

Supplemental Information

SUPPLEMENTAL TABLE 4 Demographic Characteristics of Children Ages <18 Years Hospitalized with SARS-CoV-2 Infection Included Versus Excluded from the Analysis: COVID-NET, March 2020 to May 2021

	Pediatric Hospitalizations Excluded From Analysis (<i>n</i> = 813)		Pediatric Hospitalizations Included in Analysis (<i>n</i> = 2293)	
	<i>n</i>	%	<i>n</i>	%
Reason for exclusion				
Incomplete chart abstraction	81	10.0	0	0.0
Currently pregnant on admission	127	15.9	0	0.0
Unknown outcome	15	0.5	0	0.0
Primary reason for admission not likely related to COVID-19	718	23.1	0	0.0
OB or labor and delivery	162	19.9	0	0.0
Inpatient surgery or procedure	118	14.5	0	0.0
Psychiatric admissions	270	33.2	0	0.0
Trauma	136	16.7	0	0.0
Other, missing or unknown	92	11.3	0	0.0
Demographic characteristics				
Age, median and IQR, y	14	9–16	7	1–14
Age group				
<6 mo	84	10.3	450	19.6
6–23 mo	33	4.1	295	12.9
2–4 y	52	6.4	249	10.9
5–11 y	97	11.9	470	20.5
12–17 y	547	67.3	829	36.2
Sex				
Male	332	40.8	1224	53.4
Female	481	59.2	1069	46.6
Race and ethnicity group				
Hispanic	278	34.2	773	33.7
NH White	242	29.8	525	22.9
NH Black	199	24.5	737	32.1
NH Asian or Pacific Islander	31	3.8	118	5.2
NH other ^a	63	7.8	140	6.1
Housing type				
Private residence ^b	699	86.0	2240	28.0
Congregate setting, other, or unknown ^c	114	14.0	53	2.3
Underlying medical conditions				
≥1 underlying medical conditions	299	36.8	1262	55.0
Obesity ^d	119	14.6	478	20.9
Chronic lung disease	87	10.7	468	20.4
Asthma	78	9.6	373	16.3
Neurologic disorder	70	8.6	348	15.2
Developmental delay	46	5.7	218	9.5
Cardiovascular disease	24	3.0	146	6.4
Congenital heart disease	14	1.7	94	4.1
Blood disorder	10	1.2	142	6.2
Sickle cell disease	6	0.7	102	4.5
Chronic metabolic disease	35	4.3	136	5.9
Diabetes mellitus (type I or II)	13	1.6	89	3.9
Immunocompromised condition	25	3.1	129	5.6
Feeding tube dependent	6	0.7	114	5.0
Premature ^e	19	2.3	100	4.4
Airway abnormality	3	0.4	58	2.5
Other	21	2.6	133	5.8
Renal disease	7	0.9	46	2.0
Liver disease	6	0.7	41	1.8

SUPPLEMENTAL TABLE 4 Continued

	Pediatric Hospitalizations Excluded From Analysis (<i>n</i> = 813)		Pediatric Hospitalizations Included in Analysis (<i>n</i> = 2293)	
	<i>n</i>	%	<i>n</i>	%
Rheumatologic, autoimmune, inflammatory condition	2	0.3	14	0.6
Discharge diagnosis of MIS-C	4	0.5	198	8.6
Outcomes				
ICU admission or invasive mechanical ventilation	170	20.9	691	30.1
Invasive mechanical ventilation	67	8.2	122	5.3
In-hospital deaths	10	1.2	12	0.5

χ^2 tests or Fisher's exact tests generated *P* values assessing the uniformity of the prevalence distributions by primary reason for admission. NH, non-Hispanic.

^a Includes NH American Indian or Alaska Native (*n* = 21; 1.1%); NH multiple races (*n* = 20; 1.0%); or unknown (*n* = 77; 3.9%).

^b Includes private residence or home with services.

^c Includes hospitalized since birth, group home or retirement, homeless shelter, psychiatric facility, facility, long-term acute-care hospital, corrections facility, other, and unknown.

