|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Model 1 (Unadjusted)** | **p -value** | **Model 2 (Adjusted)** | **p-value** † |
| **Malnutrition Status** |  |  |  |  |
| Normal | Ref |  | Ref |  |
| Moderate | 2.360 [1.454 - 3.829] | < 0.001 | 1.762 [1.074 - 2.888] | **0.011** |
| Severe | 7.198 [4.854 - 10.674] | < 0.001 | 3.332 [2.145 - 5.177] | **< 0.001** |
| **Age** |  |  |  |  |
| 65-80 | Ref |  | Ref |  |
| 81+ | 2.166 [1.477 - 3.177] | < 0.001 | 2.007 [1.332 - 3.024] | **< 0.001** |
| **BMI** |  |  |  |  |
| Underweight (<18.5kg/m2) | 2.251 [0.881 - 5.747] | 0.090 | 0.849 [0.310 - 2.323] | 0.749 |
| Normal Weight (18.5-24.9 kg/m2) | 1.549 [1.029 - 2.330] | 0.036 | 0.949 [0.613 - 1.470] | 0.815 |
| Overweight (25.0-29.9 kg/m2) | 0.811 [0.526 - 1.249] | 0.341 | 0.710 [0.452 - 1.116] | 0.138 |
| Obese (>30.0 kg/m2) | Ref |  | Ref |  |
| **Race** |  |  |  |  |
| White | Ref |  | Ref |  |
| Black | 1.310 [0.787 - 2.179] | 0.299 | - | - |
| Hispanic | 1.234 [0.700 - 2.175] | 0.468 | - | - |
| Other | 1.069 [0.537 - 2.132] | 0.849 | - | - |
| **Admission Status** |  |  |  |  |
| Outpatient | Ref |  | Ref |  |
| Inpatient | 20.150 [2.815 - 144.255] | **0.003** | 11.155 [1.549 - 80.351] | **0.017** |
| **Comorbidites** |  |  |  |  |
| Smoking History | 1.321 [0.826 - 2.114] | 0.246 | - | - |
| Diabetes Mellitus | 1.220 [0.847 - 1.757] | 0.286 | - | - |
| CVA/TIA | 0.843 [0.116 - 6.119] | 0.866 | - | - |
| Hemiplegia/Quadraplegia/Paraplegia | 4.873 [2.080 - 11.420] | **< 0.001** | 2.399 [0.899 - 6.401] | 0.080 |
| Steroid Use  | 2.355 [1.453 - 3.817] | **< 0.001** | 1.549 [0.916 - 2.620] | 0.102 |
| >10% Weight Loss Within Last 6 Months | 10.078 [5.567 - 18.242] | **< 0.001** | 3.918 [1.976 - 7.771] | **< 0.001** |
| Disseminated Cancer | 6.352 [3.947 - 10.221] | **< 0.001** | 3.796 [2.223 - 6.483] | **< 0.001** |
| ***Pulmonary Comorbidity*** | 2.387 [1.627 - 3.503] | **< 0.001** | - | - |
| Dyspnea | 2.092 [1.292 - 3.389] | **0.003** | 1.459 [0.837 - 2.544] | 0.182 |
| Ventilator Dependent | 13.031 [6.808 - 24.942] | **< 0.001** | 4.665 [2.243 - 9.703] | **< 0.001** |
| COPD | 1.994 [1.218 - 3.262] | **0.006** | 1.384 [0.803 - 2.387] | 0.242 |
| ***Cardiac Comorbidity*** | 3.500 [1.857 - 6.596] | **< 0.001** | - | - |
| CHF | 6.007 [2.958 - 12.197] | **< 0.001** | 2.353 [1.032 - 5.635] | 0.042 |
| ***Renal Comorbidity*** | 7.504 [4.012 - 14.035] | **< 0.001** | - | - |
| On Dialysis | 8.016 [4.276 - 15.026] | **< 0.001** | 4.606 [2.310 - 9.185] | **< 0.001** |
| **Surgical Subspecialty** |  |  |  |  |
| Orthopedic Surgery | Ref |  | Ref |  |
| Neurosurgery | 2.049 [1.295 - 3.243] | **0.002** | 1.686 [1.050 - 2.706] | 0.031 |
| **Number of Levels** |  |  |  |  |
| Single level | Ref |  | Ref |  |
| Multi-level | 1.247 [0.839 - 1.853] | 0.275 | - | - |

Supplemental Table 1. Univariate and multivariate regression analysis for mortality

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