

Supplemental Online Content

Leyenaar JK, Freyleue S, Arakelyan M, Goodman D, O'Malley AJ. Pediatric hospitalizations at rural and urban teaching and nonteaching hospitals in the US, 2009-2019. *JAMA Netw Open*. 2023;6(9):e2331807. doi:10.1001/jamanetworkopen.2023.31807

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

eTable 1. Birth and Nonbirth Pediatric Hospitalizations and Total Hospitalization Costs at Rural Hospitals, Urban Nonteaching and Teaching Hospitals, and Freestanding Children's Hospitals, 2009-2019, Weighted National Estimates.

	2009^a N,% of total (95%CI)	2012 N, % of total (95%CI)	2016 N, % of total (95%CI)	2019 N, % of total (95%CI)	Change, 2009-2019 N (95% CI)
Birth hospitalizations	3,856,059	3,736,337	3,770,047	3,567,900	-288,159 (-479,497; -96,821)
Rural hospitals	474,038 12.3 (11.6-13.0)	447,988, 12.0 (11.3-12.6)	372,614, 9.9 (9.3-10.4)	332,835, 9.3 (8.8-9.9)	-141,203 (-171,093; -111,313)
Urban non-teaching hospitals	1,723,546 44.7 (42.9-46.5)	1,429,665, 38.3 (36.7-39.8)	929,780, 24.7 (23.3-26.0)	617,957, 17.3 (16.2-18.5)	-1,105,589 (-1,202,886; -1,008,292)
Urban teaching hospitals	1,647,202 42.7 (40.8-44.6)	1,845,633, 49.4 (47.7-51.1)	2,447,520, 64.9 (63.4-66.4)	2,586,803, 72.5 (71.1-73.9)	+939,601 (779,872; 1,099,330)
Freestanding children's hospitals	11,273 0.3 (0.0-0.7)	13,051, 0.3 (0.0-0.8)	20,133, 0.5 (0.0-1.1)	30,305, 0.8 (0.2-1.5)	+19,032 (-8,106; 46,170)
Birth hospitalization costs, Millions of USD	11,600.6	13,401.5	15,643.0	16,699.7	Millions of USD +5,099.1 (3,673.1; 6,525.2)
Rural hospitals	636.8 5.5 (4.9-6.1)	703.8 5.3 (4.6-5.9)	637.6 4.1 (3.7-4.5)	650.6 3.9 (3.4-4.4)	+13.8 (-78.7; 106.4)
Urban-nonteaching hospitals	3,939.5 34.0 (31.9-36.0)	3,534.1 26.4 (24.7-28.1)	2,268.0 14.5 (13.0-16.0)	1,637.1 9.8 (8.6-11.1)	-2,302.5 (-2,716.3; -1,888.7)
Urban-Teaching hospitals	6,896.9 59.5 (56.8-62.1)	8,852.5 66.1 (63.6-68.5)	11,932.2 76.3 (73.7-78.8)	13,551.7 81.1 (78.5-83.8)	+6,654.8 (5,416.8; 7,892.9)
Freestanding children's hospitals	127.4 1.1 (0.0-2.4)	311.1 2.3 (0.3-4.3)	805.2 5.1 (1.7-8.6)	860.4 5.2 (2.2-8.1)	+733.0 (166.4; 1,299.5)
Non-birth hospitalizations	2,330,980	2,121,093	1,832,564	1,729,982	-600,998 (-811,907; -390,089)
Rural hospitals	229,263 9.8 (9.0-10.7)	156,428 7.4 (6.6-8.1)	80,705 4.4 (3.9-4.9)	62,729 3.6 (3.2-4.1)	-166,534 (-182,487; -150,581)
Urban non-teaching hospitals	581,320 24.9 (22.7-27.2)	381,642 18.0 (16.2-19.8)	177,222 9.7 (8.3-11.0)	92,118 5.3 (4.5-6.1)	-489,202 (-543,358; -435,046)
Urban teaching hospitals	969,631 41.6 (38.4-44.8)	1,017,888 48.0 (44.0-51.6)	1,001,976 54.7 (50.4-58.9)	1,002,652 58.0 (53.5-62.4)	+33,021 (-98,395; 164,437)
Freestanding children's hospitals	550,766 23.6 (20.0-27.3)	565,135 26.6 (22.4-30.9)	572,661 31.2 (26.5-36.0)	572,483 33.1 (28.4-37.8)	+21,717 (-133,283; 176,717)
Non-birth hospitalization costs, Millions of USD	23,739.0	26,948.3	28,897.6	30,782.6	Millions of USD +7,043.6 (1,939; 12,148.2)
Rural hospitals	865.1 3.6 (3.1-4.2)	747.9 2.8 (2.0-3.6)	397.8 1.4 (1.1-1.6)	364.8 1.2 (0.9-1.5)	-500.3 (-613.5; -387.0)
Urban non-teaching hospitals	3,049.5 12.8 (11.1-14.6)	2,097.9 7.8 (6.7-8.9)	1,020.8 3.5 (2.9-4.2)	614.5 2.0 (1.5-2.5)	-2,435.0 (-2,828.0; -2,042.0)
Urban teaching hospitals	9,424.7 39.7 (35.9-43.5)	10,878.1 40.4 (36.5-44.2)	11,700.0 40.5 (36.5-44.5)	12,461.6 40.5 (36.5-44.5)	+3,036.9 (819.2; 5,254.7)
Freestanding children's hospitals	10,399.7 43.8 (38.3-49.4)	13,224.4 49.1 (43.4-54.8)	15,779.1 54.6 (48.5-60.7)	17,341.6 56.3 (50.3-62.4)	+6,941.9 (2,362.5; 11,521.4)

