

Geographic Variation in Uncompensated Care between Rural and Urban Hospitals

Krystal G. Garcia, MSPH; Kristie Thompson, MA; Hilda A. Howard, BS; George H. Pink, PhD

BACKGROUND

Rural residents are less likely than urban residents to have health care coverage through their employer, more likely to be low-income, and oftentimes are unable to afford coverage on their own.^{1,2} For hospitals that serve rural residents, this often means higher rates of uncompensated care compared to urban hospitals.³ Congress' elimination of the health insurance tax penalty in the Tax Cuts and Jobs Act (TCJA) passed on December 22, 2017 could cause the uninsured rate to increase, which could result in more uncompensated care reported by rural and urban hospitals.⁴

Hospitals that serve a disproportionate number of low-income patients receive payments from the Centers for Medicare & Medicaid Services (CMS) to cover the costs of providing care to uninsured patients [called Disproportionate Share Hospital or Medicare DSH payments⁵]. In the 2018 Medicare Inpatient Prospective Payment System final rule (82 Fed. Reg. 37990, August 14, 2017), CMS indicated that it would begin to incorporate data from Worksheet S-10 in the computation of Factor 3 for the calculation of hospitals' share of Medicare uncompensated care payments for fiscal year 2018.⁶ In addition, on January 10, 2018, the House Energy and Commerce Committee released a report on the 340B Drug Discount Program that recommended that “Congress should also establish a mechanism to monitor the level of charity care provided by covered entities”.⁷ Finally, Senator Grassley has been an outspoken critic of charity care policies of not-for-profit hospitals and has led efforts to increase federal pressure on hospitals to report charity care as proof that they deserve their tax-exempt status.⁸

All of these factors suggest an increasing focus on and importance of reported uncompensated care. The purpose of this brief is to compare uncompensated care in rural and urban hospitals and to describe how it varies across regions of the country.

METHODS

Data were obtained from 2014-2016 Medicare Cost Report Worksheet S-10. Cost reports with reporting periods less than 360 days of data were excluded. Uncompensated care was defined as cost of charity care (Worksheet S-10, line 23) plus cost of non-Medicare and non-reimbursable Medicare bad debt expense (Worksheet S-10, line 29) divided by operating expenses (Worksheet G-3, line 4). Cost reports were excluded if the sum of charity care and bad debt was less than or equal to zero or unreported, and if charity care plus bad debt as a percentage of operating expenses was greater than 100 percent. Table 1 shows the number of Medicare cost reports with >360 days reporting period, excluded cost reports, and the number used in the study.

KEY FINDINGS

- Between 2014 and 2016, median uncompensated care as a percentage of operating expense declined across Critical Access Hospitals (CAHs), other rural hospitals, and urban hospitals.
- The median uncompensated care as a percentage of operating expense also declined across census regions between 2014 and 2016. However, between 2015 and 2016, it increased for hospitals with less than \$20 million in net patient revenue and decreased for hospitals with more than \$20 million in net patient revenue.
- In 2016, the hospitals with the highest median uncompensated care as a percentage of operating expense were CAHs, other rural hospitals, and urban hospitals in the South. Urban hospitals in the West, Northeast, and Midwest had the lowest median percentages.
- Among hospital types, other rural hospitals had the highest median percentage of uncompensated care, and urban hospitals had the lowest median percentage in 2016.
- In 2016, nine of the 10 states with the highest median uncompensated care as a percentage of operating expense were located in the South.
- Reporting practice variations and errors can obscure whether a hospital qualifies for tax exempt status and CMS payment programs designed to support safety net hospitals.

