|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Model 1 (Unadjusted)** | **p -value** | **Model 2 (Adjusted)** | **p-value** † |
| **Malnutrition Status** |  |  |  |  |
| Normal | Ref |  | Ref |  |
| Moderate | 1.275 [0.866 - 1.877] | 0.219 | 1.218 [0.825 - 1.799] | 0.321 |
| Severe | 1.663 [1.136 - 2.433] | 0.009 | 1.542 [1.033 - 2.304] | 0.034 |
| **Age** |  |  |  |  |
| 65-80 | Ref |  | Ref |  |
| 81+ | 0.707 [0.437 - 1.143] | 0.157 | - | - |
| **BMI** |  |  |  |  |
| Underweight (<18.5kg/m2) | 1.353 [0.539 - 3.396] | 0.520 | 1.025 [0.399 - 2.628] | 0.960 |
| Normal Weight (18.5-24.9 kg/m2) | 0.581 [0.378 - 0.893] | 0.013 | 0.534 [0.346 - 0.825] | **0.005** |
| Overweight (25.0-29.9 kg/m2) | 0.770 [0.546 - 1.085] | 0.135 | 0.776 [0.550 - 1.095] | 0.149 |
| Obese (>30.0 kg/m2) | Ref |  | Ref |  |
| **Race** |  |  |  |  |
| White | Ref |  | Ref |  |
| Black | 0.796 [0.464 - 1.365] | 0.407 | - | - |
| Hispanic | 0.706 [0.380 - 1.314] | 0.272 | - | - |
| Other | 1.412 [0.833 - 2.393] | 0.200 | - | - |
| **Admission Status** |  |  |  |  |
| Outpatient | Ref |  | Ref |  |
| Inpatient | 2.676 [1.363 - 5.253] | 0.004 | 2.506 [1.272 - 4.936] | **0.008** |
| **Comorbidites** |  |  |  |  |
| Smoking History | 1.485 [0.990 - 2.227] | 0.056 | - | - |
| Diabetes Mellitus | 1.219 [0.879 - 1.689] | 0.235 | - | - |
| CVA/TIA | 1.361 [0.330 - 5.607] | 0.669 | - | - |
| Hemiplegia/Quadraplegia/Paraplegia | 0.557 [0.080 - 4.171] | 0.585 | - | - |
| Steroid Use  | 1.293 [0.756 - 2.213] | 0.349 | - | - |
| >10% Weight Loss Within Last 6 Months | 1.868 [0.679 - 5.141] | 0.226 | - | - |
| Disseminated Cancer | 1.306 [0.606 - 2.814] | 0.495 | - | - |
| ***Pulmonary Comorbidity*** | 1.512 [1.028 - 2.223] | 0.036 | - | - |
| Dyspnea | 1.415 [0.862 - 2.323] | 0.170 | - | - |
| Ventilator Dependent | 2.799 [1.007 - 7.780] | 0.048 | 2.166 [0.761 - 6.164] | 0.148 |
| COPD | 1.716 [1.079 - 2.732] | 0.023 | 1.664 [1.043 - 2.655] | 0.033 |
| ***Cardiac Comorbidity*** | 0.912 [0.335 - 2.485] | 0.857 | - | - |
| CHF | 0.923 [0.226 - 3.777] | 0.911 | - | - |
| ***Renal Comorbidity*** | 1.257 [0.395 - 4.002] | 0.698 | - | - |
| On Dialysis | 1.335 [0.419 - 4.255] | 0.625 | - | - |
| **Surgical Subspecialty** |  |  |  |  |
| Orthopedic Surgery | Ref |  | Ref |  |
| Neurosurgery | 0.746 [0.543 - 1.025] | 0.071 | - | **-** |
| **Number of Levels** |  |  |  |  |
| Single level | Ref |  | Ref |  |
| Multi-level | 1.149 [0.800 - 1.650] | 0.452 | - | - |

Table 3. Univariate and multivariate regression analysis for surgical site infection

†Boldface values are significant at p < 0.017 due to Bonferroni correction.