^aHospital type (and all hospital characteristics) missing for 238,818 (3.7%) of hospitalizations in 2009

eTable 2. Payer and Community Median Income Distribution by Year and Hospital Type Among Birth Hospitalizations, Weighted National Estimates, 2009-2019^a

	2009 ^d		2012		2016		2019	
Rural Hospitals	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI
Primary Payer	472,941		445,664		371,700		332,138	
Medicaid	261,588	55.3(53.8-56.8)	242,757	54.5(52.9-56.1)	195,225	52.5(50.9-54.1)	174,727	52.6(51.1-54.2)
Medicare	1,759	0.4(0-0.7)	2,453	0.6(0.1-1.0)	1,518	0.4(0.2-0.7)	675	0.2(0.1-0.3)
Private insurance	166,703	35.2(33.9-36.6)	158,423	35.5(34.2-36.9)	139,223	37.5(36.0-39.0)	120,435	36.3(34.9-37.7)
Other	18,627	3.9(3.2-4.7)	20,581	4.6(3.7-5.6)	12,869	3.5(2.8-4.2)	9,085	2.7(2.2-3.3)
Self-pay	24,264	5.1(4.4-5.9)	21,450	4.8(4.1-5.5)	22,865	6.2(5.5-6.9)	27,216	8.2(7.2-9.2)
Median Income at ZIP code^{bc}	459,509		435,237		364,076		327,040	
Quartile 1	228,758	49.8(47.0-52.6)	224,524	51.6(48.9-54.3)	167,128	45.9(43.3-48.5)	168,490	51.5(48.8-54.3)
Quartile 2	166,334	36.2(34.0-38.4)	150,195	34.5(32.3-36.7)	137,993	37.9(35.7-40.1)	110,761	33.9(31.6-36.1)
Quartile 3	53,868	11.7(10.1-13.3)	48,758	11.2(9.7-12.7)	50,653	13.9(12.3-15.5)	40,424	12.4(10.7-14.0)
Quartile 4	10,549	2.3(1.5-3.1)	11,760	2.7(1.8-3.6)	8,302	2.3(1.4-3.1)	7,365	2.3(1.4-3.1)
Urban Non-Teaching Hospitals								
Primary Payer	1,722,020		1,426,877		928,817		617,617	
Medicaid	744,126	43.2(41.5-44.9)	634,556	44.5(42.8-46.1)	427,400	46.0(44.1-47.9)	266,085	43.1(40.9-45.3)
Medicare	1,899	0.1(0.1-0.2)	5,350	0.4(0.2-0.6)	3,586	0.4(0.2-0.5)	3,172	0.5(0.3-0.7)
Private insurance	862,057	50.1(48.3-51.8)	677,472	47.5(45.8-49.2)	419,143	45.1(43.2-47.1)	291,856	47.3(45.0-49.5)
Other	46,406	2.7(2.4-3.0)	52,447	3.7(3.2-4.2)	28,597	3.1(2.7-3.5)	18,669	3.0(2.6-3.5)
Self-pay	67,532	3.9(3.5-4.4)	57,052	4.0(3.4-4.6)	50,091	5.4(4.6-6.2)	37,835	6.1(5.3-7.0)
Median Income at ZIP code^b	1,698,580		1,411,176		920,216		611,558	
Quartile 1	361,424	21.3(19.6-23.0)	310,365	22.0(20.3-23.7)	233,071	25.3(23.4-27.3)	135,450	22.1(19.9-24.4)
Quartile 2	434,685	25.6(24.3-26.9)	340,183	24.1(22.8-25.4)	228,754	24.9(23.5-26.3)	158,856	26.0(24.1-27.9)
