

Supplemental Information

SUPPLEMENTAL TABLE 4 Complete Multivariable Regression Analysis Results

Outcome Variable	Predictor Variable	Overall Cohort IRR (95% CI)	CHCO IRR (95% CI)	MUSC IRR (95% CI)
LOS ^a	SHS	1.1 (1.0–1.2)	1.2 (1.1–1.3)	1.0 (0.8–1.1)
	Age	1.0 (1.0–1.0)	1.0 (1.0–1.0)	1.0 (1.0–1.0)
	Race			
	Black	1.1 (1.0–1.2)	(1.0–1.3)	1.1 (0.9–1.3)
	Hispanic	1.1 (1.0–1.2)	1.04 (0.9–1.2)	1.2 (0.9–1.6)
	Other	1.1 (1.0–1.3)	1.1 (0.9–1.3)	1.0 (0.7–1.4)
	White	Reference	Reference	Reference
	Gender, girls	1.0 (1.0–1.1)	1.1 (1.0–1.2)	1.0 (0.9–1.1)
	Insurance			
	Medicaid	1.0 (0.8–1.1)	1.0 (0.9–1.3)	1.0 (0.9–1.2)
	Private	Reference	Reference	Reference
	Self-pay/other	0.7 (0.5–1.0)	0.6 (0.5–0.9)	0.9 (0.5–1.7)
	Oxygen use, yes	1.3 (1.2–1.5)	1.1 (0.9–1.5)	1.5 (1.3–1.7)
	Home ICS, yes	1.1 (1.0–1.6)	1.2 (1.1–1.3)	1.0 (0.8–1.2)
	Pneumonia, yes	1.7 (1.5–1.9)	1.9 (1.7–2.2)	1.3 (1.1–1.5)
	RSV, yes	1.7 (1.4–2.0)	2.1 (1.7–2.6)	1.3 (1.0–1.6)
	Institution, MUSC	0.7 (0.7–0.8)	–	–
SHS*institution	1.5 (1.4–1.6)	–	–	
		Overall Cohort OR (95% CI)	CHCO OR (95% CI)	MUSC OR (95% CI)
IV steroids ^b	SHS, yes	1.6 (1.1–2.3)	1.5 (1.0–2.5)	1.8 (0.9–3.6)
	Age	1.1 (1.0–1.1)	1.1 (1.0–1.1)	1.0 (1.0–1.1)
	Race			
	Black	1.5 (0.9–2.6)	1.8 (0.9–3.5)	1.2 (0.5–2.9)
	Hispanic	1.6 (0.9–2.8)	1.6 (0.8–3.0)	3.8 (0.9–15.6)
	Other	1.6 (0.7–3.4)	1.8 (0.3–4.1)	0.4 (0.04–4.4)
	White	Reference	Reference	Reference
	Gender, girls	1.4 (1.0–2.0)	1.8 (1.1–2.8)	1.0 (0.5–1.9)
	Insurance			
	Medicaid	1.4 (0.3–2.0)	1.7 (0.3–9.6)	0.7 (0.02–20.8)
	Private	1.7 (0.4–7.9)	2.7 (0.5–15.6)	0.5 (0.02–16.7)
	Self-pay/other	Reference	Reference	Reference
	Oxygen use, no	0.3 (0.1–0.5)	0.2 (0.02–1.7)	0.3 (0.1–0.6)
	Home ICS, no	0.7 (0.5–1.0)	0.6 (0.4–1.0)	0.7 (0.3–1.3)
	Pneumonia, no	0.6 (0.3–1.0)	0.5 (0.2–0.9)	0.9 (0.4–2.1)
	RSV, no	0.5 (0.2–1.1)	0.4 (0.1–1.1)	0.7 (0.2–2.1)
	Institution, CHCO	0.4 (0.2–0.7)	–	–
PICU ^b	SHS, yes	1.5 (1.0–2.3)	1.4 (0.8–2.4)	1.6 (0.7–3.8)
	Age	1.1 (1.0–1.1)	1.1 (1.0–1.1)	1.1 (0.9–1.2)
	Race			
	Black	0.9 (0.5–1.7)	1.1 (0.5–2.3)	0.6 (0.2–1.6)
	Hispanic	0.9 (0.5–1.6)	0.9 (0.5–1.8)	1.2 (0.2–6.3)
	Other	0.7 (0.3–1.6)	0.7 (0.3–1.9)	0.9 (0.1–8.9)
	White	Reference	Reference	Reference
	Gender, girls	1.4 (0.9–2.1)	1.6 (1.0–2.7)	1.2 (0.5–2.7)
	Insurance			
	Medicaid	1.6 (0.3–8.2)	2.8 (0.3–26.2)	0.2 (0.0–3.9)
	Private	2.3 (0.4–12.7)	4.7 (0.5–45.5)	0.2 (0.0–4.5)
	Self-pay/other	Reference	Reference	Reference
	Oxygen use, no	0.2 (0.1–0.4)	–	0.1 (0.1–0.4)
	Home ICS, no	0.9 (0.6–1.4)	0.8 (0.5–1.4)	1.2 (0.5–2.8)
	Pneumonia, no	0.5 (0.3–0.8)	0.3 (0.1–0.5)	1.6 (0.6–4.9)
	RSV, no	0.4 (0.2–0.9)	0.4 (0.1–1.4)	0.3 (0.1–1.1)
	Institution, CHCO	0.5 (0.3–1.0)	–	–
SHS, yes	1.3 (0.9–2.0)	1.4 (0.9–2.3)	1.0 (0.5–2.2)	
Age	1.0 (1.0–1.1)	1.1 (1.0–1.1)	1.1 (1.0–1.2)	

