

Supplemental Information

SUPPLEMENTAL TABLE 3 Characteristics of Data Set, ACS-NSQIP Database, 2012–2017

Characteristic	No. (%) Neonate Patients			No. (%) Infant Patients			No. (%) Children Patients		
	Overall (n = 20 492)	Transfusion Group (n = 3179)	Nontransfusion Group (n = 17 313)	Overall (n = 79 744)	Transfusion Group (n = 7023)	Nontransfusion Group (n = 72 721)	Overall (n = 382 862)	Transfusion Group (n = 20 710)	Nontransfusion Group (n = 362 152)
Age in d ^a	6 (2–18)	7 (3–16)	5 (1–19)	—	—	—	—	—	—
Premature birth	6345 (31.0)	2028 (63.8)	4317 (24.9)	—	—	—	—	—	—
Missing	2725 (13.3)	137 (4.3)	2588 (15.0)	—	—	—	—	—	—
Age in wk ^a	—	—	—	23 (11–35)	16 (9–30)	24 (12–36)	—	—	—
Age group									
Toddler, 1–2 y	—	—	—	—	—	—	36 749 (9.6)	1476 (7.1)	35 273 (9.7)
Early childhood, 2–5 y	—	—	—	—	—	—	87 115 (22.8)	2616 (12.6)	84 499 (23.3)
Middle childhood, 6–11 y	—	—	—	—	—	—	126 584 (33.1)	4188 (20.2)	122 360 (33.8)
Adolescent, 12–18 y	—	—	—	—	—	—	132 450 (34.6)	12 430 (60.0)	120 020 (33.1)
Sex									
Female	7779 (38.0)	1354 (42.6)	6425 (37.1)	26 944 (33.8)	2727 (38.8)	24 217 (33.3)	208 422 (54.4)	12 345 (59.6)	162 095 (44.8)
Male	12 713 (62.0)	1825 (57.4)	10 888 (62.9)	52 800 (66.2)	4296 (61.2)	48 504 (66.7)	174 440 (45.6)	8365 (40.4)	200 057 (55.2)
Race									
White	13 296 (64.9)	1766 (55.6)	11 530 (66.6)	53 644 (67.3)	4475 (63.7)	49 169 (67.6)	268 813 (70.2)	13 720 (66.3)	255 093 (70.4)
Black or African American	2853 (13.9)	685 (21.5)	2168 (12.5)	11 689 (14.7)	1209 (17.2)	10 480 (14.4)	48 123 (12.6)	3893 (18.8)	44 230 (12.2)
Other	708 (3.5)	130 (4.1)	578 (3.3)	2944 (3.7)	228 (3.3)	2716 (3.7)	15 317 (4.0)	711 (3.4)	14 606 (4.0)
Unknown	3635 (17.7)	598 (18.8)	3037 (17.5)	11 467 (14.4)	1111 (15.8)	10 356 (14.2)	50 609 (13.2)	2386 (11.5)	48 223 (13.3)
ASA class									
1, no disturbance	1422 (6.9)	11 (0.3)	1411 (8.1)	19 439 (24.4)	488 (7.0)	18 951 (26.1)	128 937 (33.7)	2385 (11.5)	126 552 (34.9)
2, mild disturbance	5160 (25.2)	125 (3.9)	5035 (29.1)	31 403 (39.4)	1871 (26.6)	29 532 (40.6)	168 591 (44.0)	8175 (39.5)	160 416 (44.3)
3, severe disturbance	8813 (43.0)	927 (29.2)	7886 (45.5)	23 270 (29.2)	3004 (42.8)	20 266 (27.9)	78 870 (20.6)	8816 (42.6)	70 054 (19.3)