Quartile 3	477,750	28.1(26.9-29.4)	393,042	27.9(26.6-29.1)	246,665	26.8(25.4-28.2)	171,808	28.1(26.4-29.8)
Quartile 4	424,721	25.0(23.0-27.0)	367,586	26.0(23.9-28.2)	211,726	23.0(20.7-25.3)	145,444	23.8(20.9-26.7)
Urban Teaching Hospitals								
Primary Payer	1,644,144		1,840,555		2,445,003		2,583,107	
Medicaid	730,221	44.4(41.9-46.9)	844,499	45.9(43.8-47.9)	1,084,288	44.3(42.7-46.0)	1,130,471	43.8(42.3-45.2)
Medicare	1,647	0.1(0.0-0.2)	5,467	0.3(0.2-0.4)	8,644	0.4(0.2-0.5)	5,324	0.2(0.1-0.3)
Private insurance	801,147	48.7(46.1-51.4)	878,556	47.7(45.6-49.8)	1,186,694	48.5(46.9-50.2)	1,253,935	48.5(47-50.1)
Other	36,688	2.2(1.8-2.7)	45,862	2.5(2.1-2.8)	65,743	2.7(2.3-3.0)	66,780	2.6(2.3-2.9)
Self-pay	74,441	4.5(3.8-5.3)	66,171	3.6(3.1-4.1)	99,634	4.1(3.7-4.5)	126,597	4.9(4.4-5.4)

	2009		2012		2016		2019	
	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI
Median Income at ZIP code ^b	1,611,398		1,811,661		2,426,960		2,568,208	
Quartile 1	451,010	28(25.8-30.2)	505,675	27.9(26.0-29.8)	657,658	27.1(25.6-28.6)	677,060	26.4(24.9-27.8)
Quartile 2	386,508	24(22.7-25.3)	410,097	22.6(21.5-23.8)	544,524	22.4(21.4-23.4)	588,211	22.9(21.9-23.9)
Quartile 3	402,554	25(23.7-26.2)	459,873	25.4(24.3-26.5)	626,354	25.8(24.9-26.7)	675,376	26.3(25.4-27.2)
Quartile 4	371,326	23(20.8-25.3)	436,016	24.1(22.0-26.1)	598,424	24.7(22.9-26.4)	627,561	24.4(22.8-26.1)
Freestanding Children's Hospital								
Primary Payer	11,273		13,051		20,134		30,305	
Medicaid/Medicare	5,346	47.4(45.3-49.5)	6,129	47.0(41.1-52.9)	9,707	48.2(33.7-62.7)	13,962	46.1(39.6-52.5)
Private Insurance	5,472	48.5(43.1-54.0)	6,227	47.7(40.9-54.5)	9,056	45.0(35.4-54.6)	14,299	47.2(41.0-53.3)
Other	325	2.9(0.1-5.7)	414	3.2(2.5-3.9)	1,072	5.3(0.1-10.5)	1,052	3.5(1.2-5.7)
Self-pay	130	1.2(0.0-2.4)	281	2.2(0.3-4.0)	299	1.5(0.2-2.8)	992	3.3(1.5-5.0)
Median Income at ZIP code ^b	11,194		12,915		20,011		30,083	
Quartile 1	2,426	21.7(0.0-46.4)	2,038	15.8(0.0-32.6)	3,455	17.3(7.1-27.4)	5,559	18.5(7.2-29.8)
Quartile 2	1,463	13.1(0.0-27.0)	2,731	21.1(0.0-42.3)	5,560	27.8(6.5-49.1)	6,069	20.2(7.3-33.1)
Quartile 3	2,148	19.2(17.7-20.7)	1,951	15.1(12.1-18.1)	3,678	18.4(13.1-23.7)	7,830	26.0(17.8-34.3)
Quartile 4	5,157	46.1(6.2-85.9)	6,195	48.0(7.2-88.7)	7,318	36.6(5.8-67.4)	10,625	35.3(16.5-54.2)