Table 1: Medicare Cost Reports Used in the Study, 2014-2016

	2014	2015	2016
Medicare cost reports with >360 days reporting period	4,564	4,525	4,520
Medicare cost reports excluded:			
(Charity care + bad debt) = 0	37	38	31
(Charity care + bad debt) < 0	54	34	50
(Charity care + bad debt) = Unreported	52	16	50
(Charity care + bad debt) / operating expenses > 100%	2	2	3
Medicare cost reports used in the study after exclusions	4,419	4,435	4,386

Hospitals were identified as rural using the definition from the Federal Office of Rural Health Policy.⁹ Hospitals were classified as: Critical Access Hospitals (CAH); other rural hospitals which included Medicare Dependent Hospitals, Sole Community Hospitals, and rural PPS hospitals; and urban hospitals. Uncompensated care for 2014-2016 was analyzed by hospital type, net patient revenue, and census region.

2014-2016 Uncompensated Care

Figures 1 and 2 show that between 2014 and 2016, median uncompensated care as a percentage of operating expense declined across all three hospital types and four census regions. However, Figure 3 shows that, between 2015 and 2016, the median percentage increased for hospitals with less than \$20 million in net patient revenue (n=894), whereas the median percentage decreased for hospital groups with more than \$20 million in net patient revenue (n=3,492).

Figure 1: Median Uncompensated Care as a Percent of Operating Expense by Hospital Type, 2014-2016

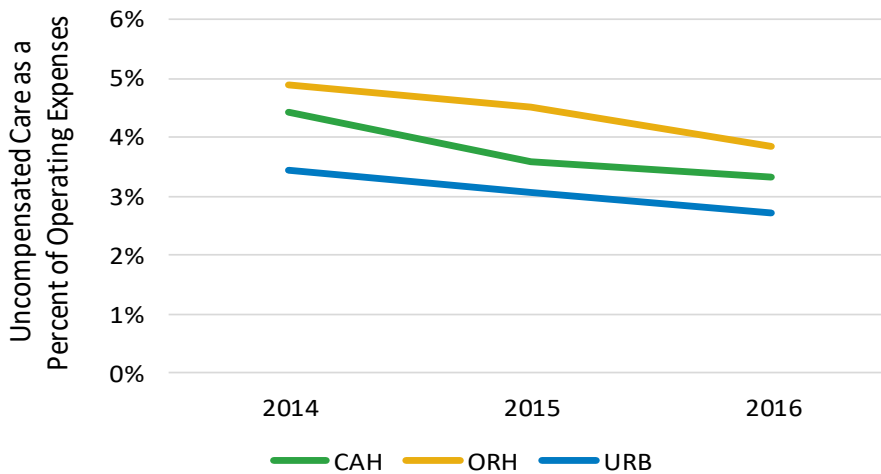


Figure 2: Median Uncompensated Care as a Percent of Operating Expense by Census Region, 2014-2016

