Table 2: Bivariable and multivariable logistic regression analysis of the association between set variables and opportunities for improvement

|  | **Unadjusted** | | | **Adjusted** | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **OR1** | **95% CI1** | **p-value** | **OR1** | **95% CI1** | **p-value** |
| **Age (Years)** | 1.01 | 1.01, 1.02 | **<0.001** | 1.01 | 1.00, 1.01 | **0.008** |
| **Sex** |  |  |  |  |  |  |
| Male | — | — |  | — | — |  |
| Female | 0.89 | 0.68, 1.14 | 0.36 | 1.01 | 0.77, 1.32 | 0.94 |
| **Survival after 30 days** |  |  |  |  |  |  |
| Alive | — | — |  | — | — |  |
| Dead | 1.31 | 0.74, 2.18 | 0.32 | 0.58 | 0.31, 1.07 | 0.083 |
| **Respiratory rate** |  |  |  |  |  |  |
| 10-29 | — | — |  | — | — |  |
| >29 | 2.11 | 1.25, 3.37 | **0.003** | 1.16 | 0.67, 1.99 | 0.60 |
| 6-9 | 0.00 | 0.00, 17.9 | 0.97 | 0.00 | 0.00, Inf | 0.98 |
| 1-5 | 1.12 | 0.06, 5.58 | 0.91 | 0.35 | 0.04, 3.40 | 0.37 |
| 0 | 0.00 |  | 0.98 | 0.00 | 0.00, Inf | 0.98 |
| Missing | 1.49 | 0.80, 2.56 | 0.18 | 0.95 | 0.36, 2.50 | 0.91 |
| **Systolic blood pressure (mmHg)** |  |  |  |  |  |  |
| >89 | — | — |  | — | — |  |
| 76-89 | 2.40 | 1.10, 4.62 | **0.016** | 1.00 | 0.47, 2.17 | >0.99 |
| 50-75 | 4.05 | 1.62, 8.82 | **0.001** | 1.41 | 0.54, 3.69 | 0.49 |
| 1-49 | 0.00 |  | >0.99 | 0.46 | 0.00, Inf | >0.99 |
| 0 | 0.00 |  | 0.98 | 0.00 | 0.00, Inf | 0.99 |
| Missing | 0.00 |  | 0.98 | 0.00 | 0.00, Inf | 0.99 |
| **Glagow Coma Scale** |  |  |  |  |  |  |
| 13-15 | — | — |  | — | — |  |
| 9-12 | 1.77 | 1.06, 2.78 | **0.020** | 0.89 | 0.52, 1.52 | 0.67 |
| 3-8 | 1.45 | 0.86, 2.29 | 0.14 | 0.73 | 0.37, 1.42 | 0.35 |
| Missing | 1.21 | 0.61, 2.15 | 0.56 | 0.33 | 0.12, 0.94 | **0.038** |
| **Intubation** |  |  |  |  |  |  |
| None | — | — |  | — | — |  |
| Pre-hospital | 1.43 | 0.75, 2.51 | 0.24 | 0.82 | 0.36, 1.89 | 0.64 |
| Emergency department | 2.72 | 1.89, 3.83 | **<0.001** | 0.99 | 0.61, 1.60 | 0.96 |
| **Working hours** |  |  |  |  |  |  |
| Yes | — | — |  | — | — |  |
| No | 1.04 | 0.82, 1.33 | 0.73 | 1.12 | 0.87, 1.45 | 0.36 |
| **Time to first CT (minutes)** |  |  |  |  |  |  |
| No CT | — | — |  | — | — |  |
| 0-30 | 1.06 | 0.68, 1.71 | 0.81 | 1.17 | 0.72, 1.89 | 0.53 |
| 31-60 | 1.66 | 1.06, 2.70 | **0.032** | 1.75 | 1.08, 2.86 | **0.024** |
| 61-90 | 1.54 | 0.92, 2.64 | 0.11 | 2.85 | 1.64, 4.96 | **<0.001** |
| >90 | 1.45 | 0.90, 2.40 | 0.14 | 1.97 | 1.18, 3.29 | **0.010** |
| **Weekend** |  |  |  |  |  |  |
| Yes | — | — |  | — | — |  |
| No | 1.05 | 0.82, 1.35 | 0.73 | 1.04 | 0.80, 1.36 | 0.76 |
| **Highest hospital care level** |  |  |  |  |  |  |
| Emergency Department | — | — |  | — | — |  |
| General Ward | 2.90 | 1.65, 5.53 | **<0.001** | 2.66 | 1.43, 4.93 | **0.002** |
| Surgical Ward | 9.11 | 5.25, 17.2 | **<0.001** | 6.86 | 3.69, 12.8 | **<0.001** |
| High Dependency Unit | 13.1 | 6.78, 26.5 | **<0.001** | 8.25 | 4.02, 16.9 | **<0.001** |
| Critical Care Unit | 11.7 | 6.75, 22.0 | **<0.001** | 6.91 | 3.41, 14.0 | **<0.001** |
| **Injury severity score** | 1.06 | 1.05, 1.07 | **<0.001** | 1.05 | 1.04, 1.07 | **<0.001** |
| 1OR = Odds Ratio, CI = Confidence Interval | | | | | | |
| Significant p-values (<0.05) are in bold. | | | | | | |