^a Bolded numbers show weighted national estimates of non-missing data; variables with $\geq 3.0\%$ missing data are also indicated with footnotes;

^b Quartile ranges for median household income at home ZIP Code vary annually (e.g. Quartile 1 encompasses median household incomes of <\$40,000 in 2009 and <\$48,000 in 2019.) Details available in the HCUP data dictionaries.

^c n, % of hospitalizations with missing values in 2019 - 14,529 (3.0%)

^d Hospital type missing for 238,818 (3.7%) of hospitalizations in 2009

eTable 3. Payer and Community Median Income Distribution by Year and Hospital Type Among Nonbirth Pediatric Hospitalizations, Weighted National Estimates, 2009-2019^a

	2009 ^d		2012		2016		2019	
	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI
Rural Hospitals								
Primary Payer	228,576		155,380		80,252		62,488	
Medicaid	133,437	58.4(56.9-59.9)	91,660	59.0(57.3-60.7)	47,766	59.5(57.4-61.6)	38,517	61.6(59.9-63.3)
Medicare	1,221	0.5(0.0-1.2)	967	0.6(0.2-1.0)	408	0.5(0.2-0.9)	233	0.4(0.1-0.6)
Private insurance	78,140	34.2(32.8-35.6)	52,032	33.5(31.9-35.1)	26,960	33.6(31.4-35.8)	19,684	31.5(29.8-33.2)
Other	8,147	3.6(3.1-4.1)	6,009	3.9(3.1-4.7)	2,613	3.3(2.5-4.0)	1,713	2.7(2.0-3.5)
Self-pay	7,631	3.3(3.1-3.6)	4,712	3.0(2.8-3.3)	2,505	3.1(2.8-3.4)	2,341	3.7(3.4-4.1)
Median Income at ZIP code^{bc}	221,172		151,517		78,490		61,211	
Quartile 1	130,793	59.1(56.3-62.0)	91,451	60.4(57.4-63.3)	40,639	51.8(48.3-55.3)	32,382	52.9(48.8-57.0)
Quartile 2	67,555	30.5(28.4-32.7)	44,598	29.4(27.0-31.8)	26,194	33.4(30.6-36.2)	19,812	32.4(29.3-35.4)
Quartile 3	18,534	8.4(7.1-9.7)	12,693	8.4(7.1-9.7)	9,747	12.4(10.6-14.2)	7,458	12.2(10.1-14.2)
Quartile 4	4,290	1.9(1.3-2.6)	2,775	1.8(1.3-2.3)	1,910	2.4(1.6-3.2)	1,559	2.5(1.6-3.5)
Urban Non-Teaching Hospitals								
Primary Payer	580,624		380,822		177,135		92,062	
Medicaid	291,733	50.2(48.4-52.1)	202,491	53.2(51.3-55.0)	101,111	57.1(54.5-59.7)	52,011	56.5(53.5-59.5)
Medicare	845	0.1(0.1-0.2)	896	0.2(0.1-0.4)	634	0.4(0.1-0.6)	568	0.6(0.2-1.0)
Private insurance	246,417	42.4(40.6-44.3)	149,234	39.2(37.2-41.2)	64,298	36.3(33.4-39.2)	32,556	35.4(32.6-38.1)
Other	21,895	3.8(3.3-4.2)	17,330	4.6(3.9-5.2)	5,990	3.4(2.7-4.1)	3,346	3.6(3.0-4.2)
Self-pay	19,734	3.4(3.1-3.7)	10,871	2.9(2.6-3.1)	5,102	2.9(2.5-3.2)	3,581	3.9(3.2-4.6)
Median Income at ZIP code^b	570,325		375,728		174,933		91,047	
Quartile 1	159,787	28.0(25.3-30.7)	112,569	30.0(26.8-33.1)	58,468	33.4(29.5-37.4)	27,684	30.4(26.2-34.6)
Quartile 2	153,614	26.9(25.5-28.4)	96,461	25.7(24.0-27.3)	44,530	25.5(23.5-27.4)	24,903	27.4(24.7-30.0)
Quartile 3	143,315	25.1(23.5-26.7)	89,690	23.9(22.3-25.4)	40,904	23.4(21.4-25.3)	22,460	24.7(22.3-27.0)
Quartile 4	113,609	19.9(17.8-22.0)	77,008	20.5(18.0-23.0)	31,031	17.7(15.0-20.5)	16,000	17.6(13.9-21.3)
Urban Teaching Hospitals								
Primary Payer	968,324		1,015,210		1,001,060		1,001,448	
Medicaid	474,462	49.0(47.2-50.8)	538,405	53.0(51.3-54.7)	554,190	55.4(53.9-56.8)	548,851	54.8(53.2-56.4)
Medicare	2,878	0.3(0.2-0.4)	4,256	0.4(0.2-0.6)	3,992	0.4(0.2-0.6)	2,807	0.3(0.2-0.4)
Private insurance	418,095	43.2(41.2-45.1)	402,345	39.6(37.8-41.5)	381,247	38.1(36.6-39.5)	384,579	38.4(36.8-40.0)
Other	35,420	3.7(3.1-4.2)	44,385	4.4(3.4-5.3)	38,126	3.8(3.2-4.4)	35,924	3.6(3.1-4.1)
Self-pay	37,469	3.9(3.2-4.6)	25,819	2.5(2.3-2.8)	23,505	2.3(2.2-2.5)	29,287	2.9(2.7-3.2)

