## Supplemental Table. Logistic Regression Analysis for Missed Critical Step Group

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| --- | --- | --- |
| Variable | Univariablea | Full Modelb |
| OR (95% CI) | *P* value | OR (95% CI) | *P* value |
| Method |  |  |  |  |
| Mask | [Ref] | [Ref] |
| Mouthpiece | 5.31 (1.59-17.73) | 0.007 | 6.95 (1.71-28.23) | 0.007 |
| Patient age | 1.20 (1.06-1.35) | 0.003 |  |  |
| Previous PICU admissions for asthma? |  |  |  |  |
| No | 3.53 (1.1-11.35) | 0.03 | 3.55 (0.81-15.59) | 0.094 |
| Yes | [Ref] | [Ref] |
| How many asthma exacerbations requiring hospitalization in the past 12 months? |  |  |  |  |
| 0-1 exacerbations requiring hospitalization | 2.33 (1.01-5.37) | 0.048 | 2.31 (0.79-6.79) | 0.127 |
| ≥2 exacerbations requiring hospitalization | [Ref] | [Ref] |
| Trigger: Exercise | 3.22 (1.17-8.86) | 0.02 | 4.32 (1.26-14.76) | 0.020 |
| No family history of asthma | 2.52 (1.13-5.64) | 0.02 | 1.07 (0.37-3.11) | 0.902 |
| Family history of asthma in extended family member(s) | 0.20 (0.06-0.63) | 0.006 | 0.19 (0.04-0.93) | 0.040 |
| PAMSE total score | 0.96 (0.91-1.01) | 0.08 | 0.94 (0.88-1.01) | 0.096 |
| Received previous asthma education in the hospital | 2.42 (1.09-5.39) | 0.03 | 0.75 (0.26-2.17) | 0.599 |
| Barrier: Transportation | 1.37 (1.01-1.86) | 0.04 | 1.62 (1.06-2.46) | 0.025 |
| BHLS: Difficulty understanding medical information  | 3.78 (0.56-25.64) | 0.1 | 2.71 (0.25-29.28) | 0.412 |
| PICU, pediatric intensive care unit; PAMSE, Parent Asthma Management Self-Efficacy; BHLS, Brief Health Literacy Screen. a Univariable models refer to each covariate modeled separately.b The full model included all covariates of interest in a single model. Patient age was not included due to collinearity with spacer method.  |