**Supplemental table1.** ICD9-code and ICD10-code used in this study

|  |  |  |
| --- | --- | --- |
| **Disease** | **ICD9-code** | **ICD10-code** |
| Chronic kidney disease (CKD) | 016.0, 042, 095.4, 189, 223, 236.9, 250.4, 271.4, 274.1, 403-404, 440.1, 442.1, 446.21, 447.3, 572.4, 580-589, 590-591, 593, 642.1, 646.2, 753, 984 | B20, A52.75, C64-68, D30, D41, E11.29, E74.8, M10.30, N20, I70.1, I72.2, M31, I77.3, K76.7, N00-08, N10-15, N18, N28.83, N28.81, N28.1, N28.9, O10.41-43, O12.14, O26.831-839, Q60-4 |
| End-stage renal disease (ESRD) | 585 | N186 |
| **Comorbidities** |  |  |
| Hypertension | 401-405 | I10-I16 |
| Dyslipidemia | 272 | E78 |
| Liver cirrhosis | 571.2, 571.5, 571.6 | K70.30-K70.32, K74.5, K74.60, K71.7 |
| Connective tissue disease | 710, 714, 728 | M30-M36 |
| Atrial fibrillation | 427.31 | I48 |
| Peripheral arterial disease (PAD) | 440.2, 440.3, 440.8, 440.9, 443, 444.22, 444.8, 444.9 | I70.2-I70.9, I73.9 |
| **Infectious disease** |  |  |
| Sepsis | 038, 995.91, 995.92, 020.2, 785.52, 790.7 | R65.20, R65.21, R78.81, A41.9, A49.9, B96.89 |
| Pneumonia | 481-486 (exclude 484) | J14.xx, J15.xx, J16.xx, J17.xx, J18.xx, J12.xx, J69.xx, J95.8x, J09.xx, M96.xx, B25.0, B96.1, B95.3, B37.1, B38.0, A74, A40.3, A02.22, B45.0, B44.9, O89.01 |
| Empyema | 510 | J85.xx-J86.xx |
| Cellulitis | 681, 682 | L03.xx, H60.1x, H05.01x, H00.03x, K61.xx |
| Necrotizing fasciitis | 728.86 | M72.6 |
| Urinary tract infection | 590, 595.0, 599.0 | N39.0, N30.01, N30.90, N99.51x, B37.41, A54.01, A56.01, N10.xx, N11.xx, N12.xx, N15.xx, N16.xx, T83.511 |
| Biliary tract infection | 576.1, 575.0, 574.00 | K83.xx |
| Brain abscess | 324 | G06.xx, A54.82, B43.1, A06.6 |
| Liver abscess | 572.0 | K75.xx |
| Perianal abscess | 566 | K61.xx |
| Bacterial meningitis | 320 | G03.xx |
| Septic arthritis | 711 | M00.xx, M19.90 |
| Infection of catheter, device, implant, and graft | 996.6, 999.3 | T80.2xx, T82.7XX, T85.7xx, T83.51x, |
| Peritoneal and retroperitoneal infection | 567 | K65.xx, K67.xx, A18.31, , T85.71, N73.x, K68.11 |
| Osteomyelitis | 730.3, 730.8, 730.9 | M86.xx, M46.2x-M46.5x |
| Infective endocarditis | 421 | I33.xx, I38.xx |
| **Major adverse cardiac/cerebrovascular events (MACCEs)** | | |
| Cardiogenic shock | 785.51 | R57.0 |
| Heart failure (HF) | 428 | I50 |
| Malignant dysrhythmia | 426.0, 426.12-426.13, 426.51-426.52, 426.54, 427.1, 427.4, 427.41-427.42, 427.5 | I44.0-3, I45.2, I45.3, I46.9, I47.2, I49.0-3 |
| Myocardial infarction | 410 | I21, I22 |
| Stroke | 430-437 | I60-64, G45.0, G45.1, G45.4, G45.8, I67 |