710.9, 711.2, 714.x, 719.3, 720.x, 725.x, 728.5, 728.89, 729.30 | L94.0#, L94.1#, L94.3#, M05.#, M06.#, M08.#, M12.0#, M12.3#, M30.#, M31.0#, M31.1#, M31.2#, M31.3#, M32.#, M33.#, M34.#, M35.#, M45.#, M46.1#, M46.8#, M46.9# |
| Coagulopathy | 286.x, 287.1, 287.3–287.5 | D65.#, D66.#, D67.#, D68.#, D69.1#, D69.3#, D69.4#, D69.5#, D69.6# |
| Obesity | 278 | E66.# |
| Weight Loss | 260.x–263.x, 783.2, 799.4 | E40.#, E41.#, E42.#, E43.#, E44.#, E45.#, E46.#, R63.4#, R64# |
| Fluid and Electrolyte Disorders | 253.6, 276.x | E22.2#, E86.#, E87.# |
| Blood Loss Anemia | 280 | D50.0# |
| Deficiency Anemia | 280.1–280.9, 281.x | D50.8#, D50.9#, D51.#, D52.#, D53.# |
| Alcohol Abuse | 265.2, 291.1–291.3, 291.5–291.9, 303.0, 303.9, 305.0, 357.5, 425.5, 535.3, 571.0–571.3, 980.x, V11.3 | F10.#, E52, G62.1#, I42.6, K29.2#, K70.0#, K70.3#, K70.9#, T51.#, Z50.2#, Z71.4#, Z72.1# |
| Drug Abuse | 292.x, 304.x, 305.2–305.9, V65.42 | F11.#, F12.#, F13.#, F14.#, F15.#, F16.#, F18.#, F19.#, Z71.5#, Z72.2# |
| Psychoses | 293.8, 295.x, 296.04, 296.14, 296.44, 296.54, 297.x, 298.x | F20.#, F22.#, F23.#, F24.#, F25.#, F28.#, F29.#, F30.2#, F31.2#, F31.5# |
| Depression | 296.2, 296.3, 296.5, 300.4, 309.x, 311 | F20.4#, F31.3#, F31.4#, F31.5#, F32.#, F33.#, F34.1#, F41.2#, F43.2# |

**Supplementary Table D. MARCE Composite**

|  |  |  |
| --- | --- | --- |
| **Adverse Events** | **ICD-9 Coding** | **ICD-10 Coding** |
| CI-AKI | E947.8 | N14.1 |
| AKI | 584.9 | N17.9 |
| Renal Failure with dialysis | 586 | N19 |
| AMI | 410.x1 | I21.# |
| Stroke/ transient ischemic attack | 430, 431, 432, 433.x1, 434.x1, 435, 436 | I60.#, I61.#, I62.#, I63.###, G45.# |
| Stent occlusion/ thrombosis | 996.72 | T82.817A, T82.855A, T82.857A, T82.867A |
| Death (not code based) | Discharge=death | Discharge=death |

AKI, acute kidney injury; AMI, acute myocardial infarction; CI-AKI, contrast-induced

**Supplementary Table E. Insurance, Admission Type and Year of each Inpatient Record for Comorbidity Groups of Interest**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **All** | | **Diabetes** | | **Heart Failure** | | **Chronic Kidney Disease**  **Stage 1 - 4** | |
| **IOCM** | **LOCM** | **IOCM** | **LOCM** | **IOCM** | **LOCM** | **IOCM** | **LOCM** |
| **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** |
| **Total Visits** | 133,192 (100) | 402,821 (100) | 54,019 (100) | 148,170 (100) | 33,024 (100) | 83,740 (100) | 30,285 (100) | 52,958 (100) |
