

Supplemental table 1: Univariate Analysis of Family Presence during Neonatal Intubation with Tracheal Intubation Outcomes

Outcome, N (%)	Family Absent (n=2,328)	Family Present (n=242)	p-Value
First attempt success*	1,132 (49)	133 (55)	0.062
Overall success ^a	1,540 (66)	179 (74)	0.014
Any TIAE	454 (20)	44 (18)	0.62
Severe TIAE	110 (5)	11 (5)	0.90
Non-severe TIAE	389 (17)	37 (15)	0.57
Severe Desaturation ^b	1,185 (52)	115 (49)	0.40

*First attempt success was unknown in one encounter

^a Intubation within two TI attempts

^b $\geq 20\%$ drop in oxygen saturation during tracheal intubation attempt

TIAE: tracheal intubation associated events.

Supplemental Table 2: GEE model multivariable analysis for the association between family presence and success within 2 attempts adjusted for patient, provider, and practice factors

	Odds ratio	95% Confidence Interval	p-Value
Family member present	1.24	0.90-1.71	0.183
Patient			
Weight \geq 1500 grams	1.57	1.29-1.91	<0.001
Comorbidities			
Acute respiratory failure	0.93	0.72-1.20	0.590
Chronic respiratory failure	0.73	0.56-0.96	0.023
Indication			
Frequent apnea and bradycardia	0.82	0.65-1.03	0.088
Upper airway obstruction	0.81	0.54-1.23	0.328
Unstable hemodynamics	0.86	0.49-1.52	0.610
Surfactant administration	0.83	0.65-1.06	0.140
Reintubation after unplanned extubation	1.87	1.36-2.59	<0.001
Provider			
Neonatology attending	1 (reference)	N/A	N/A
Neonatology fellow	0.67	0.43-1.02	0.063
Pediatric resident	0.17	0.11-0.26	<0.001
Nurse practitioner	0.62	0.40-0.96	0.032
Physician assistant	0.55	0.34-0.88	0.014
Hospitalist/RT/Other	0.57	0.34-0.96	0.034
Practice			
Device-Video laryngoscopy (vs. direct laryngoscopy)	1.67	1.31-2.11	<0.001
Approach- Nasal (vs. oral)	2.01	1.32-3.05	0.001

GEE denotes generalized estimate equation. RT: respiratory therapist.

Supplemental Table 3: GEE model multivariable analysis for the association between family presence and the occurrence of adverse tracheal-intubation-associated events adjusted for patient, provider, and practice factors

	Odds ratio	95% Confidence Interval	p-Value
Family member present	0.95	0.67-1.37	0.803
Patient			
Weight \geq 1500 grams	0.66	0.53-0.83	<0.001
Comorbidities			
Acute respiratory failure	0.96	0.71-1.30	0.799
Chronic respiratory failure	1.43	1.04-1.97	0.026
Indication			
Frequent apnea and bradycardia	1.25	0.96-1.62	0.093
Upper airway obstruction	1.46	0.91-2.32	0.115
Unstable hemodynamics	2.16	1.23-3.79	0.007
Surfactant administration	1.26	0.95-1.67	0.113
Reintubation after unplanned extubation	1.13	0.82-1.57	0.454
Provider			
Neonatology attending	1 (reference)	N/A	N/A
Neonatology fellow	0.92	0.59-1.43	0.702
Pediatric resident	1.12	0.70-1.80	0.633
Nurse practitioner	1.09	0.69-1.72	0.699
Physician assistant	0.83	0.49-1.39	0.477
Hospitalist/RT/Other	1.16	0.66-2.02	0.605
Practice			
Device-Video laryngoscopy (vs. direct laryngoscopy)	0.30	0.21-0.42	<0.001
Approach- Nasal (vs. oral)	0.43	0.25-0.72	0.001

GEE denotes generalized estimate equation. RT: respiratory therapist.

Supplemental Table 4: GEE model multivariable analysis for the association between family presence and the occurrence severe desaturation adjusted for patient, provider, and practice factors

	Odds ratio	95% Confidence Interval	p-Value
Family member present	0.91	0.69-1.20	0.506
Patient			
Weight \geq 1500 grams	0.69	0.58-0.83	<0.001
Comorbidities			
Acute respiratory failure	1.10	0.88-1.38	0.404
Chronic respiratory failure	1.85	1.45-2.37	<0.001
Indication			
Frequent apnea and bradycardia	1.15	0.93-1.43	0.203
Upper airway obstruction	1.51	1.02-2.22	0.037
Unstable hemodynamics	1.36	0.80-2.32	0.258
Surfactant administration	0.91	0.72-1.15	0.425
Reintubation after unplanned extubation	1.02	0.78-1.33	0.902
Provider			
Neonatology attending	1 (reference)	N/A	N/A
Neonatology fellow	1.03	0.73-1.46	0.875
Pediatric resident	1.83	1.26-2.66	0.002
Nurse practitioner	0.93	0.64-1.33	0.675
Physician assistant	1.32	0.88-1.96	0.177
Hospitalist/RT/Other	0.87	0.56-1.35	0.527
Practice			
Device-Video laryngoscopy (vs. direct laryngoscopy)	0.85	0.69-1.05	0.131
Approach- Nasal (vs. oral)	0.77	0.55-1.10	0.147

GEE denotes generalized estimate equation. RT: respiratory therapist.