^d Children aged 2 to 17 y were classified as having obesity if they had BMI (kg/m²) \geq 95th percentile for age and sex on the basis of CDC growth charts, ICD-10 codes for obesity in the electronic medical record, or obesity selected on the case report form.

^e Gestational age <37 wk at birth among children <2 y.

SUPPLEMENTAL TABLE 5 Underlying Medical Conditions Among Children <18 Years Hospitalized With SARS-CoV-2 Infection Identified Through the COVID-NET, March 2020 to January 2021

Underlying Medical Conditions	Population	Included Conditions
Airway abnormality	Children <18 y	Abnormality of airway (eg, tracheostomy and abnormalities of mouth or throat that affect ability to handle secretions: laryngomalacia, tracheomalacia, laryngotracheomalacia, subglottic stenosis, subglottic cyst, glottic web, subglottic hemangioma, vascular ring of trachea, congenital stridor, or vocal cord paralysis)
Blood disorders, hemoglobinopathy underlying conditions	Children <18 y	<ul style="list-style-type: none"> α thalassemia Aplastic anemia β thalassemia Coagulopathy Hemoglobin S-β thalassemia Leukopenia Myelodysplastic syndrome Neutropenia Pancytopenia Sickle cell disease Splenectomy or asplenia Thrombocytopenia
Cardiovascular disease	Children <18 y	<ul style="list-style-type: none"> Aortic, mitral, tricuspid, or pulmonic valve replacement Aortic stenosis Atrioventricular blocks Automated implantable devices, automatic implantable cardioverter-defibrillator, or pacemaker Bundle branch block (left bundle branch block or right bundle branch block) Cardiomyopathy Cerebral vascular accident, incident, or stroke, history of Congenital heart disease Coronary artery disease Deep vein thrombosis, history of Heart failure or congestive heart failure Myocardial infarction Mitral stenosis Pulmonary embolism Pulmonary hypertension, history of Pulmonary regurgitation Tricuspid regurgitation Ventricular fibrillation Ventricular tachycardia Other cardiovascular disease categorized on the basis of free-text review
Chronic lung disease	Children <18 y	<ul style="list-style-type: none"> Active tuberculosis Asthma Bronchiectasis Bronchiolitis obliterans Chronic respiratory failure Cystic fibrosis Emphysema or chronic obstructive pulmonary disease Interstitial lung disease Obstructive sleep apnea Oxygen dependent Pulmonary fibrosis Restrictive lung disease Chronic lung disease of prematurity or bronchopulmonary dysplasia

SUPPLEMENTAL TABLE 5 Continued

Underlying Medical Conditions	Population	Included Conditions
Chronic metabolic disease	Children <18 y	Other chronic lung disease categorized on the basis of free-text review Adrenal disorders Diabetes mellitus (type I or II) Hyper- or hypo-function of pituitary gland Inborn errors of metabolism Metabolic syndrome Parathyroid dysfunction Thyroid dysfunction Other chronic metabolic disease categorized on the basis of free-text review
Feeding tube dependent	Children <18 y	Feeding tube dependent
Gastrointestinal or liver disease	Children <18 y	Autoimmune hepatitis Chronic pancreatitis Cirrhosis or end stage liver disease Crohn disease Esophageal varices Hepatitis B, chronic Non-alcoholic fatty liver disease Ulcerative colitis
Immunocompromised condition	Children <18 y	Complement deficiency Immunoglobulin deficiency or immunodeficiency Immunosuppressive therapy (within the last 12 mo before admission) Leukemia ^a Lymphoma, Hodgkin's, or Non-Hodgkin's ^a Metastatic cancer ^a Solid organ malignancy ^a Steroid therapy (within 2 wk of admission) Transplant, hematopoietic stem cell (bone marrow transplant or peripheral stem cell transplant), history of Transplant, solid organ, history of Other immunocompromised condition categorized on the basis of free-text review
Neurologic disorder	Children <18 y	Cerebral palsy Cognitive dysfunction Developmental delay Down syndrome or Trisomy 21 Epilepsy, seizure, or seizure disorder Mitochondrial disorder Muscular dystrophy Neural tube defects or spina bifida Neuropathy Plegias, paralysis, or quadriplegia Scoliosis or kyphoscoliosis Traumatic brain injury, history of Other neurologic disorder categorized on the basis of free-text review
Obesity	Children 2–17 y	BMI (kg/m ²) ≥95th percentile for age and sex on the basis of CDC growth charts, ICD-10 codes for obesity in the electronic medial chart, or obesity selected on COVID-NET the case report form
Other underlying conditions	Children <18 y	Other free-text underlying medical conditions not categorized into a previous category after review by pediatrician
Prematurity	Children <2 y	Gestational age <37 wk at birth among children <2 y