4, life-threatening	4542 (22.2)	1761 (55.4)	2781 (16.1)	5309 (6.7)	1505 (21.4)	3804 (5.2)	5479 (1.4)	1229 (5.9)	4250 (1.2)
5, moribund	369 (1.8)	278 (8.7)	91 (0.5)	177 (0.22)	119 (1.7)	58 (0.1)	168 (0.07)	0 (0)	78 (0.4)
Unknown	186 (0.9)	77 (2.4)	109 (0.6)	146 (0.18)	36 (0.5)	110 (0.2)	817 (0.2)	27 (0.1)	790 (0.2)
Hospital length of stay, d ^a	14 (3–29)	32 (15–61)	13 (3–26)	2 (0–4)	6 (3–42)	1 (0–3)	1 (0–3)	5 (4–7)	1 (0–2)
Unknown	2946 (14.4)	1193 (37.5)	1753 (10.1)	5743 (7.2)	1661 (23.7)	4082 (5.6)	1156 (0.3)	263 (1.3)	893 (0.25)
Preoperative sepsis	1171 (5.7)	711 (22.4)	460 (2.7)	1956 (2.5)	586 (8.3)	1370 (1.9)	37 729 (9.9)	1252 (6.05)	36 477 (10.1)
Preoperative ventilation	5246 (25.6)	2263 (71.2)	2983 (17.2)	4877 (6.1)	1508 (21.5)	3369 (4.6)	5328 (1.4)	1122 (5.4)	4206 (1.2)
Disseminated cancer	88 (0.4)	34 (1.1)	54 (0.3)	742 (0.93)	286 (4.1)	456 (0.6)	11 354 (3.0)	1892 (9.1)	9462 (2.6)
Central line	121 (0.6)	43 (1.4)	78 (0.5)	248 (0.31)	88 (1.3)	160 (0.2)	543 (0.1)	197 (0.5)	446 (0.1)
Work-related RVUs ^a	19.5 (11.3–27.8)	20.9 (18.1–36.9)	19 (11.3–26.4)	14.1 (8.6–17.7)	22.6 (15.6–33.6)	14.0 (8.5–17.6)	10.0 (8.5–17.1)	32.1 (20.8–37.5)	9.8 (8.0–15.0)
Surgical subspecialty	Cardiothoracic 41 (0.2)	17 (0.5)	24 (0.1)	65 (0.1)	17 (0.2)	48 (0.1)	435 (0.1)	23 (0.1)	412 (0.1)
General	16 619 (81.1)	2857 (89.9)	13 762 (79.5)	35 307 (44.3)	3710 (52.8)	31 597 (43.5)	135 050 (35.3)	3586 (17.3)	131 464 (36.3)
Gynecologic	2 (0.0)	0 (0.0)	2 (0.0)	4 (0.0)	1 (0.0)	3 (0.0)	1026 (0.3)	21 (0.1)	1005 (0.3)
Neurosurgical	2407 (11.8)	212 (6.7)	2195 (12.7)	8937 (11.2)	1666 (23.7)	7271 (10.0)	34 962 (9.1)	1710 (8.3)	33 252 (9.2)
Orthopedic	191 (0.93)	29 (0.9)	162 (0.9)	1979 (2.5)	33 (0.5)	1946 (2.7)	88 530 (23.1)	14 144 (68.3)	74 386 (20.5)
Otolaryngological	611 (3.0)	23 (0.7)	588 (3.4)	6653 (8.3)	217 (3.1)	6436 (8.9)	54 785 (14.3)	241 (1.2)	54 544 (15.1)
Plastic	166 (0.8)	7 (0.2)	159 (0.9)	11 708 (14.7)	1288 (18.3)	10 420 (14.3)	30 894 (8.1)	772 (3.7)	30 122 (8.3)
Urologic	455 (2.2)	34 (1.1)	421 (2.4)	15 091 (18.9)	91 (1.3)	15 000 (20.6)	37 180 (9.7)	213 (1.0)	36 967 (10.2)
VTE ^a	99 (0.48)	56 (1.8)	43 (0.3)	147 (0.2)	69 (1.0)	78 (0.1)	374 (0.1)	122 (0.6)	252 (0.1)

—, not applicable.

