**Appendix 2.** Calculated difference between prevalence in 2006 and 2016 able to detect with 90% power, the given sample size, and an alpha of 0.0006 for each outcome

|  |  |  |  |
| --- | --- | --- | --- |
| **Outcome** | **Observed 2006 Prevalence** | **Observed 2016 Prevalence** | **Difference able to detect with 90% power\*** |
| **Age** | 82 | 81 | 4.03 |
| **Gender** (Male) | 28.2 | 30.6 | 1.46 |
| **Race** |  |  |  |
| Black | 4.2 | 4.2 | 0.63 |
| White | 75.2 | 87.5 | 1.43 |
| **Insurance** |  |  |  |
| Medicaid | 2.5 | 3.4 | 0.49 |
| Medicare | 83 | 85.1 | 1.25 |
| Private | 10.4 | 7.8 | 0.98 |
| Uninsured  | 1.5 | 1.1 | 0.37 |
| **Hospital Location** (Urban) | 88.5 | 86.5 | 1.07 |
| **Hospital Size** |  |  |  |
| Small | 31.9 | 41.3 | 1.52 |
| Medium | 38 | 30.4 | 1.59 |
| Large | 30.1 | 28.3 | 1.49 |
| **Hospital Teaching Status** | 39.3 | 37.4 | 1.60 |
| **Anesthesia Type** |  |  |  |
| General | 68.5 | 72.5 | 1.53 |
| Neuraxial | 7.3 | 3.6 | 0.83 |
| Both | 6.3 | 3.4 | 0.77 |
| **Location of Fracture** |  |  |  |
| Multi | 10.8 | 7.4 | 1.00 |
| Intertrochanteric | 34.2 | 37.7 | 1.55 |
| Subtrochanteric | 4.2 | 4.1 | 0.63 |
| Femoral Neck | 50.9 | 50.8 | 1.64 |
| **Procedure** |  |  |  |
| Internal Fixation | 61.9 | 60.7 | 1.60 |
| Hemiarthroplasty | 34.7 | 32.3 | 1.55 |
| Total Hip Arthroplasty | 3.4 | 7.1 | 0.57 |
| **Comorbidities** |  |  |  |
| 0 comorbidities | 6.6 | 4.9 | 0.79 |
| 1 comorbidity | 15.6 | 12.6 | 1.17 |
| 2 comorbidities | 21.9 | 18.9 | 1.34 |
| 3 comorbidities | 22.1 | 20.2 | 1.35 |
| >3 comorbidities | 33.9 | 43.4 | 1.54 |
| Sleep Apnea | 1.2 | 4.3 | 0.33 |
| Obesity | 2.6 | 5.4 | 0.50 |
| Hypertension | 65.3 | 74.3 | 1.57 |
| CHF | 17.4 | 16.5 | 1.23 |
| Valvular Disease | 10.8 | 12.1 | 1.00 |
| Peripheral Vascular Disorder | 6.7 | 8.4 | 0.80 |
| Chronic Pulmonary Disease | 22.3 | 23.2 | 1.35 |
| Diabetes | 20.7 | 24.1 | 1.31 |
| Pulmonary Circulation Disorder | 3.3 | 5.9 | 0.56 |
| Paralysis | 2.8 | 3.7 | 0.52 |
| Other Neurological | 17.1 | 16 | 1.22 |
| Hypothyroidism | 17.1 | 22.3 | 1.22 |
| Renal Failure | 10.9 | 19.6 | 1.00 |
| Peptic Ulcer Disease | 0 | 0 | -- |
| AIDS/HIV | 0.1 | 0.1 | 0.08 |
| Lymphoma | 0.7 | 0.7 | 0.25 |
| Metastatic Cancer | 1.3 | 1.1 | 0.35 |
| Liver Disease | 1.3 | 2.2 | 0.35 |
| Tumor | 2.5 | 2.7 | 0.49 |
| Rheumatoid Arthritis | 3.5 | 4.2 | 0.58 |
| Coagulation Deficiency | 4.8 | 8.6 | 0.68 |
| Weight Loss | 3.1 | 7.1 | 0.54 |
| Fluid and Electrolyte Disorders | 26.2 | 32.4 | 1.43 |
| Anemia | 32.3 | 24.9 | 1.52 |
| Alcohol Abuse | 1.5 | 2.1 | 0.37 |
| Drug Abuse | 0.7 | 1.9 | 0.25 |
| Psychoses | 3.3 | 3.5 | 0.56 |
| Depression | 12.5 | 15.1 | 1.06 |
| **Complications** |  |  |  |
| Acute MI | 3.1 | 1.8 | 1.56 |
| Other Cardiovascular | 27.6 | 5.8 | 5.12 |
| Hemorrhage/Hematoma | 2.5 | 0.9 | 1.37 |
| Stroke | 1.2 | 1.2 | 0.87 |
| Pulmonary Complications | 11.9 | 12.6 | 3.29 |
| Pulmonary Embolism | 0.8 | 0.9 | 0.66 |
| Pneumonia | 6.9 | 4.4 | 2.45 |
| Sepsis/Septic Shock | 1.9 | 2.6 | 1.16 |
| Wound Complications | 0.8 | 0.9 | 0.66 |
| Venous Thromboembolism | 1.8 | 0.9 | 1.12 |
| Acute Renal Failure | 6.9 | 11.1 | 2.45 |
| Other Genitourinary Complications | 1.6 | 0.8 | 1.04 |
| Delirium | 6 | 7.9 | 2.27 |
| Inpatient Falls | 17.6 | 17 | 4.05 |
| Mortality | 3.4 | 3.1 | 1.64 |
| Blood Transfusions | 62.5 | 53.4 | 7.70 |
| \*Mean difference is reported for age, difference in #/1000 inpatient days is reported for complications, difference in proportions is reported for all other variables |