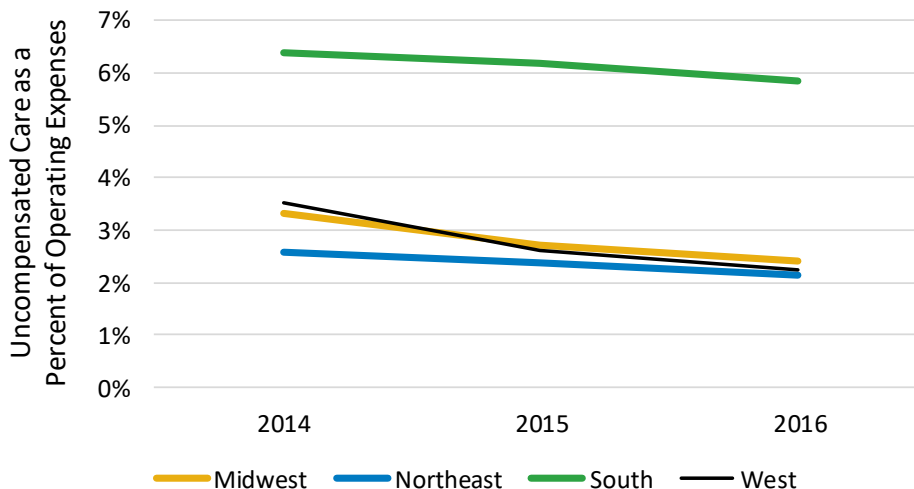
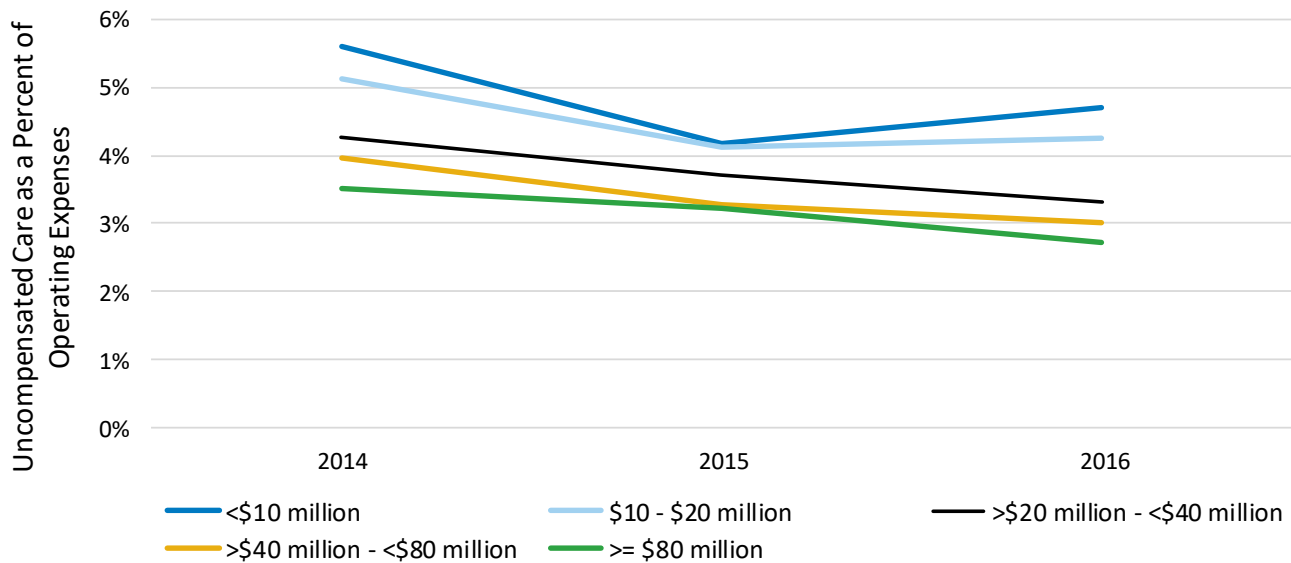


Figure 3: Median Uncompensated Care as a Percent of Operating Expense by Hospital Net Patient Revenue, 2014-2016



2016 Uncompensated Care in Detail

Table 2 shows that, in 2016, the hospitals with the highest median uncompensated care as a percentage of operating expense were CAHs in the South (7.7%), other rural hospitals in the South (6.0%), and urban hospitals in the South (5.1%). Urban hospitals in the West (1.7%), Northeast (2.0%), and Midwest (2.2%) had the lowest median percentages. Among hospital types, other rural hospitals had the highest median percentage of uncompensated care (3.9%), CAHs had a median percentage of 3.3%, and urban hospitals had the lowest median percentage (2.7%) in 2016.

Table 2: Median 2016 Charity Care, Bad Debt, and Total Uncompensated Care as Percentages of Operating Expenses by Hospital Type and Census Region