^a Data are median (IQR).

SUPPLEMENTAL TABLE 4 Characteristics of Study Population Stratified by Missing Data for at Least 1 Variable Versus Complete Cases, ACS-NSQIP Database, 2012–2017

Characteristic	No. (%) Neonate Patients			No. (%) Infant Patients			No. (%) Children Patients		
	Missing (n = 8240)	Nonmissing (n = 12 252)	P	Missing (n = 16 158)	Nonmissing (n = 63 586)	P	Missing (n = 52 220)	Nonmissing (n = 330 642)	P
Age in d ^a	6 (1–18)	6 (2–18)	—	—	—	—	—	—	—
Premature birth	2772 (33.6)	3573 (29.2)	<.001	—	—	—	—	—	—
Missing	2725 (33.1)	—	—	—	—	—	—	—	—
Age in wk ^a	—	—	—	19 (1132)	24 (1136)	—	—	—	—
Age group	—	—	—	—	—	—	—	—	<.001
Toddler, 1–2 y	—	—	—	—	—	—	5864 (11.2)	30 885 (9.3)	—
Early childhood, 2–5 y	—	—	—	—	—	—	12 589 (24.1)	74 526 (22.5)	—
Middle childhood, 6–11 y	—	—	—	—	—	—	17 371 (33.3)	109 178 (33.0)	—
Adolescent, 12–18 y	—	—	—	—	—	—	16 396 (31.4)	116 055 (35.1)	—
Female	3125 (37.9)	4654 (38.0)	.942	6009 (37.2)	20 935 (32.9)	<.001	23 329 (44.7)	151 112 (45.7)	<.001
Race	—	—	<.001	—	—	<.001	—	—	<.001
White	3448 (41.8)	9848 (80.4)	—	2887 (17.9)	50 757 (79.8)	—	1209 (2.3)	267 604 (80.9)	—
Black or African American	950 (11.5)	1903 (15.5)	—	1564 (9.7)	10 125 (15.9)	—	315 (0.6)	47 808 (14.5)	—
Other	207 (2.5)	501 (4.1)	—	240 (1.5)	2704 (4.3)	—	87 (0.2)	15 230 (4.6)	—
Missing	3635 (44.1)	—	—	11 467 (71.0)	—	—	50 609 (96.9)	—	—
ASA class	—	—	<.001	—	—	<.001	—	—	<.001
1, no disturbance	702 (8.5)	720 (5.9)	—	2851 (17.6)	16 588 (26.1)	—	20 315 (38.9)	108 623 (32.9)	—
2, mild disturbance	1869 (22.7)	3291 (26.9)	—	4441 (27.5)	26 962 (42.4)	—	20 445 (39.2)	148 146 (44.8)	—
3, severe disturbance	3102 (37.6)	5711 (46.6)	—	6018 (37.2)	17 252 (27.1)	—	9540 (18.3)	69 330 (21.0)	—
4, life-threatening	2187 (26.5)	2355 (19.2)	—	2618 (16.2)	2691 (4.2)	—	1067 (2.0)	4412 (1.3)	—
5, moribund	194 (2.4)	175 (1.4)	—	84 (0.5)	93 (0.1)	—	36 (0.1)	132 (0.0)	—
Missing	186 (2.3)	—	—	146 (0.9)	—	—	817 (1.6)	—	—
Hospital length of stay, d ^a	9 (2–25)	16 (5–31)	—	2 (1–5)	2 (0–4)	—	1 (0–3)	1 (0–3)	—
Preoperative sepsis	664 (8.1)	507 (4.1)	<.001	618 (3.8)	1338 (2.1)	<.001	6122 (11.7)	31 607 (9.6)	<.001
Missing	—	—	—	—	—	—	2 (0.0)	—	—
Preoperative ventilation	2616 (31.7)	2630 (21.5)	<.001	3092 (19.1)	1785 (2.8)	<.001	978 (1.9)	4350 (1.3)	<.001
Disseminated cancer	41 (0.5)	47 (0.4)	.265	143 (0.9)	599 (0.9)	.530	1828 (3.5)	9526 (2.9)	<.001
Missing	—	—	—	—	—	—	1 (0.0)	—	—
Central line	59 (0.7)	62 (0.5)	.067	132 (0.8)	116 (0.2)	<.001	96 (0.2)	447 (0.1)	.007
Work-related RVUs ^a	19.9 (11.3–28.3)	19.0 (11.3–27.8)	—	14.1 (8.5–18.1)	14.1 (9.5–17.7)	—	9.8 (8.5–16.2)	10.1 (8.5–17.2)	—
Surgical subspecialty	—	—	<.001	—	—	<.001	—	—	<.001
Cardiothoracic	16 (0.2)	25 (0.2)	—	22 (0.0)	43 (0.1)	—	64 (0.1)	371 (0.1)	—
General	6618 (80.3)	10 001 (81.6)	—	8568 (53.0)	26 739 (42.1)	—	18 912 (36.2)	116 138 (35.1)	—
Gynecologic	2 (0.0)	0 (0.0)	—	1 (0.0)	3 (0.0)	—	140 (0.3)	886 (2.7)	—
Neurosurgical	792 (9.6)	1615 (13.2)	—	1702 (10.5)	7235 (11.4)	—	4116 (7.9)	30 846 (9.3)	—
Orthopedic	162 (2.0)	29 (0.2)	—	274 (1.7)	1705 (2.7)	—	11 656 (22.3)	76 874 (23.3)	—
Otolaryngological	308 (3.7)	303 (2.5)	—	1753 (10.8)	4900 (7.7)	—	7117 (13.6)	47 668 (14.4)	—
Plastic	119 (1.4)	47 (0.4)	—	1851 (11.5)	9857 (15.5)	—	5032 (9.6)	25 862 (7.8)	—
Urologic	223 (2.7)	232 (1.9)	—	1987 (12.3)	13 104 (20.6)	—	5183 (9.9)	31 997 (9.7)	—
VTE	55 (0.7)	44 (0.4)	.003	65 (0.4)	82 (0.1)	<0.001	77 (0.1)	297 (0.1)	<.001