	2009		2012		2016		2019	
	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI	N	%, 95% CI
Median Income at ZIP code ^b	940,963		990,372		989,088		991,987	
Quartile 1	296,826	31.5(29.0-34.0)	313,717	31.7(29.5-33.9)	323,690	32.7(30.6-34.8)	321,206	32.4(30.2-34.6)
Quartile 2	236,832	25.2(23.8-26.5)	243,771	24.6(23.3-25.9)	240,014	24.3(23.1-25.4)	246,543	24.9(23.6-26.1)
Quartile 3	214,489	22.8(21.6-24.0)	232,093	23.4(22.4-24.5)	232,217	23.5(22.5-24.5)	237,278	23.9(22.9-24.9)
Quartile 4	192,816	20.5(18.2-22.8)	200,791	20.3(18.2-22.4)	193,167	19.5(17.5-21.5)	186,960	18.8(16.9-20.8)
Freestanding Children's Hospital								
Primary Payer	549,917		564,916		571,131		571,421	
Medicare/Medicaid	265,747	48.3(44.0-52.6)	288,612	51.1(47.2-55.0)	297,742	52.1(47.8-56.5)	308,675	54.0(50.3-57.7)
Private insurance	241,883	44.0(39.8-48.2)	228,876	40.5(37.2-43.9)	232,275	40.7(36.9-44.4)	221,761	38.8(35.9-41.7)
Other	28,478	5.2(3.0-7.4)	30,031	5.3(3.0-7.6)	26,284	4.6(2.3-6.9)	24,831	4.3(2.1-6.5)
Self-pay	13,809	2.5(1.7-3.4)	17,397	3.1(1.8-4.3)	14,830	2.6(1.9-3.3)	16,154	2.8(2.2-3.5)
Median Income at ZIP code ^b	542,291		556,698		563,243		564,507	
Quartile 1	159,109	29.3(24.6-34.1)	167,037	30.0(25.4-34.6)	161,618	28.7(24.4-33.0)	159,259	28.2(23.9-32.5)
Quartile 2	128,552	23.7(21.5-26.0)	127,719	22.9(20.9-25.0)	132,249	23.5(21.1-25.9)	129,419	22.9(20.6-25.2)
Quartile 3	133,747	24.7(22.0-27.3)	137,334	24.7(22.2-27.2)	138,767	24.6(22.6-26.6)	144,676	25.6(23.4-27.9)
Quartile 4	120,883	22.3(18.1-26.4)	124,608	22.4(18.5-26.3)	130,609	23.2(19.1-27.3)	131,153	23.2(19.3-27.1)

