|  |  |  |
| --- | --- | --- |
|  | **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 = -0.36 | <0.001 | Beta = -0.58 |
| Crystalloid cc/kg/hr\* | 0.05 | Beta = -0.03 | <0.001 | Beta = -0.17 |
| Median tidal volume > 10 ml/kg | <0.001 | 0.51 (0.36-0.74) | <0.001 | 0.13 (0.07-0.23) |
| **Outcome measures** |
| Myocardial injury | 0.05 | 0.61 (0.37-0.99) | 0.002 | 0.41 (0.23-0.73) |
| Stage 1 acute kidney injury | 0.23 | 1.10 (0.94-1.29) | 0.38 | 1.09 (0.90-1.32) |
| Stage 2 acute kidney injury | 0.42 | 1.16 (0.81-1.66) | 0.92 | 0.98 (0.64-1.51) |
| Mortality 30 day | 0.18 | 0.77 (0.53-1.13) | 0.55 | 0.84 (0.48-1.48) |
| Hospital length of stay\* | 0.17 | beta = -0.014 | <0.001 | N/a (beta = -0.13) |
| Encounter charges\*\* | <0.001 | beta = 0.002 | N/A | N/A |

Supplemental Digital Content 2: Multivariable model results for comparison of AlertWatch cases to parallel controls and historical controls restricted to **Certified Registered Nurse Anesthetists** 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