| **Insurance** |  |  |  |  |  |  |  |  |
| Commercial | 4,978 (3.7) | 23,159 (5.7) | 1,737 (3.2) | 7,151 (4.8) | 784 (2.4) | 2,886 (3.4) | 551 (1.8) | 1,381 (2.6) |
| Medicare | 83,833 (62.9) | 217,256 (53.9) | 35,869 (66.4) | 87,382 (59.0) | 25,011 (75.7) | 58,182 (69.5) | 23,900 (78.9) | 40,933 (77.3) |
| Medicaid | 9,122 (6.8) | 33,830 (8.4) | 4,136 (7.7) | 13,507 (9.1) | 1,949 (5.9) | 6,370 (7.6) | 1,529 (5.0) | 2,912 (5.5) |
| Managed Care | 25,043 (18.8) | 91,103 (22.6) | 8,619 (16.0) | 27,833 (18.8) | 3,551 (10.8) | 10,753 (12.8) | 3,093 (10.2) | 5,443 (10.3) |
| Other | 10,216 (7.7) | 37,473 (9.3) | 3,658 (6.8) | 12,297 (8.3) | 1,729 (5.2) | 5,549 (6.6) | 1,212 (4.0) | 2,289 (4.3) |
| **Admission Type** |  |  |  |  |  |  |  |  |
| Emergency | 58,077 (43.6) | 210,737 (52.3) | 25,267 (46.8) | 78,476 (53.0) | 14,842 (44.9) | 43,388 (51.8) | 13,782 (45.5) | 26,566 (50.2) |
| Urgent | 23,893 (17.9) | 87,001 (21.6) | 10,446 (19.3) | 32,527 (22.0) | 6,082 (18.4) | 17,828 (21.3) | 5,754 (19.0) | 11,433 (21.6) |
| Elective | 49,525 (37.2) | 98,133 (24.4) | 17,482 (32.4) | 34,542 (23.3 | 11,581 (35.1) | 20,838 (24.9) | 10,118 (33.4) | 14,239 (26.9) |
| Unknown/Missing | 1,697 (1.3) | 6,950 (1.7) | 824 (1.5) | 2,625 (1.8) | 519 (1.6) | 1,686 (2.0) | 631 (2.1) | 720 (1.4) |
| **Year** |  |  |  |  |  |  |  |  |
| 2012 | 11,489 (8.6) | 32,354 (8.0) | 4,448 (8.2) | 11,262 (7.6) | 2,135 (6.5) | 4,942 (5.9) | 2,279 (7.5) | 3,135 (5.9) |
| 2013 | 23,526 (17.7) | 64,766 (16.1) | 9,224 (17.1) | 22,645 (15.3) | 4,747 (14.4) | 10,545 (12.6) | 4,797 (15.8) | 6,961 (13.1) |
| 2014 | 21,609 (16.2) | 65,628 (16.3) | 8,641 (16.0) | 23,407 (15.8) | 4,914 (14.9) | 12,017 (14.4) | 4,841 (16.0) | 7,622 (14.4) |
| 2015 | 22,184 (16.7) | 69,320 (17.2) | 9,098 (16.8) | 25,264 (17.1) | 5,569 (16.9) | 14,316 (17.1) | 5,166 (17.1) | 8,870 (16.7) |
| 2016 | 23,626 (17.7) | 76,209 (18.9) | 9,826 (18.2) | 29,052 (19.6) | 6,376 (19.3) | 17,512 (20.9) | 5,595 (18.5) | 11,453 (21.6) |
| 2017 | 22,203 (16.7) | 67,461 (16.7) | 9,226 (17.1) | 25,842 (17.4) | 6,706 (20.3) | 17,212 (20.6) | 5,508 (18.2) | 10,446 (19.7) |
| 2018 | 8,555 (6.4) | 27,083 (6.7) | 3,556 (6.6) | 10,698 (7.2) | 2,577 (7.8) | 7,196 (8.6) | 2,099 (6.9) | 4,471 (8.4) |

