|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Parallel controls** | | **Historical controls** | |
| **Process measures** | | | | |
|  | P-value | Adjusted odds ratios or Beta coefficient for AlertWatch Use (95% CI) | P-value | Adjusted odds ratios or Beta coefficient for AlertWatch Use (95% CI) |
| Minutes mean arterial pressure < 55 mmHg\* | <0.001 | Beta = -0.14 | <0.001 | Beta = -0.35 |
| Crystalloid cc/kg/hr\* | <0.001 | Beta = -0.04 | <0.001 | Beta = -0.16 |
| Median tidal volume > 10 ml/kg | 0.006 | 0.71 (0.55-0.90) | <0.001 | 0.22 (0.17-0.30) |
| **Outcome measures** | | | | |
| Myocardial injury | 0.54 | 0.92 (0.70-1.21) | <0.001 | 0.57 (0.43-0.76) |
| Stage 1 acute kidney injury | 0.57 | 0.97 (0.87-1.08) | <0.001 | 0.79 (0.71-0.89) |
| Stage 2 acute kidney injury | 0.40 | 0.90 (0.70-1.15) | 0.02 | 0.75 (0.58-0.96) |
| Mortality 30 day | 0.61 | 1.06 (0.85-1.33) | 0.05 | 0.76 (0.58-1.00) |
| Hospital length of stay\* | 0.03 | beta = -0.014 | <0.001 | beta = -0.12 |
| Encounter charges\* | <0.001 | beta = -0.017 | N/A | N/A |

Supplemental Digital Content 3: Multivariable model results for comparison of AlertWatch cases to parallel controls and historical controls restricted to **Anesthesiology Residents** only. Odds ratios and beta coefficients reflect impact associated with AlertWatch use.

Adjusted for patient demographics, anthropometrics, clinical diagnoses, procedural risk, and in-room provider characteristics. For dichotomous outcomes, a logistic regression model was used. For continuous outcomes, generalized linear model with Poisson distribution was used.

CI = Confidence Interval

\* Continuous outcomes and therefore measure of effects size (adjusted odds ratios and 95% confidence intervals) are not available for reporting. The beta coefficient and 95% confidence interval for AlertWatch use is reported. The beta coefficient indicates in what direction the use of AlertWatch demonstrated impact: a lower (negative beta coefficient) or a higher (positive beta coefficient) expected value.

\*\* Historical comparison for encounter charges was not performed due to changes in cost accounting processes