

The Hilltop Institute

Sole Community Hospitals and Affordable Rural Health

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About the Project

The Sole Community Hospital (SCH) program has operated since 1983 and provides additional Medicare funding to geographically isolated hospitals to support access to care in rural communities. Geographically isolated hospitals have few competitors, so they may command local market power. Given recent research linking market power to prices,¹⁻³ this littleknown federal program may be financially supporting hospitals that also charge relatively high commercial prices.

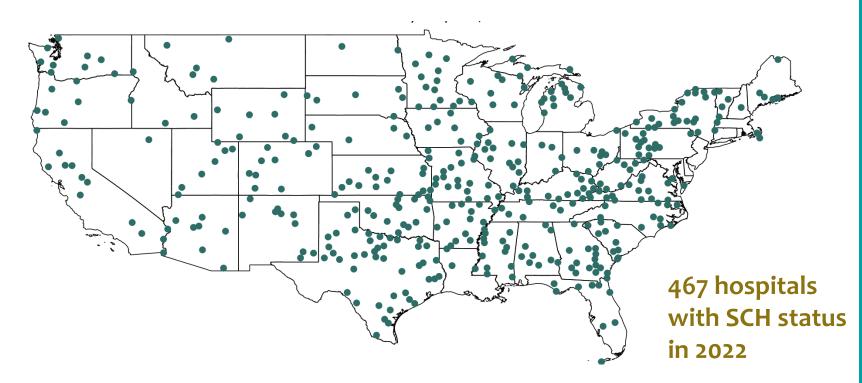
Research Questions

- 1. How do SCHs differ from non-SCHs?
- 2. How much did this program cost Medicare in 2022?
- Do hospitals with SCH status charge higher commercial prices relative 3. to comparable non-SCH facilities?

Background

Hospitals are granted SCH status from the Centers for Medicare & Medicaid Services (CMS) if they are located more than 35 miles from other like hospitals or are located in rural areas and certain other conditions apply.⁴

Hospitals with SCH status can earn the higher of the IPPS rate or a hospital-specific rate for the cost-reporting period; from 2010-2015, 64%-76% of hospitals with SCH designation earned the hospitalspecific rate, while the remainder earned the IPPS (Inpatient Prospective Payment System) rate.⁵



Data and Methodology

Primary data sources: Medicare Cost Reports, 2022; CMS Provider of Services (POS) Current File, 2022 Q4; Dartmouth Health Atlas HRR, 2019

commercial-Medicare payment rate ratios⁶

Sample restrictions: retain "general short-term" hospitals; drop non-singleton hospitals; exclude hospitals with missing POS or HRR data; drop hospitals with fewer than 100 Medicare discharges; drop if estimated commercial-to-Medicare ratio is under 0% or over 500%.⁶ Final analytical sample: **3,368** short-term hospitals

Methodology: t-tests to assess bivariate differences in hospital characteristics; multivariate linear regression to assess regression-adjusted differences in commercial-Medicare payment rate ratios for SCHs and non-SCHs

How much did this program cost?

In 2022, this program cost \$865.21 million for the 427 hospitals with SCH status in the analytic data set.

Category	Amount (\$ million)	
10 th percentile	\$0.19	
25 th percentile	\$0.64	
50 th percentile	\$1.44	
75 th percentile	\$4.44	
90 th percentile	\$8.72	
Maximum	\$29.36	
Total (HSR – IPPS)	\$865.21	
where HSR > IPPS		

Notes: This is based on 2022 Medicare Cost Report data. The analytic sample includes 427 hospitals with SCH status; of these, 259 have a hospital-specific payment exceeding what the IPPS would have been.

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Key variables: SCH status; hospital-specific payment; Medicare IPPS payment; fraction of operating expenses for charity care; fraction of operating expenses for uncompensated and unreimbursed care; cost-charge ratio;

How are SCHs different?