SUPPLEMENTAL TABLE 5 Continued

Underlying Medical Conditions	Population	Included Conditions
Renal disease	Children <18 y	Chronic kidney disease or chronic renal insufficiency Dialysis End stage renal disease Glomerulonephritis Nephrotic syndrome
Rheumatologic, autoimmune, or inflammatory condition	Children <18 y	Juvenile idiopathic arthritis Kawasaki disease Systemic lupus erythematosus, lupus Vasculitis, other Other rheumatologic, autoimmune, or inflammatory disorders

^a Currently in treatment or diagnosed in previous 12 mo.

SUPPLEMENTAL TABLE 6 Demographic Characteristics Associated With Severe Disease Among Children Hospitalized With COVID-19 Who Did Not Have a Discharge Diagnosis of MIS-C

	Severe Disease (n = 567)		No Severe Disease (n = 1528)		Bivariate Models			Multivariable Model		
	n	%	n	%	RR	95% CI	P	aRR	95% CI	P
Age group										
<6 mo	86	15.2	361	23.6	0.6	0.5–0.8	.0004	0.8	0.6–1.1	.21
6–23 mo	70	12.4	213	13.9	0.8	0.6–1.1	.16	1.0	0.7–1.4	.84
2–4 y	63	11.1	150	9.8	0.9	0.8–1.1	.44	1.0	0.8–1.2	.89
5–11 y	105	18.5	272	17.8	0.9	0.8–1.0	.07	0.9	0.8–1.0	.03
12–17 y	243	42.9	532	34.8	Reference	—	—	Reference	—	—
Sex										
Male	313	55.2	788	51.6	1.1	0.9–1.4	.27	1.1	0.9–1.4	.35
Female	254	44.8	740	48.4	Reference	—	—	Reference	—	—
Race and ethnicity group										
Hispanic	175	30.9	538	35.2	1.0	0.7–1.4	.77	0.9	0.7–1.3	.75
NH Black	204	36.0	447	29.3	1.2	0.8–1.6	.37	1.0	0.7–1.5	.87
NH Asian or Pacific Islander	26	4.6	84	5.5	0.9	0.6–1.3	.66	1.0	0.7–1.3	.75
NH other ^a	37	6.5	95	6.2	1.2	0.9–1.5	.21	1.2	0.9–1.6	.15
NH White	125	22.1	364	23.8	Reference	—	—	Reference	—	—
Residential type ^b										
Congregate setting, other or unknown	21	3.7	31	2.0	1.5	1.1–2.3	.02	1.5	1.0–2.2	.03
Private residence	546	96.3	1497	98.0	Reference	—	—	Reference	—	—
≥1 underlying medical conditions ^c										
Yes	409	72.1	777	50.9	2.0	1.6–2.6	<.0001	1.9	1.5–2.6	<.0001
No	158	27.9	751	49.2	Reference	—	—	Reference	—	—

Multivariable generalized estimating equations modeling demographic characteristics and ≥1 underlying medical conditions associated with ICU admission or invasive mechanical ventilation among children ages <18 y hospitalized with SARS-CoV-2 infection who did not have a discharge diagnosis of MIS-C identified through the COVID-NET, March 2020 to May 2021. NH, non-Hispanic; —, not applicable.

^a Includes non-Hispanic American Indian or Alaska Native, non-Hispanic multiple races, or unknown.