—, not applicable.

^a Data are median (IQR).

SUPPLEMENTAL TABLE 5 Association of Perioperative RBC Transfusion and Development of Postoperative VTE Within 30 d in Neonates

Variable	No. Patients	30-d Postoperative VTE		
		No. (%)	aOR (95% CI)	<i>P</i>
Perioperative RBC transfusion				
No	17 313	43 (0.2)	Ref.	—
Yes	3179	56 (1.8)	4.1 (2.5–6.7)	<.001
Age in d	—	—	1.0 (1.0–1.0)	.557
Premature birth				
No	13 785	66 (0.5)	Ref.	—
Yes	6707	33 (0.5)	0.3 (0.2–0.5)	<.001
Sex				
Male	12 713	56 (0.4)	Ref.	—
Female	7779	43 (0.6)	1.1 (0.7–1.6)	.788
Race				
White	16 276	87 (0.5)	Ref.	—
Black or African American	3380	7 (0.2)	0.3 (0.1–0.6)	.002
Other	837	5 (0.6)	0.9 (0.3–2.7)	.854
ASA class				
No or mild disturbance	6604	4 (0.1)	Ref.	—
Severe disturbance	8878	41 (0.5)	4.7 (1.6–13.9)	.005
Life-threatening or moribund	5010	54 (1.1)	5.1 (1.6–16.3)	.006
Hospital length of stay, d	—	—	1.0 (1.0–1.0)	.023
Sepsis				
No	19 321	80 (0.4)	Ref.	—
Yes	1171	19 (1.6)	2.0 (1.2–3.6)	.012
Preoperative ventilation				
No	15 246	39 (0.3)	Ref.	—
Yes	5246	60 (1.1)	1.6 (1.0–2.8)	.070
Disseminated cancer				
No	20 404	97 (0.5)	Ref.	—
Yes	88	2 (2.3)	3.1 (0.7–13.3)	.132
Central line				
No	20 371	95 (0.5)	Ref.	—
Yes	121	4 (3.3)	3.9 (1.3–11.2)	.012
Square root work-related RVU	—	—	1.0 (0.9–1.1)	.778

—, not applicable.