SUPPLEMENTAL TABLE 4 Continued

Outcome Variable	Predictor Variable	Overall Cohort IRR (95% CI)	CHCO IRR (95% CI)	MUSC IRR (95% CI)
Magnesium ^b	Race			
	Black	2.1 (1.2–3.7)	2.2 (1.1–4.6)	1.9 (0.7–5.2)
	Hispanic	2.2 (1.2–4.1)	2.1 (1.1–4.3)	3.2 (0.7–14.8)
	Other	2.6 (1.2–5.6)	2.4 (1.0–5.8)	2.7 (0.4–18.8)
	White	Reference	Reference	Reference
	Gender, girls	1.1 (0.7–1.6)	1.4 (0.8–2.2)	0.7 (0.3–1.5)
	Insurance			
	Medicaid	1.4 (0.3–7.6)	2.3 (0.3–20.5)	0.4 (0.0–9.2)
	Private	2.1 (0.4–11.2)	3.9 (0.4–35.2)	0.4 (0.0–10.1)
	Self-pay/other	Reference	Reference	Reference
	Oxygen use, no	0.2 (0.1–0.5)	0.3 (0.04–2.2)	0.2 (0.1–0.4)
	Home ICS, no	0.8 (0.6–1.3)	0.8 (0.5–1.3)	0.9 (0.4–1.9)
	Pneumonia, no	0.7 (0.4–1.2)	0.5 (0.2–0.9)	1.5 (0.5–4.0)
	RSV, no	1.1 (0.4–2.6)	0.7 (0.2–2.2)	2.0 (0.4–10.2)
	Institution, CHCO	0.4 (0.2–0.7)	–	–

ICS, inhaled corticosteroids; RSV, respiratory syncytial virus.

^a LOS model is a zero-truncated negative binomial regression model and included age, race, insurance, gender, oxygen use, home ICS, diagnosis of pneumonia, and diagnosis of RSV as covariates. The overall cohort model had significant interaction between institution and SHS in predicting LOS. An interaction term (institution*SHS) was included for this reason.

^b Logistic regression models controlled for age, race, insurance, gender, oxygen use, home ICS, diagnosis of pneumonia, diagnosis of RSV, and institution (for the overall cohort model).