^b Private residence includes home with services. Congregate setting includes hospitalized since birth, group home or retirement, homeless shelter, psychiatric facility, facility, long-term acute-care hospital, corrections facility, other, and unknown

^c Includes obesity (among ages 2 to 17 y); prematurity (among ages <2 y); chronic lung disease; airway abnormality; neurologic disorders; immunocompromised conditions; feeding tube dependence; cardiovascular disease; chronic metabolic disease; blood disorders; gastrointestinal/liver disease; renal disease; rheumatologic, autoimmune, or inflammatory conditions; or other conditions.

SUPPLEMENTAL TABLE 7 Underlying Medical Conditions Associated With Severe Disease Among Children Ages <18 Years Hospitalized With COVID-19 Who Did Not Have a Discharge Diagnosis of MIS-C

	Severe Disease		No Severe Disease		Bivariate Models				Multivariable Models	
	<i>n</i>	%	<i>n</i>	%	RR	95% CI	<i>P</i>	aRR	95% CI	<i>P</i>
Infants and children <2 y without MIS-C	156	21.4	574	78.6	—	—	—	—	—	—
Chronic lung disease	21	13.5	17	3.0	2.9	2.1–4.0	<.0001	2.2	1.1–4.3	.02
Neurologic disorder	27	17.3	22	3.8	3.0	2.3–3.9	<.0001	2.1	1.5–2.9	<.0001
Cardiovascular disease	22	14.1	34	5.9	2.0	1.5–2.7	<.0001	1.6	1.1–2.3	.007
Airway abnormality	12	7.7	12	2.1	2.5	1.4–4.3	.001	1.6	1.1–2.3	.02
Prematurity ^a	38	24.4	61	10.6	2.1	1.5–3.0	<.0001	1.6	1.3–2.1	<.0001
Feeding tube dependent	11	7.1	22	3.8	1.6	1.0–2.7	.04	0.4	0.2–0.8	.02
Other ^b	11	7.1	25	4.4	1.5	0.8–2.7	.19	1.1	0.6–2.0	.89
Children 2–17 y without MIS-C	411	30.1	954	69.9	—	—	—	—	—	—
Diabetes mellitus (type I or II)	52	12.7	35	3.6	2.2	1.9–2.6	<.0001	2.4	2.0–2.8	<.0001
Feeding tube dependent	49	11.9	30	3.1	2.3	2.0–2.7	<.0001	2.2	1.7–2.9	<.0001
Chronic lung disease ^d	32	7.8	38	4.0	1.7	1.3–2.2	.0001	1.2	0.9–1.6	.14
Obesity ^c	154	37.5	276	28.9	1.3	1.1–1.6	.002	1.3	1.1–1.5	.002
Developmental delay	80	19.5	103	10.8	1.6	1.5–1.8	<.0001	1.3	1.1–1.6	.004
Chronic metabolic disease ^d	12	2.9	28	2.9	1.0	0.6–1.7	.91	0.9	0.6–1.4	.61
Asthma	105	25.6	231	24.2	1.1	0.8–1.4	.66	1.1	0.8–1.4	.70
Airway abnormality	18	4.4	16	1.7	1.8	1.3–2.7	.002	1.0	0.7–1.5	.99
Immunocompromised condition	37	9.0	85	8.9	1.0	0.7–1.4	.98	1.3	0.9–1.9	.17
Cardiovascular disease	30	7.3	53	5.6	1.3	0.9–1.8	.19	1.1	0.8–1.5	.46
Neurologic disorder ^d	33	8.0	63	6.6	1.2	0.9–1.6	.28	1.1	0.8–1.4	.59
Blood disorder	24	5.8	95	10.0	0.6	0.4–0.7	<.0001	0.6	0.4–0.8	.002
Other ^e	14	3.4	76	8.0	0.5	0.3–0.7	<.0001	0.4	0.3–0.6	<.0001

Multivariable generalized estimating equations modeling underlying medical conditions associated with ICU admission or invasive mechanical ventilation among children ages <18 y hospitalized with COVID-19 who did not have a discharge diagnosis of MIS-C identified through the COVID-NET, March 2020 to May 2021. Estimates are adjusted for age group, sex, race and ethnicity group, and housing type. —, not applicable.

^a Born <37 wk gestational age.

