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Types of Rural and Urban Hospitals and Counties Where They Are Located

George Pink, PhD; H. Ann Howard, BS

INTRODUCTION

More Americans are now aware of the financial challenges faced by rural hospitals. Media coverage of the 138 rural hospital closures between January 2010 and June 2022 (defined as hospitals that ceased providing inpatient services) has highlighted the health care access and economic challenges facing rural America.² Recognizing that many rural hospitals are the only health care facility in their communities and that their survival is vital to ensure access to health care, Federal policymakers in the 1980s and 1990s created five special payment designations under Medicare: Critical Access Hospital (CAHs), Medicare Dependent Hospitals (MDHs), Sole Community Hospitals (SCHs), Essential Access Community Hospitals (EACHs), and Rural Referral Centers (RRCs), all of which are defined in the Appendix. CAHs,³ MDHs, and SCHs are required to be in a rural area, but RRCs can be in either a rural or an urban area. In addition, there are urban hospitals that qualify for a special payment designation under current statutory authority for reclassification as a rural hospital.⁴

The purpose of this brief is to provide a snapshot of the types of rural and urban hospitals and the counties where they are located.

KEY FINDINGS

As of December 2020,¹ there are 4,306 acute hospitals in the U.S.—1,334 Critical Access Hospitals (CAHs), 11 cancer hospitals, 1,924 Prospective Payment System hospitals (PPS-only), and 1,037 PPS hospitals with special payment designations. 2,176 hospitals are in rural locations and 2,130 are in urban locations.

- There are CAHs, PPS-only hospitals, and PPS hospitals with special payment designations in both urban and rural locations.
- Hospitals in rural locations are primarily CAHs and hospitals in urban locations are primarily PPS-only hospitals.
- Counties with < 50K population are primarily served by CAHs and counties with > 50K population by PPS-only hospitals.
- The acute average daily censes (ADCs) in hospitals in counties with < 50K population are much lower than the acute ADCs in hospitals in counties with > 50K population.

METHOD

All study data are from files produced by the Centers for Medicare & Medicaid Services (CMS). Hospital type was obtained from the 2020 Provider Specific File,⁵ and inpatient acute care bed days were obtained from the Healthcare Cost Report Information System (HCRIS 8-30-21) file.⁶ We defined hospitals as rural using the Federal Office of Rural Health Policy definition effective on October 1, 2021. FORHP defines a rural area as: "All non-metro counties; all metro census tracts with RUCA codes 4-10; large area Metro census tracts of at least 400 sq. miles in area with population density of 35 or less per sq. mile with RUCA codes 2-3," and; all outlying metro counties without an urbanized area.⁷ County population size was obtained from the U.S Census Bureau.⁸

If a hospital believes it competes for labor in a different area than its location, it may request geographic reclassification through the Medicare Geographic Classification Review Board (MGCRB).⁹ CMS allows hospitals that are treated as located in a rural area under section 1886(d)(8)(E) of the Social Security Act¹⁰ to reclassify through the MGCRB using the hospital's rural reclassified area instead of its geographic area. The Fiscal Year 2022 Hospital Inpatient PPS Impact file¹¹ lists 532 Sec 401 reclassified hospitals (27 PPS-only hospitals, 31 MDHs, 9 MDH/RRCs, 44 SCHs, 35 SCH/RRCs, and 386 RRCs).

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Acute average daily census (ADC) was calculated as:

Numerator	Inpatient acute care bed days	HCRIS Worksheet S-3, col. 8, line 14-5-6-13
Denominator	Days in reporting period	Days in reporting period

Types of Rural and Urban Acute Hospitals

Figure 1 shows the number of CAHs, cancer hospitals, PPS-only hospitals, and PPS hospitals with special payment designations by rural and urban location. The figure shows that hospitals in rural locations are primarily CAHs followed by PPS hospitals with special payment designations and PPS-only hospitals. Hospitals in urban locations are primarily PPS-only hospitals followed by PPS hospitals with special payment designations and PPS-only hospitals. Hospitals in urban locations are primarily PPS-only hospitals followed by PPS hospitals with special payment designations, and a small number of CAHs and cancer hospitals. Figure 1 also shows that most CAHs are in rural locations, all cancer hospitals are in urban locations, most PPS-only hospitals are in urban locations, and most PPS hospitals with special payment designations are in rural locations.