^a Bolded numbers show weighted national estimates of non-missing data; variables with $\geq 3.0\%$ missing data are also indicated with footnotes

^b Quartile ranges for median household income at home ZIP Code vary annually (e.g. Quartile 1 encompasses median household incomes of $< \$40,000$ in 2009 and $< \$48,000$ in 2019.) Details available in the HCUP data dictionaries.

^c N, % of hospitalizations with missing values: 2009: 8,091 (3.5%) 2012: 4,911 (3.1%)

^d Hospital type missing for 238,818 (3.7%) of hospitalizations in 2009

eTable 4. Age Distribution by Year and Hospital Type Among Nonbirth Pediatric Hospitalizations, Weighted National Estimates, 2009-2019.

	2009 ^a		2012		2016		2019	
	N	%	N	%	N	%	N	%
Rural hospitals	228,714		156,167		80,705		62,729	
Infant (up to 1 yr)	55,673	24.3 (23.7-25.0)	39,280	25.2 (24.3-26.0)	22,995	28.5 (27.0-30.0)	19,288	30.7 (28.6-32.9)
Early Childhood (1-4 yrs)	62,842	27.5 (26.7-28.2)	39,115	25.0 (24.2-25.9)	17,070	21.2 (20.0-22.3)	12,193	19.4 (18.2-20.7)
Middle Childhood (5-10 yrs)	35,828	15.7 (15.3-16.0)	24,374	15.6 (15.1-16.1)	10,949	13.6 (13.0-14.2)	7,537	12.0 (11.3-12.7)
Early Adolescence (11-14 yrs)	23,889	10.4 (10.0-10.9)	17,747	11.4 (10.7-12.0)	9,146	11.3 (10.3-12.4)	7,741	12.3 (10.9-13.8)
Later Adolescence (15-17 yrs)	50,483	22.1 (21.2-23.0)	35,651	22.8 (21.8-23.8)	20,545	25.5 (24.0-26.9)	15,969	25.5 (23.7-27.3)
Urban non-teaching hospitals	572,723		378,216		177,222		92,118	
Infant (up to 1 yr)	153,757	26.8 (24.3-29.4)	96,529	25.5 (24.5-26.5)	47,350	26.7 (25.1-28.4)	27,572	29.9 (27.5-32.4)
Early Childhood (1-4 yrs)	123,457	21.6 (20.4-22.7)	75,460	20.0 (19.1-20.8)	29,791	16.8 (15.4-18.2)	14,933	16.2 (14.5-17.9)
Middle Childhood (5-10 yrs)	82,516	14.4 (13.7-15.1)	55,006	14.5 (14.0-15.1)	24,395	13.8 (12.8-14.8)	10,827	11.8 (10.7-12.8)
Early Adolescence (11-14 yrs)	64,807	11.3 (10.7-12.0)	49,949	13.2 (12.4-14.0)	25,478	14.4 (13.0-15.8)	13,464	14.6 (12.7-16.6)
Later Adolescence (15-17 yrs)	148,187	25.9 (24.3-27.5)	101,272	26.8 (25.4-28.1)	50,208	28.3 (26.2-30.5)	25,322	27.5 (25.1-29.9)
Urban teaching hospitals	960,824		1,013,348		1,001,976		1,002,652	
Infant (up to 1 yr)	230,827	24.0 (23.3-24.7)	244,279	24.1 (23.5-24.7)	256,193	25.6 (24.6-26.5)	256,777	25.6 (24.8-26.4)
Early Childhood (1-4 yrs)	213,427	22.2 (21.6-22.8)	227,148	22.4 (21.8-23.0)	205,596	20.5 (19.9-21.2)	207,159	20.7 (19.9-21.4)
Middle Childhood (5-10 yrs)	167,084	17.4 (17.0-17.8)	178,958	17.7 (17.3-18.1)	172,318	17.2 (16.7-17.7)	161,760	16.1 (15.7-16.6)
Early Adolescence (11-14 yrs)	133,960	13.9 (13.5-14.3)	150,992	14.9 (14.5-15.3)	152,511	15.2 (14.7-15.7)	164,959	16.5 (15.9-17.0)
Later Adolescence (15-17 yrs)	215,526	22.4 (21.4-23.5)	211,971	20.9 (20.0-21.8)	215,358	21.5 (20.7-22.3)	211,997	21.1 (20.3-22.0)
Freestanding children's hospitals	547,871		564,376		572,661		572,483	
Infant (up to 1 yr)	153,545	28.0 (26.6-29.4)	152,509	27.0 (25.5-28.6)	154,449	27.0 (25.1-28.8)	153,059	26.7 (25.1-28.4)
Early Childhood (1-4 yrs)	139,604	25.5 (24.8-26.2)	139,923	24.8 (24.1-25.5)	134,491	23.5 (22.7-24.3)	137,729	24.1 (23.3-24.8)
Middle Childhood (5-10 yrs)	110,327	20.1 (19.6-20.7)	115,845	20.5 (19.9-21.1)	116,966	20.4 (19.7-21.2)	108,995	19.0 (18.4-19.7)
Early Adolescence (11-14 yrs)	81,311	14.8 (14.2-15.5)	87,365	15.5 (14.7-16.2)	90,729	15.8 (15.1-16.6)	93,789	16.4 (15.7-17.1)
Later Adolescence (15-17 yrs)	63,085	11.5 (10.7-12.3)	68,734	12.2 (11.4-12.9)	76,026	13.3 (12.5-14.1)	78,911	13.8 (13.1-14.5)