Catagony	SCH (n=427)	All Hospitals (n=3,368)
Category Descriptive Characteris		(11-3,508)
Census Region		
Northeast	9.6%**	13.4%
South	42.9%**	37.9%
Midwest	27.2%	28.7%
West	18.7%	19.4%
Pacific	1.6%**	0.6%
Ownership	1.0/0	0.070
Private - Nonprofit	43.1%**	48.4%
Private - for profit	14.8%	17.3%
Public	23.7%***	16.7%
Other	18.5%	17.6%
Bed Size		
100 or fewer	47.1%***	40.0%
101-250	38.2%***	28.5%
251+	14.8%***	31.5%
System Affiliation (yes)	62.5%***	68.7%
Rural status (yes)	80.1%***	33.5%
Teaching hospital (yes)	24.1%***	31.2%
Financial and Operational Cha	racteristics	
Medicaid discharges (relative to all)	0.102***	0.075
Charity Care as fraction of operating expenses	0.022	0.023
Uncompensated and unreimbursed care as		
fraction of operating expenses	0.066	0.068
Cost-to-Charge ratio	0.302	0.289
Commercial-Medicare payment rate ratio	1.91***	1.47

table are from CMS Provider of Services data (Q4 2022) and Medicare Cost Reports (2022). We used t-tests to test differences in the distribution of hospital characteristics (proportions) in SCHs vs. all hospitals in the analytic sample. ** p < 0.05, *** p < 0.01

Do SCHs charge higher commercial prices?

	Model 1	Model 2
SCH Status	0.703***	0.698***
HRR Fixed Effects?	No	Yes
Ν	3,368	3,368

Notes: All regressions include controls for Census region, ownership type, bed size, urban status, teaching status, system affiliation, fraction of discharges with Medicaid, charity care as a fraction of operating expenses, unreimbursed and uncompensated care as a fraction of operating expenses, and cost-to-charge-ratio. The dependent variable is commercial-Medicare Payment Rate Ratio. Standard errors are clustered at the state level. . ** p < 0.05, *** p < 0.01



Caveats

These estimates are observational and cannot be interpreted as a causal estimate of *receiving* SCH status.

Commercial-Medicare rate ratios are based on aggregated, hospital-level financial data and do not capture procedure-specific price ratios. However, they are correlated with price ratio based on claims data.⁶

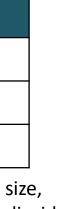
Conclusions

SCHs have characteristics that may make them more financially vulnerable than other short-term hospitals. They tend to be smaller, publicly owned, not system-affiliated, and have a higher fraction of Medicaid discharges.

The program cost Medicare over **\$850 million in 2022**, with hospitals receiving up to **\$30 million** in additional inpatient funding.

Despite receiving important financial benefits, SCHs do **not** offer proportionally more charity care than non-SCHs, and they may charge **significantly higher commercial prices** than similar, geographically proximal hospitals. These higher commercial prices may be due to market power and act as a barrier to affordable care in rural areas.

As affordability is a central component of hospital accessibility, this suggests a potential misalignment between the SCH program aims and SCH behavior.



Acknowledgments and References

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1.Cooper, Z., Craig, S. V., Gaynor, M., & Van Reenen, J. (2019). The price ain't right? Hospital prices and health spending on the privately insured. *The Quarterly Journal of Economics*, 134(1), 51-107. 2. Dauda, S. (2018). Hospital and health insurance markets concentration and inpatient hospital transaction prices in the US health care market. *Health Services Research, 53*(2), 1203-1226. 3. White, C., Reschovsky, J. D., & Bond, A. M. (2014). Understanding differences between high- and lowprice hospitals: Implications for efforts to rein in costs. *Health Affairs*, 33(2), 324-331. 4. Code of Federal Regulations, Title 42 Chapter IV Subchapter B, Part 412, Subpart G, 412.92. Special treatment: Sole community hospitals. Accessed on October 6, 2022, from https://www.ecfr.gov/current/title-42/chapter-IV/subchapter-B/part-412/subpart-G/section-412.92 5. Thomas, S. R., Randolph, R., Holmes, G. M., & Pink, G. H. (2016). The financial importance of the sole community hospital payment designation. *Findings Brief.* North Carolina Rural Health Program. 6. Levinson, Z., Qureshi, N., Liu, J. L., & Whaley, C. M. (2022). Trends in hospital prices paid by private health plans varied substantially across the US. *Health Affairs*, 41(4), 516-522.