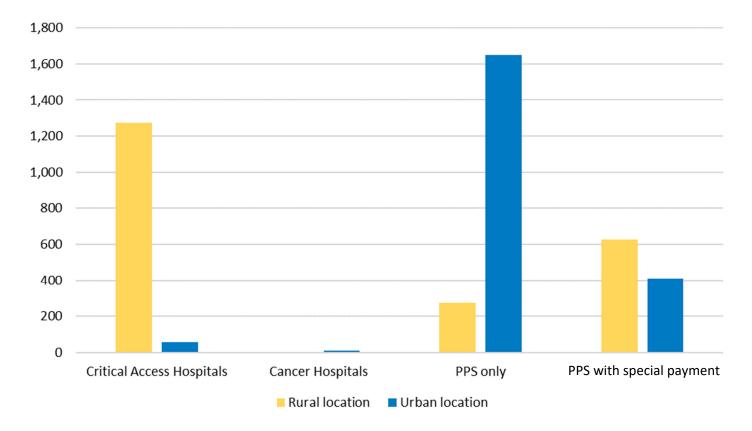


Figure 1. Number of CAHs, Cancer Hospitals, PPS-only Hospitals, and PPS Hospitals with Special Payment Designations by Location

Table 1 shows the number and percent of acute hospitals by hospital type, special payment designation, and location. The table shows that among PPS hospitals with special payment designations, RRCs are the most common followed by SCHs, SCH/RRCs, MDHs, a few MDH/RRCs and EACH/RRC, and one EACH. In contrast to other PPS hospitals with special payment designations, most RRCs are in urban locations.

Table 1. Number and Percent of Acute Hospitals by Hospital Type, Special Paym	ent Designation. and Location
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		Rural Location				Total		
Hospital Type	Payment Designation	Number	Percent	Number	Percent	Number	Percent	
Critical access hospitals		1,275	58.6%	59	2.8%	1,334	31.0%	
Cancer hospitals				11	0.5%	11	0.3%	
Prospective payment	PPS-only	275	12.6%	1,649	77.4%	1,924	44.7%	
system hospitals:	EACH	1	0.0%			1	0.0%	
	EACH/RRC	2	0.1%			2	0.0%	
	MDH	129	5.9%	10	0.5%	139	3.2%	
	MDH/RRC	18	0.8%	5	0.2%	23	0.5%	
	RRC	86	4.0%	337	15.8%	423	9.8%	
	SCH	274	12.6%	27	1.3%	301	7.0%	
	SCH/RRC	116	5.3%	32	1.5%	148	3.4%	
	Total	2,176	100.0%	2,130	100.0%	4,306	100.0%	

Source: Provider Specific File, Centers for Medicare & Medicaid Services, June 2021

CAH = Critical Access Hospital EACH = Essential Access Community Hospital MDH = Medicare Dependent Hospital PPS-only = Prospective Payment System Hospital with no special payment designation RRC = Rural Referral Center SCH = Sole Community Hospital

Rural and Urban Hospitals and County Size

Table 2 shows the number and percent of acute hospitals by hospital type, special payment designation, and size of county of hospital location. Counties with < 15K, 15K to 50K, and > 50K to 100K population are primarily served by CAHs and PPS hospitals with special payment designations. Counties with > 100K to 500K and larger are primarily served by PPS-only hospitals. Table 2 also shows that most CAHs and PPS hospitals with special payment designations are in counties with < 15K, 15K to 50K, and > 50K to 100K population, except for RRCs that are in larger counties.