^a Hospital type missing for 238,818 (3.7%) of hospitalizations in 2009

eTable 5. Complicated Birth Hospitalizations and Nonbirth Hospitalizations With Complex Chronic Diseases, Mental Health, and Disability Diagnoses, Weighted National Estimates, 2009-2019

	2009^a Birth hospitalizations=3,856,059 Non-births=2,330,981	2012 Birth hospitalizations=3,736,338 Non-births=2,121,092	2016 Birth hospitalizations=3,770,047 Non-births=1,832,565	2019 Birth hospitalizations=3,567,900 Non-births=1,729,982	Relative % Change, 2009-2019
Complicated births,^b n, % (95%CI)	1,133,458 29.4% (28.8-29.9%)	1,115,917 29.9% (29.3-30.4%)	1,404,581 37.3% (36.6-37.9%)	1,497,243 42.0% (41.3-42.6%)	+42.8% (39.1; 46.5%)
Rural hospitals	119,132 25.1% (24.3-26.0%)	114,183 25.5% (24.7-26.3%)	116,267 31.2% (30.1-32.3%)	116,893 35.1% (34.0-36.2%)	+39.7% (32.7; 46.8%)
Urban non-teaching hospitals	473,013 27.4% (26.8-28.1%)	383,620 26.8% (26.2-27.5%)	306,781 33.0% (32.1-33.9%)	231,697 37.5% (36.4-38.6%)	+36.6% (30.6; 42.7%)
Urban teaching hospitals	536,676 32.6% (31.6-33.6%)	612,060 33.2% (32.3-34.1%)	969,733 39.6% (38.8-40.5%)	1,131,662 43.7% (42.9-44.6%)	+34.3% (29.6; 39%)
Freestanding children's hospitals	4,636 41.1% (18.9-63.4%)	6,055 46.4% (23.0-69.8%)	11,801 58.6% (44.3-72.9%)	16,992 56.1% (51.9-60.2%)	+36.3% (-19.4; 92.1%)
Complex Chronic Disease Diagnosis,^c n, % (95%CI)	483,516 20.7% (19.6-21.9%)	519,672 24.5% (23.3-25.7%)	519,567 28.4% (27.0-29.7%)	522,168 30.2% (28.8-31.5%)	+45.5% (34.6; 56.4%)
Rural hospitals	16,306 7.1% (6.0-8.2%)	12,832 8.2% (6.8-9.7%)	6,684 8.3% (7.2-9.4%)	6,258 10.0% (8.1-11.9%)	+40.3% (-0.5; 81%)
Urban non-teaching hospitals	54,507 9.4% (8.3-10.5%)	39,062 10.2% (9.2-11.3%)	19,847 11.2% (9.8-12.6%)	9,910 10.8% (9.3-12.2%)	+14.7% (-6.6; 36.1%)
Urban teaching hospitals	224,413 23.1% (21.5-24.8%)	258,887, 25.4%(24.0- 26.9%)	265,044 26.5% (25.1-27.8%)	272,922 27.2% (25.8-28.7%)	+17.6% (7.4; 27.8%)