^b Includes immunocompromised conditions, liver disease, chronic metabolic disease, blood disorders, renal disease, and other disease specified on the case report form.

^c Children ages 2 to 17 y were classified as having obesity if they had BMI (kg/m²) ≥95th percentile for age and sex based on CDC growth charts, ICD-10 codes for obesity in the electronic medical record, or obesity selected on the COVID-NET case report form.

^d Chronic lung disease excludes asthma, chronic metabolic disease excludes type 1 or 2 diabetes mellitus, and neurologic disorder excludes developmental delay.

^e Includes liver disease; renal disease; rheumatologic, autoimmune, and inflammatory conditions; and other conditions specified on the case report form.

SUPPLEMENTAL TABLE 8 Underlying Conditions Associated With Severe COVID-19 by Additional Age Groups

	Severe Disease		No Severe Disease		Bivariate Models			Multivariable Model		
	<i>n</i>	%	<i>n</i>	%	RR	95% CI	<i>P</i>	aRR	95% CI	<i>P</i>
<6 mo	88	19.6	362	80.4	—	—	—	—	—	—
Prematurity ^a	25	28.4	34	9.4	2.6	1.8–3.8	<.0001	2.4	1.7–3.5	<.0001
Cardiovascular disease	8	9.1	10	2.8	2.4	1.5–3.9	.0004	2.4	1.3–4.3	.005
Other ^b	10	11.4	22	6.1	1.7	1.2–2.3	.002	1.2	1.0–1.4	.03
6–23 mo	76	25.8	219	74.2	—	—	—	—	—	—
Chronic lung disease ^d	17	22.4	13	5.9	2.7	1.7–4.2	<.0001	2.4	1.3–4.2	.004
Neurologic disorders ^d	25	32.9	20	9.1	2.7	2.4–3.2	<.0001	2.3	1.8–2.9	<.0001
Abnormality of airway	9	11.8	8	3.7	2.2	1.2–4.2	.02	1.5	0.8–2.9	.22
Cardiovascular disease	15	19.7	24	11.0	1.6	1.4–2.0	<.0001	1.4	1.2–1.5	<.0001
Prematurity ^a	14	18.4	27	12.3	1.4	0.6–3.2	.41	1.0	0.5–1.8	.91
Feeding tube dependence	9	11.8	17	7.8	1.4	1.0–2.0	.04	0.5	0.1–1.6	.23
Other ^b	10	13.2	29	13.2	1.0	0.5–2.0	.08	0.9	0.4–2.0	.80
2–4 y	80	32.1	169	67.9	—	—	—	—	—	—
Feeding tube dependence	18	22.5	8	4.7	2.5	1.1–5.7	.02	2.1	1.1–3.9	.02
Obesity ^c	16	20.0	23	13.6	1.4	0.8–2.5	.19	1.4	0.9–2.0	.13
Neurologic disorder ^d	30	37.5	37	21.9	1.8	1.1–2.9	.02	1.4	1.0–1.9	.06
Chronic lung disease ^d	19	23.8	22	13.0	1.7	0.9–3.1	.08	1.3	0.9–1.7	.18
Chronic metabolic disease ^d	10	12.5	8	4.7	1.9	1.7–2.0	<.0001	1.3	1.1–1.5	.006
Cardiovascular disease	7	8.8	11	6.5	1.5	0.9–2.5	0.14	0.8	0.6–1.1	.13
Other ^b	13	16.3	33	19.5	0.7	0.7–0.8	<.0001	0.6	0.5–0.7	<.0001
5–11 y	166	35.3	304	64.7	—	—	—	—	—	—
Chronic metabolic disease ^d	10	6.0	14	4.6	1.3	1.0–1.8	.10	1.4	0.9–2.1	.10
Obesity ^c	52	31.3	71	23.4	1.3	1.2–1.5	<.0001	1.4	1.2–1.6	<.0001
Feeding tube dependence	10	6.0	17	6.0	1.1	0.8–1.5	.48	1.3	1.0–1.7	.06
Neurologic disorder ^d	37	22.3	64	21.1	1.1	0.9–1.3	.27	1.1	0.9–1.3	.41
Chronic lung disease ^d	42	25.3	95	31.3	0.8	0.7–0.9	.0001	0.8	0.7–1.0	.09
Cardiovascular disease	7	4.2	22	7.2	0.7	0.4–1.1	.13	0.8	0.4–1.3	.32
Immunocompromised condition	7	4.2	32	10.5	0.5	0.3–0.7	.0002	0.5	0.4–0.8	.003
Blood disorder	9	5.4	32	10.5	0.5	0.4–0.8	.001	0.6	0.3–1.0	.05
Other ^b	6	3.6	25	8.2	0.6	0.4–0.8	.0006	0.6	0.4–0.7	<.0001
12–17 y	281	33.9	548	66.1	—	—	—	—	—	—
Feeding tube dependence	21	7.5	7	1.3	2.4	2.1–2.8	<.0001	3.0	2.6–3.5	<.0001
Chronic metabolic disease ^d	45	16.0	41	7.5	1.7	1.5–1.9	<.0001	1.7	1.5–1.9	<.0001
Immunocompromised conditions	26	9.3	38	6.9	1.2	0.9–1.7	.18	1.4	1.0–2.1	.05
Obesity ^c	123	43.8	193	35.2	1.3	1.0–1.6	.03	1.3	1.0–1.6	.04
Cardiovascular disease	18	6.4	24	4.4	1.3	0.7–2.5	.40	1.2	0.6–2.4	.63
Chronic lung disease ^d	91	32.4	161	29.4	1.1	0.9–1.3	.20	1.0	0.9–1.2	.61
Neurologic disorder ^d	56	19.9	75	13.7	1.4	1.2–1.6	<.0001	1.0	0.9–1.0	.33
Blood disorder	11	3.9	50	9.1	0.4	0.4–0.6	<.0001	0.4	0.3–0.6	<.0001
Other ^b	21	7.5	53	9.7	0.8	0.6–1.2	.29	0.6	0.4–0.8	.001

