Supplemental Online Content

eTable 1. Sensitivity analysis of final multivariable length of stay model showing the original model identified by backwards selection, a model using LASSO for variable selection (Model 1), a model excluding those with missing gestational age (Model 2), and a model including only those in the more recent era (Model 3)

eTable 2. Sensitivity analysis of final multivariable cost model showing the original model identified by backwards selection, a model using LASSO for variable selection (Model 1), a model excluding those with missing gestational age (Model 2), and a model including only those in the more recent era (Model 3)

eTable 3. Sensitivity analysis of final multivariable survival model showing the original model identified by backwards selection, a model using LASSO for variable selection (Model 1), a model excluding those with missing gestational age (Model 2), and a model including only those in the more recent era (Model 3)

This supplemental material has been provided by the authors to give readers additional information about their work.

eTable 1. Sensitivity analysis of final multivariable length of stay model showing the original model identified by backwards selection, a model using LASSO for variable selection (Model 1), a model excluding those with missing gestational age (Model 2), and a model including only those in the more recent era (Model 3)

	Multivariable		Model 1		Model 2		Model 3	
	Marginal length of stay (95% CI)	p-value	Marginal length of stay (95% CI)	p-value	Marginal length of stay (95% CI)	p-value	Marginal length of stay (95% CI)	p-value
Female sex								
Gestational age in weeks	-2 (-3 to -2)	<0.001	-3 (-3 to -2)	<0.001	-2 (-3 to -2)	<0.001	-3 (-4 to -2)	<0.001
Race/Ethnicity (Ref: Non-Hispanic White)		<0.001		<0.001		<0.001		<0.001
Hispanic	+11 (+1 to +20)		+11 (+1 to +20)		+14 (+4 to +24)		+13 (+2 to +23)	
Non-Hispanic Black	+16 (+7 to +25)		+18 (+9 to +27)		+19 (+10 to +29)		+21 (+11 to +31)	
Other*	+7 (-3 to +17)		+7 (-3 to +18)		+9 (-3 to +21)		+10 (-1 to +21)	
Unknown	-4 (-15 to +7)		-3 (-14 to +8)		+4 (-6 to +13)		+4 (-11 to +18)	
Child Opportunity Index (Ref: Very Low)		0.026		0.027				
Low	-2 (-10 to 6)		-3 (-11 to +5)					
Moderate	+1 (-7 to 10)		+0 (-9 to +8)					
High	+3 (-6 to +12)		+2 (-8 to +11)					
Very High	-8 (-18 to +2)		-8 (-18 to +2)					
Unknown	+54 (+12 to +96)		+51 (+10 to +92)					
Payor (Ref: Government)		<0.001		<0.001				<0.001
Commercial	-10 (-17 to -3)		-9 (-16 to -2)				-9 (-17 to -2)	
Other/Unknown	+12 (0 to +23)		+14 (+2 to +26)				+53 (+20 to +86)	

Admission after 2009								
Diagnosis								
Necrotizing Enterocolitis	+15 (+9 +21)	<0.001	+16 (+9 to +22)	<0.001	+14 (+7 to +21)	<0.001	+16 (+8 to +23)	<0.001
Gastroschisis			+12 (+3 to +22)	0.011				
Volvulus			-5 (-18 to +8)	0.448				
Hirschsprung's Disease								
Atresia								
CLABSI	+24 (+14 to +33)	<0.001	+24 (+14 to +33)	<0.001	+26 (+10 to +35)	<0.001	+25 (+14 to +36)	<0.001
Venous thromboembolism	+24 (+13 to +34)	<0.001	+24 (+14 to +35)	<0.001	+23 (+10 to +35)	<0.001	+25 (+13 to +37)	<0.001

CLABSI, central line-associated bloodstream infection

*Other includes Asian, Multiracial, and Other categories from the original dataset

eTable 2. Sensitivity analysis of final multivariable cost model showing the original model identified by backwards selection, a model using LASSO for variable selection (Model 1), a model excluding those with missing gestational age (Model 2), and a model including only those in the more recent era (Model 3)

	Multivariable Marginal cost (95% CI)	p-value	Model 1 Marginal cost (95% CI)	p-value	Model 2 Marginal cost (95% CI)	p-value	Model 3 Marginal cost (95% CI)	p-value
Length of stay (days)	+$3791 (+$3172 to +$4410)	<0.001	+$3771 (+$3156 to +$4385)	<0.001	+$4078 (+$3299 to +$4858)	<0.001	+$4408 (+$3488 to +$5329)	<0.001
Female sex			-$42,514 (-$74,744 to -$10,284)	0.009				
Gestational age in weeks	-$5823 (-$10,083 to -$1563)	0.007	-$6099 (-$10,439 to -$1758)	0.005				
Race/Ethnicity (Ref: Non-Hispanic White)				0.16				
Hispanic			-$18,193 (-$72,498 to $36,113)					
Non-Hispanic Black			-$43,213 (-$93,696 to +$7270)					
Other*			-$63,456 (-$122,035 to -$4878)					
Unknown			-$51,364 (-$118,176 to +$15,448)					
Child Opportunity Index (Ref: Very Low)		0.007						
Low	+$22,493(-$22,730 to +$67,717)							
Moderate	-$28,997 (-$75,508 to +$17,515)							
High	+$38,830 (-$12,824 to +$90,484)							
Very High	+$82,970 (+$21,181 to +$144,759)							

