**Supplemental Table 1.** ICD-9-CM Codes Used to Define Study Criteria, Comorbidities, and Procedures

| Disease or Procedure | ICD-9-CM Codea |
| --- | --- |
| Inclusion criteria |  |
|  AKI | Diagnosis code 584 |
|  AKI-D | 584 plus one of the following:Diagnosis code V45.1, V56.0, V56.1, V56.8, 996.73Procedure code 38.95, 39.95 |
| Exclusion criteria  |  |
|  End-stage renal disease  | Diagnosis code V56.2, V56.3, 585.6Procedure code 39.27, 39.42, 39.43, 39.93, 54.98OROne of the following codes without diagnosis code 584:Diagnosis code V45.1, V56.0, V56.1, V56.8, 996.73Procedure code 38.95, 39.95 |
| Acute medical conditions  | Diagnosis code |
|  Myocardial infarction | 410 |
|  Stroke | 430-436 |
|  Venous thromboembolic disease | 415.1, 453.4, 453.6, 453.8, 453.9 |
|  Gastrointestinal bleed | 456.0, 530.7, 531.0, 531.2, 531.4, 531.6, 532.0, 532.2, 532.4, 532.6, 533.0, 533.2, 533.4, 533.6, 534.0, 534.2, 534.4, 534.6, 569.3, 569.85, 578 |
|  Acute pancreatitis  | 577.0 |
|  Sepsis | 003.1, 036.2, 038.0, 038.1, 038.2, 038.3, 038.40, 038.41, 038.42, 038.43, 038.44, 038.49, 038.8, 038.9, 785.52, 790.7, 995.91, 995.92 |
|  Pneumonia | 480-486 |
| Chronic comorbidities  | Diagnosis code |
|  Cancer | 140-209, 238.4-238.7 |
|  Chronic kidney disease | 250.4, 403, 404, 585.1, 585.2, 585.3, 585.4, 585.5, 585.9, 586 |
|  Congestive heart failure | 425, 428, 514, 518.4 |
|  Dementia | 290, 294.1, 294.2, 331.0, 331.1, 331.2, 331.82, 797 |
|  Diabetes | 250 |
|  Human immunodeficiency virus | 042, 176 |
|  Hypertension | 401-405 |
|  Chronic obstructive pulmonary disease | 491, 492, 496 |
|  Peripheral vascular disease | 440-444, 557.1 |
| Hospital procedures  | Procedure code |
|  Intravenous contrast  | 88.4, 88.5, 88.6 |
|  Blood product transfusion | 99.0 |
|  Mechanical ventilation | 96.04, 96.05, 96.7 |
|  Non-invasive ventilation  | 93.9 |
|  Cardiopulmonary resuscitation  | 99.6 |
|  Left ventricular assist device | 37.62, 37.65, 37.66, 37.68 |
|  Extracorporeal membrane oxygenation  | 39.65 |
|  Echocardiogram | 88.72 |
|  Coronary angiogram | 00.66, 36.06, 36.07, 37.21-37.23, 88.5 |
|  Percutaneous transluminal coronary angioplasty  | 00.66, 36.06, 36.07 |
|  Cardiopulmonary bypass | 39.61 |
|  Coronary artery bypass grafting  | 36.1 |
|  Heart valve surgery  | 35.05, 35.06, 35.07, 35.08, 35.09, 35.1, 35.2, 35.97 |
|  Abdominal aortic aneurysm repair | 38.34, 38.44, 38.64, 39.71, 39.73, 39.78 |
|  Carotid endarterectomy  | 00.61, 00.63, 38.12 |
|  Peripheral vascular surgery | 00.55, 00.60, 38.08, 38.18, 38.38, 38.48, 38.88, 39.25, 39.29, 39.50, 39.90 |

aIf a higher level code is listed, all lower-level codes are also included. For example, if ICD-9 code 584 is listed, then all of 584.5, 584.6, 584.7, 584.8, 584.9 were also included.

**NOTE:** Abbreviations: AKI, acute kidney injury, AKI-D, acute kidney injury requiring dialysis.