Table 2. Number and Percent of Acute Hospitals by Hospital Type, Special Payment Designation,and Size of County of Hospital Location

	Payment	< 15K		15K to 50K		> 50K to 100K		> 100K to 500K	
Hospital Type	Designation	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Critical access hospitals		579	91.0%	532	50.7%	121	24.1%	85	8.6%
Cancer hospitals									
Prospective payment	PPS-only	19	3.0%	146	13.9%	155	30.9%	657	66.8%
system hospitals:	EACH			1	0.1%				
	EACH/RRC			1	0.1%	1	0.2%		
	MDH	9	1.4%	88	8.4%	24	4.8%	16	1.6%
	MDH/RRC			8	0.8%	10	2.0%	5	0.5%
	RRC			30	2.9%	75	14.9%	163	16.6%
	SCH	29	4.6%	181	17.3%	53	10.6%	35	3.6%
	SCH/RRC			62	5.9%	63	12.5%	23	2.3%
	Total	636	100.0%	1,049	100.0%	502	100.0%	984	100.0%

	Payment	nent > 500K to 1,000K > 1,000			00к	То	tal
Hospital Type	Designation	Number	Percent	Number	Percent	Number	Percent
Critical access hospitals		8	1.5%	9	1.5%	1,334	31.0%
Cancer hospitals		2	0.4%	9	1.5%	11	0.3%
Prospective payment	PPS-only	456	86.2%	491	81.0%	1,924	44.7%
system hospitals:	EACH					1	0.0%
	EACH/RRC					2	0.0%
	MDH	2	0.4%			139	3.2%
	MDH/RRC					23	0.5%
	RRC	61	11.5%	94	15.5%	423	9.8%
	SCH			3	0.5%	301	7.0%
	SCH/RRC					148	3.4%
	Total	529	100.0%	606	100.0%	4,306	100.0%

Sources: Provider Specific File, Centers for Medicare & Medicaid Services, June 2021

U.S. Census Bureau

CAH = Critical Access Hospital

EACH = Essential Access Community Hospital

MDH = Medicare Dependent Hospital

PPS-only = Prospective Payment System Hospital with no special payment designation

RRC = Rural Referral Center

SCH = Sole Community Hospital

Rural and Urban Hospitals and Inpatient Average Daily Census (ADC)

Table 3 shows the 10th, median (50th) and 90th percentiles of acute ADC of acute hospitals by hospital type, special payment designation, and size of county of hospital location. Counties with < 15K, 15K to 50K, and > 50K to 100K population are served by hospitals with low ADCs. Counties with > 100K to 500K and larger are served by hospitals with much larger ADCs. Table 3 also shows that CAHs have the lowest median ADC across all sizes of county of hospital location.

			< 15K		15K to 50K			> 50K to 100K		
Hospital Type	Payment Designation	10 th percentile	Median	90 th percentile	10 th percentile	Median	90 th percentile	10 th percentile	Median	90 th percentile
Critical access hospitals		0.4	1.3	4.3	0.8	3.4	9.5	0.4	3.9	10.2
Cancer hospitals										
Prospective payment	PPS-only	0.3	4.6	14.0	3.1	11.9	35.1	5.1	27.8	80.5
system hospitals:	EACH				11.8	11.8	11.8			
	EACH/RRC				27.3	27.3	27.3	156.7	156.7	156.7
	MDH	4.3	7.2	13.2	3.4	8.3	20.9	6.5	20.7	50.6
	MDH/RRC				11.3	32.7	49.3	25.7	39.0	60.3
	RRC				19.3	45.2	134.7	30.4	68.8	146.8
	SCH	1.7	4.4	14.8	4.5	11.7	32.4	11.0	30.2	113.0
	SCH/RRC				16.6	33.6	70.9	24.3	72.0	179.1
	Total	0.4	1.4	5.2	1.3	6.8	30.8	2.4	25.4	113.0

Table 3. 10th, 50th and 90th Percentiles of Acute ADC of Acute Hospitals by Hospital Type, Special Payment Designation and Size of County of Hospital Location