Multivariable generalized estimating equations modeling underlying medical conditions associated with ICU admission or invasive mechanical ventilation by additional age groups among children ages <18 y hospitalized with COVID-19 identified through COVID-NET, March 2020 to May 2021. Estimates are adjusted for sex and race and ethnicity group. —, not applicable.

^a Born <37 wk gestational age

^b Includes liver disease; renal disease; and rheumatologic, autoimmune, and inflammatory conditions; and other conditions specified on the case report form. Additionally, among children aged <6 mo, chronic metabolic disease, immunocompromised conditions, chronic lung disease, neurologic disorders, airway abnormalities, feeding tube dependence, and blood disorders are included. Among children aged 6 to 23 mo, chronic metabolic disease, immunocompromised conditions, and blood disorders are included. Among children aged 2 to 4 y, blood disorders, immunocompromised conditions, and airway abnormalities are included. Among children aged 5 to 11 y and 12 to 17 y, airway abnormalities are included.

^c Children ages 2 to 17 y were classified as having obesity if they had BMI (kg/m²) ≥95th percentile for age and sex based on CDC growth charts, ICD-10 codes for obesity in the electronic medical record, or obesity selected on the COVID-NET case report form.

^d Chronic lung disease includes asthma, neurologic disorders include developmental delay, and chronic metabolic disease includes type I or II diabetes mellitus.

SUPPLEMENTAL TABLE 9 Underlying Conditions Associated With Severe Disease Among Children Ages 2–17 Years Hospitalized With COVID-19 by Race and Ethnicity Group