**Supplementary Table E. Insurance, Admission Type and Year of each Inpatient Record for Comorbidity Groups of Interest (continued)**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Chronic Kidney Disease**  **Stage 3 or 4** | | **Diabetes + Chronic Kidney Disease Stage 3 or 4** | | | **Chronic Total Occlusion** | | | **Diabetes + Chronic Kidney Disease Stage 3 or 4 + Chronic Total Occlusion** | |
| **IOCM** | **LOCM** | | **IOCM** | **LOCM** | | **IOCM** | **LOCM** | **IOCM** | **LOCM** |
| **N (%)** | **N (%)** | | **N (%)** | **N (%)** | | **N (%)** | **N (%)** | **N (%)** | **N (%)** |
| **Total Visits** | 18,471 (100) | 30,168 (100) | | 18,306 | 11,645 | | 25,361 (100) | 52,884 (100) | 3,060 (100) | 2,764 (100) |
| **Insurance** |  |  | |  |  | |  |  |  |  |
| Commercial | 305 (1.7) | 737 (2.4) | | 484 (2.6) | 206 (1.8) | | 754 (3.0) | 2,530 (4.8) | 68 (2.2) | 36 (1.3) |
| Medicare | 14,782 (80.0) | 24,030 (79.7) | | 14,265 (77.9) | 9,074 (77.9) | | 16,631 (65.6) | 30,337 (57.4) | 2,341 (76.5) | 2,158 (78.1) |
| Medicaid | 882 (4.8) | 1,521 (5.0) | | 1,086 (5.9) | 689 (5.9) | | 1,927 (7.6) | 4,865 (9.2) | 214 (7.0) | 166 (6.0) |
| Managed Care | 1,830 (9.9) | 2,785 (9.2) | | 1,777 (9.7) | 1,227 (10.5) | | 4,364 (17.2) | 10,703 (20.2) | 318 (10.4) | 308 (11.1) |
| Other | 672 (3.6) | 1,095 (3.6) | | 694 (3.8) | 449 (3.9) | | 1,685 (6.6) | 4,449 (8.4) | 119 (3.8) | 96 (3.4) |
| **Admission Type** |  |  | |  |  | |  |  |  |  |
| Emergency | 8,629 (46.7) | 15,178 (50.3) | | 9,564 (52.2) | 5,782 (49.7) | | 10,832 (42.7) | 26,509 (50.1) | 1,475 (48.2) | 1,264 (45.7) |
| Urgent | 3,542 (19.2) | 6,522 (21.6) | | 4,006 (21.9) | 2,367 (20.3) | | 5,058 (19.9) | 10,741 (20.3) | 677 (22.1) | 645 (23.3) |
| Elective | 5,841 (31.6) | 8,027 (26.6) | | 4,469 (24.4) | 3,181 (27.3) | | 8,990 (35.4) | 14,281 (27.0) | 849 (27.7) | 735 (26.6) |
| Unknown/Missing | 459 (2.5) | 441 (1.5) | | 267 (1.5) | 315 (2.7) | | 481 (1.9) | 1,353 (2.6) | 59 (1.9) | 120 (4.3) |
| **Year** |  |  | |  |  | |  |  |  |  |
| 2012 | 1,187 (6.4) | 1,408 (4.7) | | 852 (4.7) | 728 (6.3) | | 2,964 (11.7) | 4,681 (8.9) | 200 (6.5) | 261 (9.4) |
| 2013 | 2,638 (14.3) | 3,322 (11.0) | | 1,966 (10.7) | 1,646 (14.1) | | 6,174 (24.3) | 10,041 (19.0) | 474 (15.5) | 566 (20.5) |
| 2014 | 2,871 (15.5) | 3,908 (13.0) | | 2,313 (12.6) | 1,818 (15.6) | | 5,985 (23.6) | 11,342 (21.4) | 510 (16.7) | 689 (24.9) |
| 2015 | 3,121 (16.9) | 4,874 (16.2) | | 2,970 (16.2) | 1,943 (16.7) | | 5,638 (22.2) | 11,989 (22.7) | 675 (22.1) | 627 (22.7) |
| 2016 | 3,619 (19.6) | 7,018 (23.3) | | 4,270 (23.3) | 2,276 (19.5) | | 2,512 (9.9) | 7,565 (14.3) | 569 (18.6) | 318 (11.5) |