SUPPLEMENTAL TABLE 6 Association of Perioperative RBC Transfusion and Development of Postoperative VTE Within 30 d in Infants

Variable	No. Patients	30-d Postoperative VTE		
		No. (%)	aOR (95% CI)	<i>P</i>
Perioperative RBC transfusion				
No	72 721	43 (0.25)	Ref.	—
Yes	7023	56 (1.76)	2.4 (1.7–3.6)	<.001
Age in wk	—	—	1.0 (1.0–1.0)	.865
Sex				
Male	52 800	83 (0.2)	Ref.	—
Female	26 944	64 (0.2)	1.1 (0.8–1.5)	.727
Race				
White	63 136	102 (0.2)	Ref.	—
Black or African American	13 312	37 (0.3)	1.0 (0.7–1.6)	.844
Other	3297	8 (0.2)	1.2 (0.5–2.7)	.751
ASA class				
No disturbance	19 466	1 (0.0)	Ref.	—
Mild disturbance	31 443	15 (0.0)	7.8 (1.0–58.9)	.047
Severe disturbance	23 311	62 (0.3)	29.0 (4.0–211.6)	.001
Life-threatening or moribund	5524	69 (1.2)	78.5 (10.5–586.0)	<.001
Hospital length of stay, d	—	—	1.0 (1.0–1.0)	<.001
Sepsis				
No	77 788	119 (0.2)	Ref.	—
Yes	1956	28 (1.4)	2.8 (1.7–4.5)	<.001
Preoperative ventilation				
No	74 867	99 (0.1)	Ref.	—
Yes	4877	48 (1.0)	0.9 (0.6–1.5)	.776
Disseminated cancer				
No	79 002	138 (0.2)	Ref.	—
Yes	742	9 (1.2)	2.4 (1.2–5.1)	.017
Central line				
No	79 496	139 (0.2)	Ref.	—
Yes	248	8 (3.2)	4.4 (2.1–9.3)	<.001
Square root work-related RVU	—	—	1.2 (1.1–1.4)	<.001

—, not applicable.

SUPPLEMENTAL TABLE 7 Association of Perioperative RBC Transfusion and Development of Postoperative VTE Within 30 d in Children

Variable	No. Patients	30-d Postoperative VTE		
		No. (%)	aOR (95% CI)	P
Perioperative RBC transfusion				
No	362 152	252 (0.1)	Ref.	—
Yes	20 710	122 (0.6)	2.2 (1.7–2.9)	<.001
Age group				
Toddler, 1–2 y	36 749	41 (0.1)	Ref.	—
Early childhood, 2–5 y	87 115	65 (0.1)	0.8 (0.5–1.2)	.313
Middle childhood, 6–11 y	126 584	83 (0.1)	0.8 (0.6–1.2)	.366
Adolescent, 12–18 y	132 450	185 (0.1)	1.6 (1.1–2.2)	.014
Sex				
Male	208 422	203 (0.1)	Ref.	—
Female	174 440	171 (0.1)	1.0 (0.8–1.2)	.727
Race				
White	312 363	292 (0.1)	Ref.	—
Black or African American	53 310	73 (0.1)	1.1 (0.9–1.5)	.373
Other	17 189	10 (0.1)	0.7 (0.3–1.3)	.222
ASA class				
No disturbance	129 270	15 (0.0)	Ref.	—
Mild disturbance	168 921	84 (0.0)	3.6 (2.1–6.3)	<.001
Severe disturbance	78 996	197 (0.2)	13 (7.6–22.2)	<.001
Life-threatening or moribund	5675	78 (1.4)	25.9 (14.1–47.3)	<.001
Hospital length of stay, d	—	—	1.0 (1.0–1.0)	<.001
Sepsis				
No	345 133	279 (0.1)	Ref.	—
Yes	37 729	95 (2.5)	3.0 (2.3–3.9)	<.001
Preoperative ventilation				
No	377 534	302 (0.1)	Ref.	—
Yes	5328	72 (1.4)	2.6 (1.9–3.5)	<.001
Disseminated cancer				
No	371 508	319 (0.1)	Ref.	—
Yes	11 354	55 (0.5)	1.5 (1.1–2.0)	.011
Central line				
No	382 319	353 (0.1)	Ref.	—
Yes	543	21 (3.9)	10.4 (6.4–17.0)	<.001
Square root work-related RVU	—	—	1.2 (1.1–1.3)	<.001