Underlying Medical Condition	Severe Disease		No Severe Disease		Bivariate Models			Multivariable Models ^a		
	<i>n</i>	%	<i>n</i>	%	RR	95% CI	<i>P</i>	aRR	95% CI	<i>P</i>
Hispanic children ages 2–17 y	162	32.0	344	68.0	—	—	—	—	—	—
Chronic metabolic disease ^b	19	11.7	19	5.5	1.7	1.2–2.2	.0014	1.6	1.1–2.5	.03
Neurologic disorder ^b	37	22.8	54	15.7	1.3	1.0–1.8	.04	1.3	1.0–1.8	.05
Obesity ^c	73	45.1	119	34.6	1.4	1.1–1.8	.01	1.4	1.0–1.8	.03
Chronic lung disease ^b	43	26.5	79	23.0	1.1	0.8–1.5	.71	1.0	0.8–1.3	.85
Cardiovascular disease	11	6.8	22	6.4	1.0	0.7–1.6	.90	0.9	0.7–1.2	.47
Immunocompromised condition	12	7.4	35	10.2	0.9	0.8–1.0	.02	0.9	0.7–1.0	.13
Other ^d	24	14.8	49	14.2	1.0	0.8–1.2	.90	1.0	0.8–1.2	.90
Non-Hispanic Black children ages 2–17 y	216	39.6	329	60.4	—	—	—	—	—	—
Feeding tube dependence	17	7.9	13	4.0	1.5	1.3–1.9	<.0001	1.5	1.0–2.3	.06
Obesity ^c	75	32.7	87	26.4	1.3	1.1–1.5	.003	1.2	1.0–1.4	.01
Cardiovascular disease	14	6.5	17	5.2	1.2	0.9–1.6	.34	1.1	1.1–1.1	<.0001
Neurologic disorder ^b	47	21.8	57	17.3	1.2	1.0–1.5	.12	1.0	0.6–1.7	.93
Chronic lung disease ^b	67	31.0	118	35.9	0.9	0.7–1.1	.23	0.9	0.7–1.1	.21
Immunocompromised condition	10	4.6	25	7.6	0.7	0.4–1.4	.31	0.9	0.5–1.5	.60
Chronic metabolic disease ^b	25	11.6	21	6.4	1.5	1.3–1.7	<.0001	0.8	0.5–1.2	.24
Blood disorder	17	7.9	69	21.0	0.4	0.3–0.5	<.0001	0.5	0.3–0.6	<.0001
Other ^d	19	8.8	31	9.4	0.9	0.6–1.4	.76	0.8	0.5–1.2	.24
Non-Hispanic White children ages 2–17 y	97	28.2	247	71.8	—	—	—	—	—	—
Chronic metabolic disease ^b	11	11.3	18	7.3	1.5	1.3–1.8	<.0001	1.6	1.1–2.3	.01
Obesity ^c	27	27.8	50	29.2	1.5	1.0–2.3	.06	1.5	1.0–2.2	.04
Feeding tube dependence	10	10.3	10	4.1	1.8	1.6–2.0	<.0001	2.1	1.3–3.3	.002
Chronic lung disease ^b	29	29.9	53	21.5	1.4	1.2–1.7	.0002	1.2	0.9–1.5	.23
Neurologic disorder ^b	23	23.7	46	18.6	1.3	1.0–1.7	.08	1.1	0.6–2.0	.79
Immunocompromised condition	9	9.3	20	8.1	1.2	0.7–2.0	.49	1.2	0.7–2.2	.52
Other ^d	10	10.3	37	15.0	0.8	0.6–1.0	.02	0.6	0.5–0.7	<.0001

Multivariable generalized estimating equations modeling underlying medical conditions associated with ICU admission or invasive mechanical ventilation by race and ethnicity group among children ages <18 y hospitalized with COVID-19 identified through the COVID-NET, March 2020–May 2021. Estimates are adjusted for age group and sex. —, not applicable.

^a Multivariable models are adjusted for age group, sex, race and/or Hispanic ethnicity group, and housing type.

^b Chronic lung disease includes asthma, neurologic disorders include developmental delay, and chronic metabolic disease includes type I or II diabetes mellitus.

^c Children 2 to 17 y were classified as having obesity if they had BMI (kg/m²) ≥95th percentile for age and sex based on CDC growth charts, ICD-10 codes for obesity in the electronic medical record, or obesity selected on the COVID-NET case report form.

^d Includes airway abnormalities, liver disease; renal disease; rheumatologic, autoimmune, and inflammatory conditions; and other conditions specified on the case report form. Feeding tube dependence and blood disorders are also included for Hispanic children and cardiovascular disease and blood disorders are also included for non-Hispanic White children.