**Supplemental Material 1**: List of ICD-9 and -10 Codes used to create high CIED infection probability sample

ICD-9 Codes: 998, 996.61, E848.1; E878.8; E878.9, T81.9, 996.70, 996.72, 780.61, 780.62, 041.9, 136.9, 995.91, 994.92, 031.12, 041.12, 0.38.11, 0.41.11, 038.10, 038.19, 041.19

ICD-10 Codes: T82.7XX, T81.4XX, R50.82, B99.9, A41.9, T81.9, A49.02, B95.6, T82.6, T83.5, T83.6, T84.5, T84.7, T85.7

**Supplemental Material 2**: Manually and electronically extracted variables from CIED cohort

|  |  |  |
| --- | --- | --- |
| Patient Variables – Electronic Data | Procedural Variables –  Manually Extracted Data | Infection Prevention Measures – Manually Extracted Data |
| Age  Sex  Race  Body Mass Index (BMI)  Diabetes  Tobacco Use  Chronic Obstructive Pulmonary Disease (COPD)  Cerebrovascular Disease  Peripheral Arterial Disease  Chronic Kidney Disease  Dialysis  Beta-lactam Allergy  Use of antiplatelet/anticoagulant medications | Type of CIED device  Repeat device procedure  Revision procedure  INR  Presence of pre-procedural fever  Complications (e.g. wound, hematoma) | Use of Pre- and post-procedural antimicrobial prophylaxis  Pre-operative chlorhexidine skin cleaning  Pre-operative shaving  Pre-operative mupirocin  Use of antimicrobial pocket  Pocket irrigation with antibiotic solution |

**Supplemental Material 3**: Sensitivity multivariable logistic regression of CIED infection risk by patient and procedural variables including fever status

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Parameter |  | aOR | Confidence Interval | p-value |
| Prolonged post-procedural antibiotics (>24 hrs) |  | 0.66 | (0.41, 1.06) | 0.083 |
| Age |  | 0.98 | (0.96, 1.00) | 0.017 |
| Chlorhexidine skin cleaning |  | 0.53 | (0.29, 0.98) | 0.042 |
| Elixhauser Risk Score |  | 1.03 | (0.95, 1.11) | 0.456 |
| MRSA preoperative |  | 4.64 | (0.74, 29.22) | 0.102 |
| Revision |  | 2.82 | (1.82, 4.37) | <.001 |
| Wound complication |  | 9.86 | (3.54, 27.44) | <.001 |
| INR |  | 1.58 | (1.13, 2.21) | 0.008 |
| Fever |  | 5.04 | (3.03, 8.39) | <.001 |
| Type of pre-operative antibiotics (vs Vancomycin) | Beta-lactam | 0.65 | (0.40, 1.06) | 0.083 |
|  | None/Other | 0.29 | (0.10, 0.85) | 0.025 |