Appendix:

**Appendix Table 1.** Deyo Comorbidity index

|  |  |  |
| --- | --- | --- |
| **ICD-10 CM codes** | **Condition** | **Score** |
| I21.x, I22.x, I25.2  | Myocardial infarction | 1 |
| I09.9, I11.0, I13.0, I13.2, I25.5, I42.0, I42.5-I42.9, I43.x, I50.x, P29.0 | Congestive heart failure | 1 |
| I70.x, I71.x, I73.1, I73.8, I73.9, I77.1, I79.0, I79.2, K55.1, K55.8, K55.9, Z95.8, Z95.9 | Peripheral vascular disease | 1 |
| G45.x, G46.x, H34.0, I60.x-I69.x | Cerebrovascular disease | 1 |
| F00.x-F03.x, F05.1, G30.x, G31.1 | Dementia | 1 |
| I27.8, I27.9, J40.x-J47.x, J60.x-J67.x, J68.4, J70.1, J70.3 | Chronic pulmonary disease | 1 |
| M05.x, M06.x, M31.5, M32.x-M34.x, M35.1, M35.3, M36.0 | Rheumatologic disease | 1 |
| K25.x-K28.x | Peptic ulcer disease | 1 |
| B18.x, K70.0-K70.3, K70.9, K71.3-K71.5, K71.7, K73.x, K74.x, K76.0, K76.2-K76.4, K76.8, K76.9, Z94.4 | Mild liver disease | 1 |
| E10.0, E10.l, E10.6, E10.8, E10.9, E11.0, E11.1, E11.6, E11.8, E11.9, E12.0, E12.1, E12.6, E12.8, E12.9, E13.0, E13.1, E13.6, E13.8, E13.9, E14.0, E14.1, E14.6, E14.8, E14.9 | Diabetes | 1 |
| E10.2-E10.5, E10.7, E11.2-E11.5, E11.7, E12.2-E12.5, E12.7, E13.2-E13.5, E13.7, E14.2-E14.5, E14.7 | Diabetes with chronic complications | 2 |
| G04.1, G11.4, G80.1, G80.2, G81.x, G82.x, G83.0-G83.4, G83.9 | Hemiplegia or paraplegia | 2 |
| I12.0, I13.1, N03.2-N03.7, N05.2-N05.7, N18.x, N19.x, N25.0, Z49.0-Z49.2, Z94.0, Z99.2 | Renal disease | 2 |
| C00.x-C26.x, C30.x-C34.x, C37.x-C41.x, C43.x, C45.x-C58.x, C60.x-C76.x, C81.x-C85.x, C88.x, C90.x-C97.x | Any malignancy including leukemia and lymphoma | 2 |
| I85.0, I85.9, I86.4, I98.2, K70.4, K71.1, K72.1, K72.9, K76.5, K76.6, K76.7 | Moderate or severe liver disease | 3 |
| C77.x-C80.x | Metastatic solid tumor | 6 |
| B20.x-B22.x, B24.x | Acquired Immunodeficiency syndrome (AIDS) | 6 |

**Appendix Table 2.** Predictors of Length of Stay for Acute MI – Univariate Analysis

|  |  |  |
| --- | --- | --- |
| **Predictor** | **Mean (95% CI)** | **P-Value** |
| **BMI Group Kg/m2** |  | <.001 |
|  < 19 | 6.16 (5.92-6.40) | 0.982 |
| *20-25* | *6.16 (5.89-6.44)* | *N/A* |
|    26-30 | 4.09 (3.93-4.25) | <.001 |
|    31-35 | 3.67 (3.56-3.78) | <.001 |
|    36-39 | 3.74 (3.60-3.87) | <.001 |
|    >40  | 4.34 (4.23-4.44) | <.001 |
| **Age Group, years** |  | <.001 |
|    18-44  | *3.02 (2.82-3.22)* | *N/A* |
|    45-59  | 3.49 (3.39-3.59) | <.001 |
|    60-74  | 4.42 (4.32-4.51) | <.001 |
|    > 75  | 5.39 (5.25-5.52) | <.001 |
| **Deyo-CCI** |  | <.001 |
| *1* | *2.51 (2.37-2.65)* | *N/A* |
|    2 or higher | 4.55 (4.48-4.61) | <.001 |
| **Gender** |  | <.001 |
| *Male* | *3.95 (3.87-4.03)* | *N/A* |
|    Female | 4.51 (4.42-4.60) | <.001 |
| **Race** |  | <.001 |
| *Non-white* | *4.43 (4.31-4.55)* | *N/A* |
|    White | 4.11 (4.04-4.18) | <.001 |
| ***Comorbidities*** |  |  |
| **Atrial Fibrillation/Flutter** |  | <.001 |
| *No* | *3.84 (3.78-3.90)* | *N/A* |
|    Yes | 5.89 (5.75-6.03) | <.001 |
| **COPD** |  | <.001 |
| *No* | *3.96 (3.89-4.03)* | *N/A* |
|    Yes | 4.88 (4.77-5.00) | <.001 |
| **CHF** |  | <.001 |
| *No* | *4.03 (3.96-4.09)* | *N/A* |
|    Yes | 5.08 (4.94-5.23) | <.001 |
| **DM** |  | <.001 |
| *No* | *4.04 (3.97-4.12)* | *N/A* |
|    Yes | 4.41 (4.32-4.50) | <.001 |
| **HTN** |  | <.001 |
| *No* | *5.13 (5.04-5.22)* | *N/A* |
|    Yes | 3.49 (3.41-3.57) | <.001 |
| **PVD** |  | <.001 |
| *No* | *4.07 (4.01-4.14)* | *N/A* |
|    Yes | 5.05 (4.88-5.22) | <.001 |
| **Renal failure** |  | <.001 |
| *No* | *3.63 (3.57-3.70)* | *N/A* |
|    Yes | 5.87 (5.75-5.99) | <.001 |