| 2017 | 3,643 (19.7) | 6,668 (22.1) | | 4,081 (22.3) | 2,349 (20.2) | | 1,583 (6.2) | 5,353 (10.1) | 443 (14.5) | 236 (8.5) |
| 2018 | 1,392 (7.5) | 2,970 (9.8) | | 1,854 (10.1) | 885 (7.6) | | 505 (2.0) | 1,913 (3.6) | 189 (6.2) | 67 (2.4) |

**Supplementary Table F.** **Elixhauser Comorbidities for Comorbidity Groups of Interest**

|  | **All** | | **Diabetes** | | **Heart Failure** | | **Chronic Kidney Disease**  **Stage 1 - 4** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IOCM** | **LOCM** | **IOCM** | **LOCM** | **IOCM** | **LOCM** | **IOCM** | **LOCM** |
| **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** |
| **Total Visits** | 133,192 (100) | 402,821 (100) | 54,019 (100) | 148,170 (100) | 33,024 (100) | 83,740 (100) |  |  |
| **Elixhauser Comorbidities** |  |  |  |  |  |  |  |  |
| Congestive Heart Failure | 38,169 (28.7) | 100,350 (24.9) | 19,382 (35.9) | 47,016 (31.7) | 33,024 (100.0) | 83,739 (100) | 15,093 (49.8) | 26,133 (49.3) |
| Cardiac Arrhythmia | 43,302 (32.5) | 121,682 (30.2) | 17,496 (32.4) | 44,049 (29.7) | 17,773 (53.8) | 42,681 (51.0) | 12,836 (42.4) | 22,460 (42.4) |
| Valvular Disease | 20,729 (15.6) | 52,682 (13.1) | 8,549 (15.8) | 20,303 (13.7) | 12,056 (36.5) | 26,543 (31.7) | 7,384 (24.4) | 12,748 (24.1) |
| Pulmonary Circulation Disorder | 6,330 (4.8) | 15,637 (3.9) | 3,078 (5.7) | 7,154 (4.8) | 4,389 (13.3) | 10,533 (12.6) | 2,849 (9.4) | 5,123 (9.7) |
| Peripheral Vascular Disorders | 52,598 (39.5) | 76,507 (19.0) | 22,518 (41.7) | 31,587 (21.3) | 12,226 (37.0) | 20,094 (24.0) | 14,086 (46.5) | 16,833 (31.8) |
| Hypertension (Uncomplicated) | 71,765 (53.9) | 244,357 (60.7) | 27,949 (51.7) | 92,608 (62.5) | 10,306 (31.2) | 32,733 (39.1) | 303 (1.0) | 548 (1.0) |
| Hypertension (Complicated) | 35,345 (26.5) | 71,212 (17.7) | 20,427 (37.8) | 38,782 (26.2) | 18,603 (56.3) | 38,790 (46.3) | 28,225 (93.2) | 49,412 (93.3) |
| Paralysis | 566 (0.4) | 1,067 (0.3) | 212 (0.4) | 396 (0.3) | 116 (0.4) | 257 (0.3) | 98 (0.3) | 163 (0.3) |
| Other Neurological Disorders | 4,862 (3.7) | 13,167 (3.3) | 2,088 (3.9) | 5,112 (3.5) | 1,756 (5.3) | 4,513 (5.4) | 1,373 (4.5) | 2,464 (4.7) |
| Chronic Pulmonary Disease | 31,885 (23.9) | 81,586 (20.3) | 13,511 (25.0) | 33,382 (22.5) | 12,055 (36.5) | 28,255 (33.7) | 9,192 (30.4) | 15,145 (28.6) |
| Diabetes (Uncomplicated) | 31,577 (23.7) | 103,641 (25.7) | 31,577 (58.5) | 103,641 (69.9) | 8,687 (26.3) | 24,353 (29.1) | 6,803 (22.5) | 12,677 (23.9) |