		> 100K to 500K			> 500K to 1,000K			> 1,000K		
Hospital Type	Payment Designation	10 th percentile	Median	90 th percentile	10 th percentile	Median	90 th percentile	10 th percentile	Median	90 th percentile
Critical access hospitals		0.4	2.3	7.4	0.1	3.3	12.8	0.1	2.1	11.6
Cancer hospitals					25.6	72.0	118.4	15.8	201.3	530.5
Prospective payment	PPS-only	13.4	83.9	281.5	13.0	113.4	362.3	20.8	124.6	376.3
system hospitals:	EACH									
	EACH/RRC									
	MDH	10.3	27.5	58.3	32.5	38.3	44.0			
	MDH/RRC	15.6	46.9	65.8						
	RRC	51.3	139.4	378.3	111.5	230.9	618.5	110.9	212.6	549.7
	SCH	14.7	60.8	166.2				5.9	14.9	15.3
	SCH/RRC	80.2	146.1	390.3						
	Total	5.8	83.5	280.5	12.8	125.0	405.1	20.3	139.9	420.6

Sources: Provider Specific File, Centers for Medicare & Medicaid Services, June 2021

Healthcare Cost Report Information System. September 2021, Centers for Medicare & Medicaid Services

EACH = Essential Access Community Hospital

MDH = Medicare Dependent Hospital

PPS-only = Prospective Payment System Hospital with no special payment designation

RRC = Rural Referral Center

SCH = Sole Community Hospital

SUMMARY

The purpose of this brief is to provide a snapshot of the types of rural and urban hospitals and the counties where they are located. As of December 2020, there are 4,306 acute hospitals in the U.S.—1,334 Critical Access Hospitals (CAHs), 11 cancer hospitals, 1,924 Prospective Payment System hospitals (PPS-only), and 1,037 PPS hospitals with special payment designations. 2,176 hospitals are in rural locations and 2,130 are in urban locations. There are CAHs, PPS-only hospitals, and PPS hospitals with special payment designations in both urban and rural locations. Hospitals in rural locations are primarily CAHs, and hospitals in urban locations are primarily PPS-only hospitals. Counties with < 50K population are primarily served by CAHs and counties with > 50K population by PPS hospitals. The acute average daily censes (ADCs) in hospitals in counties with < 50K population are much lower than the acute ADCs in hospitals in counties with > 50K population.

Type of Hospital	Special Payment Designation, if any	Label	Description
Critical Access Hospital		САН	Critical Access Hospitals must be in a rural area and more than 35 miles from the nearest hospital, with some exceptions; must have 25 or fewer inpatient beds or 25 or fewer total inpatient plus swing beds; have an average annual length of stay of 96 hours or fewer; and have 24-hour emergency care service using on-site or on-call staff. CAHs are paid 101% of reasonable costs for most inpatient and outpatient services. ¹²
Cancer Hospital		Cancer	Eligible hospitals are described in section (1866)(d)(1)(B)(v) of the Social Security Act and referred to as PPS-Exempt Cancer Hospitals (PCHs). Eleven hospitals have been granted PPS-Exempt Cancer Hospital designation by CMS.
Prospective Payment System Hospitals	Prospective Payment System Hospital Only	PPS- Only	Hospitals paid under the Inpatient Prospective Payment System and have no special payment designation.
	Essential Access Community Hospital	EACH	Essential Access Community Hospitals are low-volume rural hospitals that have cost- based reimbursement and relaxed regulatory requirements to help them shift emphasis from acute care to primary care and emergency services. They are treated as SCHs for payment purposes. ¹³
	Essential Access Community Hospital / Rural Referral Center	EACH/ RRC	Hospitals that qualify as both an EACH and a RRC.
	Medicare Dependent Hospital	MDH	To qualify as a Medicare Dependent Hospital (MDH), hospitals must be rural, have less than or equal to 100 acute beds, and at least 60% of their inpatient days or discharges must be for Medicare Part A beneficiaries. MDHs are reimbursed by the Outpatient Prospective Payment System (OPPS) and have a special payment for inpatient services. ¹⁴
	Medicare Dependent Hospital / Rural Referral Center	MDH/ RRC	Hospitals that qualify as both an MDH and a RRC.
	Rural Referral Center	RRC	Rural Referral Centers must be classified as rural and have a high volume of patients. Criteria to classify as high volume vary on the number of acute beds (275+), distance from other providers, and case mix. RRCs are reimbursed by the OPPS and also receive a reclassified wage index. ¹⁵
	Sole Community Hospital	SCH	Sole Community Hospitals can qualify based on various criteria, including: located at least 35 miles from nearest IPPS hospital; located 25-35 miles from other hospitals and is the exclusive provider in the area or less than 50 beds; is rural and 15-25 miles from a hospital that is inaccessible; is rural and travel time to nearest hospital is at least 45 minutes. SCHs are paid on the higher of the IPPS rate or a base year federal rate.
	Sole Community Hospital / Rural Referral Center	SCH/ RRC	Hospitals that qualify as both a SCH and a RRC.