Unknown	+$11,411(-$165,943 to +$188,766)							
Payor (Ref: Government)		<0.001		0.010		<0.001		
Commercial	-$55,069 (-$96,763 to -$13,375)		-$49,211 (-$90,569 to -$7852)		-$28,434 (-$79,445 to +$22,577)			
Other/Unknown	-$107,335 (-$160,835 to -$53,835)		-$83,315 (-$151,365 to -$15,266)		-$156,931 (-$227,026 to -$86,835)			
Admission after 2009	+$136,798 (+$98,158 to +$194,264)	<0.001	+$143,914 (+$95,861 to +$191,968)	<0.001	+$136,435 (+$76,173 to +$196,696)	<0.001		
Diagnosis								
Necrotizing Enterocolitis	+$42,168 (+$6721 to +$77,615)	0.019	+$49,581 (+$12,829 to +$86,333)	0.007	+$69,673 (+$27,220 to +$112,125)	0.001	+$57,276 (+$9496 to +$105,056)	0.016
Gastroschisis	+78,495 (+$20,915 to +136,074)	0.004	+$69,180 (+$11,718 to +$126,641)	0.014				
Volvulus	-$114,275 (-$181,925 to -$46,625)	0.002	-$118,229 (-$185,443 to -$51,015)	0.001	-$142,067 (-$225,509 to -$58,625)	0.001	-$164,380 (-$250,502 to -$78,258)	<0.001
Hirschsprung's Disease								
Atresia			+$17,274 (-$25,894 to +$60,441)	0.429				
CLABSI								
Venous thromboembolism								

CLABSI, central line-associated bloodstream infection

*Other includes Asian, Multiracial, and Other categories from the original dataset

eTable 3. Sensitivity analysis of final multivariable survival model showing the original model identified by backwards selection, a model using LASSO for variable selection (Model 1), a model excluding those with missing gestational age (Model 2), and a model including only those in the more recent era (Model 3)

	Multivariable		Model 1		Model 2		Model 3	
	Hazard ratio (95% CI)	p-value	Hazard ratio (95% CI)	p-value	Hazard ratio (95% CI)	p-value	Hazard ratio (95% CI)	p-value
Female sex							0.60 (0.38 – 0.94)	0.025
Gestational age in weeks					0.95 (0.92 – 0.98)	<0.001		
Race/Ethnicity (Ref: Non-Hispanic White)		<0.001		0.92				
Hispanic	1.30 (0.64 – 2.62)		1.14 (0.55 – 2.37)					
Non-Hispanic Black	1.07 (0.53 – 2.15)		1.02 (0.48 – 2.18)					
Other*	1.12 (0.50 - 2.48)		1.07 (0.49 – 2.36)					
Unknown	2.35 (1.30 – 4.27)		1.40 (0.52 – 3.80)					
Child Opportunity Index (Ref: Very Low)				0.20				
Low			0.95 (0.65 – 1.38)					
Moderate			0.69 (0.37 – 1.29)					
High			0.51 (0.33 – 0.80)					
Very High			0.75 (0.40 – 1.40)					
Unknown			0.92 (0.32 – 2.69)					
Payor (Ref: Government)				0.17		<0.001		
Commercial			1.50 (0.94 – 2.41)		1.27 (0.75 – 2.14)			
Other/Unknown			1.49 (0.67 – 3.32)		2.98 (1.73 – 5.13)			
Admission after 2009			0.71 (0.43 – 1.16)	0.17				
Diagnosis								
Necrotizing Enterocolitis								
Gastroschisis	0.37 (0.17 – 0.80)	0.011	0.45 (0.19 – 1.09)	0.078			0.27 (0.10 – 0.75)	0.012

Volvulus								
Hirschsprung's Disease								
Atresia	0.57 (0.35 – 0.91)	0.020	0.60 (0.37 – 0.97)	0.039				
CLABSI	0.58 (0.39 – 0.85)	0.006	0.55 (0.37 – 0.83)	0.005				
Venous thromboembolism	1.80 (1.22 – 2.63)	0.003	1.95 (1.30 – 2.94)	0.001	2.02 (1.15 – 3.55)	0.015	2.24 (1.35 – 3.71)	0.002

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