| Diabetes (Complicated) | 22,442 (16.8) | 44,529 (11.1) | 22,442 (41.5) | 44,529 (30.1) | 8,723 (26.4) | 16,755 (20.0) | 11,553 (38.1) | 18,120 (34.2) |
| Hypothyroidism | 15,445 (11.6) | 41,562 (10.3) | 7,061 (13.1) | 17,630 (11.9) | 5,247 (15.9) | 11,590 (13.8) | 4,992 (16.5) | 8,589 (16.2) |
| Renal Failure | 30,259 (22.7) | 52,800 (13.1) | 18,260 (33.8) | 30,536 (20.6) | 14,080 (42.6) | 23,962 (28.6) | 29,924 (98.8) | 52,271 (98.7) |
| Liver Disease | 3,117 (2.3) | 8,524 (2.1) | 1,473 (2.7) | 3,915 (2.6) | 1,285 (3.9) | 3,090 (3.7) | 943 (3.1) | 1,694 (3.2) |
| Peptic Ulcer Disease | 724 (0.5) | 1,887 (0.5) | 332 (0.6) | 722 (0.5) | 257 (0.8) | 520 (0.6) | 238 (0.8) | 395 (0.7) |
| AIDS/HIV | 160 (0.1) | 508 (0.1) | 48 (0.1) | 149 (0.1) | 33 (0.1) | 98 (0.1) | 47 (0.2) | 82 (0.2) |
| Lymphoma | 606 (0.5) | 1,508 (0.4) | 214 (0.4) | 519 (0.4) | 202 (0.6) | 496 (0.6) | 207 (0.7) | 334 (0.6) |
| Metastatic Cancer | 676 (0.5) | 1,960 (0.5) | 222 (0.4) | 593 (0.4) | 159 (0.5) | 339 (0.4) | 161 (0.5) | 331 (0.6) |
| Solid Tumor without Metastasis | 2,259 (1.7) | 6,009 (1.5) | 754 (1.4) | 2,031 (1.4) | 546 (1.7) | 1,306 (1.6) | 566 (1.9) | 1,056 (2.0) |
| Rheumatoid Arthritis Collagen | 3,439 (2.6) | 8,674 (2.2) | 1,291 (2.4) | 3,037 (2.0) | 1,085 (3.3) | 2,448 (2.9) | 1,025 (3.4) | 1,651 (3.1) |
| Coagulopathy | 6,926 (5.2) | 16,211 (4.0) | 2,823 (5.2) | 6,323 (4.3) | 2,943 (8.9) | 6,695 (8.0) | 2,382 (7.9) | 3,994 (7.5) |
| Obesity | 21,626 (16.2) | 75,225 (18.7) | 13,145 (24.3) | 41,279 (27.9) | 7,024 (21.3) | 19,621 (23.4) | 6,458 (21.3) | 12,432 (23.5) |
| Weight Loss | 2,704 (2.0) | 5,616 (1.4) | 1,174 (2.2) | 2,159 (1.5) | 1,130 (3.4) | 2,467 (2.9) | 973 (3.2) | 1,514 (2.9) |
| Fluid and Electrolyte Disorders | 27,583 (20.7) | 68,331 (17.0) | 13,450 (24.9) | 29,595 (20.0) | 10,264 (31.1) | 24,152 (28.8) | 9,592 (31.7) | 15,692 (29.6) |
| Blood Loss Anemia | 917 (0.7) | 1,844 (0.5) | 410 (0.8) | 752 (0.5) | 351 (1.1) | 754 (0.9) | 332 (1.1) | 514 (1.0) |
| Deficiency Anemia | 3,288 (2.5) | 6,969 (1.7) | 1,854 (3.4) | 3,616 (2.4) | 1,533 (4.6) | 3,109 (3.7) | 1,583 (5.2) | 2,412 (4.6) |
| Alcohol Abuse | 3,403 (2.6) | 11,380 (2.8) | 980 (1.8) | 2,775 (1.9) | 818 (2.5) | 2,615 (3.1) | 545 (1.8) | 988 (1.9) |
| Drug Abuse | 2,882 (2.2) | 10,982 (2.7) | 1,025 (1.9) | 3,191 (2.2) | 716 (2.2) | 2,264 (2.7) | 479 (1.6) | 991 (1.9) |
| Psychoses | 707 (0.5) | 1,885 (0.5) | 310 (0.6) | 868 (0.6) | 255 (0.8) | 560 (0.7) | 180 (0.6) | 314 (0.6) |