APPENDIX: Medicare Payment Classification

REFERENCES AND NOTES

- 1. At the time of writing, December 2020 data were the most recent data available. Although over one year old, the hospital data in this brief are relatively stable over time.
- 181 Rural hospital closures since January 2005 (138 closures since 2010). NC Rural Health Research Program, UNC Sheps Center. Available at https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospitalclosures/.
- There are 59 CAHs located in urban areas. See CMS Memo: Critical Access Hospital (CAH) Recertification Checklist for Evaluation of Compliance with the Location and Distance Requirements. Centers for Medicare & Medicaid Services. Feb. 12, 2016. Available at https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/ SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-16-08.pdf.
- 4. Code of Federal Regulations. Title 42 Public Health, Chapter IV Centers for Medicare & Medicaid Services, Subchapter B Medicare Program, Part 412 Prospective Payment Systems for Inpatient Hospital Services, Subpart G Cancellation of classification. 42 CFR § 412.103 Special treatment: Hospitals located in urban areas and that apply for reclassification as rural. Available at https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-412/ subpart-G/section-412.103.
- Some hospitals have more than one location under the same certification number (CCN). In this brief, only the primary location is used to determine location. Provider Specific Data for Public Use in SAS Format. CMS. U.S. DHHS. Available at https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/ ProspMedicareFeeSvcPmtGen/psf_SAS.
- 6. Healthcare Cost Report Information System. September 2021. Centers for Medicare & Medicaid Services, Available at https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/Cost-Reports.
- Defining Rural Population, Federal Office of Rural Health Policy, HRSA. Available at https://www.hrsa.gov/ruralhealth/aboutus/definition/index.html. The FORHP definition is different from CMS's definition for rural hospital designations for Medicare payment purposes. The CMS default rural is rural = a nonmetropolitan area, before applying the reclassifications.
- 8. County population size. U.S. Census Bureau. Available at https://www.census.gov/.
- 9. Medicare Geographic Classification Review Board, Regulations and Guidance, CMS. Available at https://www.cms.gov/regulations-and-guidance/review-boards/mgcrb.
- 10. Payment to Hospitals for Inpatient Hospital Services. Compilation of the Social Security Laws. Social Security Administration. Implemented in 42 CFR 412.103. Available at https://www.ssa.gov/OP_Home/ssact/title18/1886.htm#act-1886-d-8-e.
- 11. FY 2022 IPPS Final Rule Home Page. Acute Inpatient PPS, Medicare, CMS. Available at https://www.cms.gov/medicare/acute-inpatient-pps/fy-2022-ipps-final-rule-home-page.
- 12. Critical Access Hospital Payment System. Payment Basics. MedPAC. Revised Oct. 2020. Available at https:// www.medpac.gov/wp-content/uploads/import_data/scrape_files/docs/default-source/payment-basics/ medpac_payment_basics_20_cah_final_sec.pdf.
- 13. Campion DM, Dickey DF. Lessons from the Essential Access Community Hospital Program for rural health network development. *Journal of Rural Health*. Winter 1995;11(1):32-9. Available at https://pubmed.ncbi.nlm.nih.gov/10141277/.
- 14. Hospital Acute Inpatient Services Payment System, Payment Basics. MedPAC. Revised Nov. 2021. Available at https://www.medpac.gov/wp-content/uploads/2021/11/medpac_payment_basics_21_hospital_final_sec.pdf.
- 15. Acute Care Hospital Inpatient Prospective Payment System. Medicare Payment Systems. MLN. Available at https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/html/medicare-payment-systems.html.

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