—, not applicable.

SUPPLEMENTAL TABLE 8 Association of Perioperative RBC Transfusion and Development of Postoperative VTE Within 30 d in all Children Aged 0 to 18 y Among Those Who Received General Surgery

Exposure Variable	No. Patients	30-d Postoperative VTE		
		No. (%)	OR (95% CI)	aOR (95% CI) ^a
Neonates				
Perioperative RBC transfusion				
No	13 762	36 (0.3)	Ref.	Ref.
Yes	2857	48 (1.7)	6.5 (4.2–10.1)	3.7 (2.2–6.4)
Time of perioperative RBC transfusion				
None	13 762	36 (0.3)	Ref.	Ref.
Preoperative only	399	4 (1.0)	3.9 (1.4–10.9)	2.3 (0.8–7.1)
Intraoperative or postoperative only	1698	25 (1.5)	5.7 (3.4–9.5)	3.4 (1.9–6.2)
Preoperative and intraoperative	760	19 (2.5)	9.8 (5.6–17.1)	6.3 (3.0–13.0)
Infants				
Perioperative RBC transfusion				
No	31 597	53 (0.2)	Ref.	Ref.
Yes	3710	55 (1.5)	9.0 (6.1–13.1)	2.9 (1.9–4.5)
Time of perioperative RBC transfusion				
None	31 597	53 (0.2)	Ref.	Ref.
Preoperative only	820	7 (0.9)	5.1 (2.3–11.3)	2.0 (0.9–4.6)
Intraoperative or postoperative only	2311	35 (1.5)	9.2 (6.0–14.1)	3.1 (1.9–5.1)
Preoperative and intraoperative	579	13 (2.3)	13.7 (7.4–25.2)	3.1 (1.5–6.4)
Children				
Perioperative RBC transfusion				
No	131 464	130 (0.1)	Ref.	Ref.
Yes	3586	68 (1.9)	19.5 (14.5–26.2)	3.3 (2.3–4.8)
Time of perioperative RBC transfusion				
None	131 464	130 (0.1)	Ref.	Ref.
Preoperative only	1177	7 (0.6)	6.0 (2.8–13.0)	1.4 (0.6–3.1)
Intraoperative or postoperative only	2078	47 (2.3)	23.4 (16.7–32.7)	4.1 (2.7–6.1)
Preoperative and intraoperative	331	14 (4.2)	44.6 (25.4–78.3)	4.6 (2.4–8.9)

^a The multivariable models included adjustment for sex, race, age, ASA class, central line, preoperative sepsis status, preoperative ventilation status, disseminated cancer status, and the work-related RVU, hospital length of stay. Model for neonates also was adjusted for preterm birth status. RVUs were modeled continuously using a square root transformation.