| Depression | 11,450 (8.6) | 33,794 (8.4) | 5,471 (10.1) | 14,858 (10.0) | 3,403 (10.3) | 8,668 (10.4) | 3,062 (10.1) | 5,361 (10.1) |

**Supplementary Table F. Elixhauser Comorbidities for Comorbidity Groups of Interest (continued**)

|  | **Chronic Kidney Disease**  **Stage 3 or 4** | | **Diabetes + Chronic Kidney Disease Stage 3 or 4** | | **Chronic Total Occlusion** | | **Diabetes + Chronic Kidney Disease Stage 3 or 4 + Chronic Total Occlusion** | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IOCM** | **LOCM** | **IOCM** | **LOCM** | **IOCM** | **LOCM** | **IOCM** | **LOCM** |
| **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** | **N (%)** |
| **Total Visits** | **18,471 (100)** | **30,168 (100)** | 18,306 | 11,645 | 25,361 (100) | 52,884 (100) | 3,060 (100) | 2,764 (100) |
| **Elixhauser Comorbidities** |  |  |  |  |  |  |  |  |
| Congestive Heart Failure | 9,874 (53.5) | 16,053 (53.2) | 10,229 (55.9) | 6,532 (56.1) | 7,201 (28.4) | 14,520 (27.5) | 1,573 (51.4) | 1,404 (50.8) |
| Cardiac Arrhythmia | 8,018 (43.4) | 13,159 (43.6) | 7,493 (40.9) | 4,785 (41.1) | 8,089 (31.9) | 17,037 (32.2) | 1,207 (39.4) | 1,065 (38.5) |
| Valvular Disease | 4,739 (25.7) | 7,724 (25.6) | 4,225 (23.1) | 2,668 (23.0) | 2,728 (10.8) | 6,290 (11.9) | 521 (17.0) | 465 (16.8) |
| Pulmonary Circulation Disorder | 1,925 (10.4) | 3,239 (10.7) | 1,941 (10.6) | 1,198 (10.3) | 1,003 (4.0) | 2,041 (3.9) | 292 (9.5) | 248 (9.0) |
| Peripheral Vascular Disorders | 8,699 (47.1) | 10,028 (33.2) | 6,147 (33.6) | 5,460 (46.9) | 16,656 (65.7) | 19,359 (36.6) | 1,765 (57.7) | 2,079 (75.2) |
| Hypertension (Uncomplicated) | 78 (0.4) | 100 (0.3) | 60 (0.3) | 57 (0.5) | 13,947 (55.0) | 32,461 (61.4) | 8 (0.2) | 7 (0.2) |
| Hypertension (Complicated) | 17,452 (94.5) | 28,573 (94.7) | 17,562 (95.9) | 11,140 (95.7) | 6,934 (27.3) | 10,139 (19.2) | 2,929 (95.7) | 2,648 (95.8) |
| Paralysis | 61 (0.3) | 102 (0.3) | 56 (0.3) | 40 (0.3) | 92 (0.4) | 125 (0.2) | 10 (0.3) | 5 (0.2) |
| Other Neurological Disorders | 860 (4.7) | 1,415 (4.7) | 886 (4.8) | 561 (4.8) | 959 (3.8) | 1,767 (3.3) | 134 (4.4) | 138 (5.0) |
| Chronic Pulmonary Disease | 5,756 (31.2) | 8,765 (29.1) | 5,298 (28.9) | 3,458 (29.7) | 6,472 (25.5) | 11,588 (21.9) | 832 (27.2) | 824 (29.8) |
| Diabetes (Uncomplicated) | 3,778 (20.5) | 6,487 (21.5) | 6,487 (35.4) | 3,778 (32.4) | 6,715 (26.5) | 15,169 (28.7) | 1,145 (37.4) | 909 (32.9) |