Freestanding children's hospitals	188,290 34.2% (32.1-36.3%)	208,892 37.0% (34.8-39.2%)	227,992 39.8% (37.5-42.1%)	233,078 40.7% (38.4-43.0%)	+19.1% (9.1; 29.1%)
Mental Health Diagnosis,^c n, % (95%CI)	325,975 14.0% (13.2-14.8%)	376,335 17.7% (16.8-18.7%)	399,902 21.8% (20.7-22.9%)	430,657 24.9% (23.7-26.1%)	+78.0% (61.6; 94.4%)
Rural hospitals	21,270 9.3% (8.1-10.4%)	18,406 11.8% (10.0-13.5%)	13,181 16.3% (13.4-19.3%)	12,632 20.1% (16.3-23.9%)	+117.1% (27.5; 206.6%)
Urban non-teaching hospitals	75,325 13.0% (11.2-14.7%)	68,481 17.9% (15.4-20.5%)	41,739 23.6% (19.2-27.9%)	23,441 25.4% (20.0-30.9%)	+96.4% (13.2; 179.6%)
Urban teaching hospitals	164,823 17.0% (15.7-18.3%)	201,711 19.8% (18.5-21.1%)	232,216 23.2% (21.7-24.7%)	268,763 26.8% (25.1-28.5%)	+57.7% (40.3; 75.1%)
Freestanding children's hospitals	64,558 11.7% (10.1-13.4%)	87,738 15.5% (13.7-17.4%)	112,767 19.7% (17.7-21.7%)	125,820 22.0% (20.1-23.9%)	+87.5% (53.9; 121.1%)
Disability Diagnosis,^c n, % (95%CI)	249,089 10.7% (10.1-11.3%)	272,564 12.9% (12.2-13.5%)	308,908 16.9% (16.1-17.6%)	329,284 19.0% (18.2-19.9%)	+78.1% (63.1; 93.2%)
Rural hospitals	8,010 3.5%(2.9-4.1%)	6,392 4.1% (3.3-4.8%)	4,271 5.3% (4.5-6.1%)	4,128 6.6% (5.2-8.0%)	+88.3% (12.7; 164%)
Urban non-teaching hospitals	28,386 4.9% (4.4-5.4%)	21,586 5.7% (5.1-6.2%)	12,892 7.3% (6.4-8.1%)	6,653 7.2% (6.4-8.0%)	+47.9% (21.1; 74.7%)
Urban teaching hospitals	113,885 11.7% (10.9-12.6%)	133,733 13.1% (12.3-13.9%)	155,646 15.5% (14.7-16.4%)	172,820 17.2% (16.3-18.2%)	+46.8% (33.1; 60.4%)
Freestanding children's hospitals	98,808 17.9% (16.6-19.3%)	110,852 19.6% (18.3-20.9%)	136,099 23.8% (22.4-25.1%)	145,684 25.4% (24.1-26.8%)	+41.8% (28.6; 55.1%)

^a Hospital type missing for 238,818 (3.7%) of hospitalizations in 2009, ^b denominator reflects all birth hospitalizations, ^c denominator reflects all non-birth hospitalizations