SUPPLEMENTAL TABLE 9 Association of Perioperative RBC Transfusion and Development of Postoperative VTE in Children Age 1 to 18 by Surgical Specialties

Exposure Variable	No. Patients	30-d Postoperative VTE		
		No. (%)	OR (95% CI)	aOR (95% CI) ^a
Cardiothoracic				
Perioperative RBC transfusion				
No	412	2 (0.5)	— ^b	— ^b
Yes	23	0 (0.0)	—	—
General				
Perioperative RBC transfusion				
No	131 464	130 (0.1)	Ref.	Ref.
Yes	3586	68 (1.9)	19.5 (14.5–26.2)	3.3 (2.3–4.8)
Gynecologic				
Perioperative RBC transfusion				
No	1005	1 (0.1)	Ref.	— ^b
Yes	21	1 (4.8)	50.2 (3.0–831.2)	—
Neurosurgery				
Perioperative RBC transfusion				
No	33 252	53 (0.2)	Ref.	Ref.
Yes	1710	9 (0.5)	3.3 (1.6–6.7)	1.5 (0.6–3.3)
Orthopedic				
Perioperative RBC transfusion				
No	74 386	37 (0.0)	Ref.	Ref.
Yes	14 144	35 (0.2)	5.0 (3.1–7.9)	2.1 (1.1–4.0)
Otolaryngological				
Perioperative RBC transfusion				
No	54 544	22 (0.0)	Ref.	Ref.
Yes	241	6 (2.5)	63.3 (25.4–157.5)	4.4 (1.4–13.7)
Plastic				
Perioperative RBC transfusion				
No	30 122	0 (0.0)	— ^b	— ^b
Yes	772	2 (0.3)	—	—
Urologic				
Perioperative RBC transfusion				
No	36 967	7 (0.0)	Ref.	Ref.
Yes	213	1 (0.1)	24.9 (3.1–203.3)	0.7 (0.2–20.0)

—, not applicable.

^a The multivariable models included adjustment for sex, race, age, ASA class, central line, preoperative sepsis status, preoperative ventilation status, disseminated cancer status, and the work-related RVU, hospital length of stay. Model for neonates also was adjusted for preterm birth status. RVUs were modeled continuously using a square root transformation.

^b Model did not converge.

SUPPLEMENTAL TABLE 10 Association of Perioperative RBC Transfusion and Development of Postoperative VTE Within 30 d in Children Aged 0 to 18 y With Available Data on Preoperative Hematocrit, INR, and Platelet Levels

Exposure Variable	No. Patients	30-d Postoperative VTE		
		No. (%)	OR (95% CI)	aOR (95% CI) ^a
Neonates				
Perioperative RBC transfusion				
No	2420	12 (0.4)	Ref.	Ref.
Yes	1311	43 (3.3)	6.8 (3.6–13.0)	5.5 (2.6–11.5)
Infants				
Perioperative RBC transfusion				
No	6750	31 (0.4)	Ref.	Ref.
Yes	3006	33 (1.1)	2.4 (1.5–3.9)	1.4 (0.8–2.4)
Children				
Perioperative RBC transfusion				
No	33 979	106 (0.3)	Ref.	Ref.
Yes	11 384	71 (0.6)	2.0 (1.5–2.7)	1.6 (1.2–2.3)

^a The multivariable models included adjustment for sex, race, age, ASA class, central line, preoperative sepsis status, preoperative ventilation status, disseminated cancer status, and the work-related RVU, hospital length of stay. RVUs were modeled continuously using a square root transformation. These multivariable models also included additional adjustment for preoperative hematocrit levels (continuous), preoperative platelet levels using square root transformation, and preoperative INR of prothrombin time values. Values for preoperative hematocrit levels, preoperative platelet levels, and preoperative INR values were not imputed; therefore, these models represent a complete case analysis. Model for neonates also was adjusted for preterm birth status and includes 3731 complete cases. Model for infants includes 9756 complete cases. Model for children includes 45 363 complete cases.