| Diabetes (Complicated) | 7,867 (42.6) | 11,819 (39.2) | 11,819 (64.6) | 7,867 (67.6) | 5,701 (22.5) | 7,376 (13.9) | 1,915 (62.6) | 1,855 (67.1) |
| Hypothyroidism | 3,268 (17.7) | 5,225 (17.3) | 3,123 (17.1) | 2,060 (17.7) | 2,749 (10.8) | 5,073 (9.6) | 486 (15.9) | 454 (16.4) |
| Renal Failure | 18,471 (100) | 30,168 (100) | 18,306 (100) | 11,645 (100) | 6,605 (26.0) | 8,360 (15.8) | 3,060 (100) | 2,764 (100) |
| Liver Disease | 568 (3.1) | 947 (3.1) | 625 (3.4) | 367 (3.1) | 593 (2.3) | 1,179 (2.2) | 88 (2.9) | 68 (2.5) |
| Peptic Ulcer Disease | 147 (0.8) | 228 (0.8) | 138 (0.7) | 106 (0.9) | 147 (0.6) | 249 (0.5) | 24 (0.8) | 26 (0.9) |
| AIDS/HIV | 23 (0.1) | 38 (0.1) | 19 (0.1) | 15 (0.1) | 36 (0.1) | 75 (0.1) | 5 (0.2) | 1 (0.0) |
| Lymphoma | 129 (0.7) | 202 (0.7) | 105 (0.6) | 83 (0.7) | 86 (0.3) | 168 (0.3) | 13 (0.4) | 16 (0.6) |
| Metastatic Cancer | 117 (0.6) | 173 (0.6) | 71 (0.4) | 63 (0.5) | 91 (0.4) | 167 (0.3) | 6 (0.2) | 10 (0.3) |
| Solid Tumor without Metastasis | 346 (1.9) | 606 (2.0) | 308 (1.7) | 182 (1.6) | 320 (1.3) | 622 (1.2) | 36 (1.2) | 31 (1.1) |
| Rheumatoid Arthritis Collagen | 660 (3.6) | 1,007 (3.3) | 508 (2.8) | 338 (2.9) | 653 (2.6) | 1,112 (2.1) | 79 (2.6) | 81 (2.9) |
| Coagulopathy | 1,517 (8.2) | 2,404 (8.0) | 1,353 (7.4) | 835 (7.2) | 1,050 (4.1) | 1,948 (3.7) | 171 (5.6) | 174 (6.3) |
| Obesity | 4,223 (22.9) | 7,486 (24.8) | 5,790 (31.6) | 3,354 (28.8) | 3,853 (15.2) | 9,744 (18.4) | 908 (29.7) | 725 (26.2) |
| Weight Loss | 678 (3.7) | 961 (3.2) | 554 (3.0) | 415 (3.6) | 738 (2.9) | 924 (1.7) | 116 (3.8) | 119 (4.3) |
| Fluid and Electrolyte Disorders | 6,260 (33.9) | 9,592 (31.8) | 6,231 (34.0) | 4,193 (36.0) | 6,820 (26.9) | 11,197 (21.2) | 1,099 (35.9) | 1,142 (41.3) |
| Blood Loss Anemia | 224 (1.2) | 302 (1.0) | 178 (1.0) | 147 (1.3) | 199 (0.8) | 244 (0.5) | 34 (1.1) | 47 (1.7) |
| Deficiency Anemia | 1,149 (6.2) | 1,662 (5.5) | 1,114 (6.1) | 804 (6.9) | 715 (2.8) | 987 (1.9) | 188 (6.1) | 197 (7.1) |
| Alcohol Abuse | 317 (1.7) | 476 (1.6) | 203 (1.1) | 165 (1.4) | 803 (3.2) | 1,554 (2.9) | 30 (1.0) | 50 (1.8) |
| Drug Abuse | 295 (1.6) | 517 (1.7) | 291 (1.6) | 184 (1.6) | 603 (2.4) | 1,458 (2.8) | 50 (1.6) | 47 (1.7) |
| Psychoses | 113 (0.6) | 161 (0.5) | 102 (0.6) | 66 (0.6) | 192 (0.8) | 314 (0.6) | 22 (0.7) | 22 (0.8) |
| Depression | 1,946 (10.5) | 3,140 (10.4) | 2,094 (11.4) | 1,357 (11.6) | 2,314 (9.1) | 4,476 (8.5) | 345 (11.3) | 309 (11.2) |