BMI=Body Mass Index Kg/m2; CHF= Congestive Heart Failure; COPD= Chronic Obstructive Lung Disease; CRD=Chronic Renal Disease; Deyo-CCI= Deyo-Charlson Comorbidity Index; DM= Diabetes mellitus; HTN=Hypertension; PVD= Peripheral Vascular Disease

**Appendix Table 3.** Predictors of Length of Stay for Acute MI – Multivariate Analysis

|  |  |  |
| --- | --- | --- |
| **Predictor** | **Mean (95% CI)** | **P-Value** |
| **BMI Group Kg/m2** |  | <.001 |
|  < 19 | 4.48 (4.21-4.76) | 0.519 |
| *20-25* | *4.61 (4.30-4.91)* | *N/A* |
|    26-30 | 2.94 (2.74-3.13) | <.001 |
|    31-35 | 2.75 (2.59-2.90) | <.001 |
|    36-39 | 2.88 (2.70-3.05) | <.001 |
|   > 40  | 3.37 (3.22-3.52) | <.001 |
| **Age Group, years** |  | <.001 |
|    18-44  | *2.69 (2.46-2.92)* | *N/A* |
|    45-59  | 3.11 (2.95-3.26) | <.001 |
|    60-74  | 3.84 (3.69-3.99) | <.001 |
|    >75  | 4.38 (4.20-4.55) | <.001 |
| **Gender** |  | 0.015 |
|    Female | 3.58 (3.43-3.73) | 0.015 |
| *Male* | *3.43 (3.29-3.57)* | *N/A* |
| **Race** |  | <.001 |
| *Non-white* | *3.63 (3.46-3.79)* | *N/A* |
|    White | 3.38 (3.26-3.51) | <.001 |
| **Deyo-CCI** |  | <.001 |
| *1* | *2.73 (2.55-2.91)* | *N/A* |
|    2 or higher | 4.28 (4.15-4.40) | <.001 |
| ***Comorbidities*** |  |  |
| **Atrial Fibrillation/Flutter** |  | <.001 |
| *No* | *3.30 (3.17-3.43)* | *N/A* |
|    Yes | 4.85 (4.66-5.04) | <.001 |
| **CHF** |  | <.001 |
| *No* | *3.47 (3.34-3.60)* | *N/A* |
|    Yes | 3.83 (3.63-4.03) | <.001 |
| **COPD** |  | <.001 |
| *No* | *3.45 (3.32-3.58)* | *N/A* |
|    Yes | 3.78 (3.60-3.96) | <.001 |
| **DM** |  | 0.037 |
| *No* | *3.53 (3.40-3.66)* | *N/A* |
|    Yes | 3.39 (3.22-3.56) | 0.037 |
| **HTN** |  | <.001 |
| *No* | *4.27 (4.12-4.41)* | *N/A* |
|    Yes | 2.97 (2.84-3.11) | <.001 |
| **PVD** |  | <.001 |
| *No* | *3.47 (3.34-3.60)* | *N/A* |
|    Yes | 3.91 (3.70-4.13) | <.001 |
| **Renal failure** |  | <.001 |
| *No* | *3.24 (3.11-3.37)* | *N/A* |
|    Yes | 4.90 (4.73-5.08) | <.001 |

BMI= Body Mass Index Kg/m2;CHF= Congestive Heart Failure; COPD= Chronic Obstructive Lung Disease; CRD=Chronic Renal Disease; Deyo-CCI= Deyo-Charlson Comorbidity Index; DM= Diabetes mellitus; HTN=Hypertension; PVD= Peripheral Vascular Disease