Census region	Hospital type	Number of cost reports	Charity care as a percentage of operating expenses	Bad debt as a percentage of operating expenses	Total uncompensated care as a percentage of operating expenses
South	CAH	327	1.18%	5.82%	7.72%
	Other rural	484	1.03%	3.90%	6.00%
	Urban	850	2.08%	2.02%	5.10%
Midwest	CAH	619	0.45%	1.82%	2.53%
	Other rural	239	0.65%	1.68%	2.57%
	Urban	495	0.91%	1.05%	2.17%
West	CAH	264	0.61%	2.41%	3.24%
	Other rural	106	0.64%	1.40%	2.49%
	Urban	450	0.08%	0.78%	1.73%
Northeast	CAH	69	0.98%	1.93%	2.95%
	Other rural	92	0.53%	1.41%	2.22%
	Urban	391	0.97%	0.90%	1.96%
U.S.	CAH	1279	0.62%	2.41%	3.32%
	Other rural	921	0.77%	2.47%	3.85%
	Urban	2186	1.10%	1.24%	2.71%
	Total	4386	0.87%	1.72%	3.09%

Table 3 shows that nine of the 10 states with the highest median uncompensated care as a percentage of operating expense were all located in the South. Georgia (8.0%), Texas (7.9%), and South Carolina (7.1%) were the only states with medians greater than seven percent.

Table 3: Median Uncompensated Care Costs as a Percent of Operating Expenses by State (2016)

State	%	State	%	State	%
GA	7.98%	DE	3.67%	SD	2.23%
TX	7.85%	ID	3.62%	DC	2.22%
SC	7.06%	MT	3.58%	KY	2.22%
MS	6.67%	AR	3.50%	PA	2.20%
NC	6.36%	MD	3.37%	OR	1.93%
OK	6.16%	IN	3.26%	NY	1.92%
WY	5.98%	NE	3.05%	IA	1.89%
AL	5.96%	KS	2.98%	MI	1.82%
FL	5.96%	NJ	2.97%	WI	1.81%
LA	5.91%	NH	2.95%	VT	1.81%
VA	5.65%	NM	2.85%	WA	1.73%
MO	5.51%	WV	2.70%	CT	1.73%
UT	4.68%	OH	2.55%	MA	1.70%
TN	4.27%	IL	2.54%	RI	1.65%
ME	4.14%	AZ	2.48%	CA	1.62%
AK	3.98%	CO	2.41%	MN	1.56%
NV	3.79%	ND	2.40%	HI	1.25%

Reporting Issues

Mirroring previous research, we found that CAHs reported lower rates of charity care and higher rates of bad debt.³ Table 2 shows that the median charity care as a percentage of operating expense for urban hospitals (1.10%) was almost twice as high as CAHs (0.62%), and much higher than other rural hospitals (0.77%). Conversely, the median bad debt as a percentage of operating expense for CAHs (2.41%) and other rural hospitals (2.47%) was twice as high as urban hospitals (1.24%). Although reasons for differences like this may vary by hospital, CAHs have been known to have more restrictive charity care programs and challenges with billing and revenue management systems, which could increase their rates of bad debt and reduce rates of charity care.³ Different reporting also makes it difficult to make meaningful comparisons between urban and rural hospitals.

A second reporting issue is the presence of errors in the data reported by hospitals on Worksheet S-10. Table 1 shows the number of Medicare cost reports excluded because the sum of charity care and bad debt was less than or equal to zero or unreported, and charity care plus bad debt as a percentage of operating expenses was greater than 100 percent. In total, 3.2% (145/4,564) in 2014, 2.0% (90/4,525) in 2015, and 3.0% (134/4,520) in 2016 cost reports were excluded because of probable errors. Table 4 shows higher error rates in the individual reporting of charity care and bad debt: 5.4% (243/4,520) of 2016 cost reports included a value of \$0 for charity care, and 2.5% (115/4,520) included a negative value for bad debt.

Table 4: Number of 2016 Cost Reports with Errors in Reporting of Charity Care and Bad Debt on Worksheet S-10

Values	Charity Care Line 23	Bad Debt Line 29	Charity Care + Bad Debt Line 30
Equal to 0	243	41	31
Less than 0	15	115	50
Unreported	50	50	50
As a % of operating expense > 100%	1	1	3
Total	309	207	134

DISCUSSION

This study finds substantial differences in reported uncompensated care as a percent of operating expense between rural and urban hospitals and among regions of the country. Between 2014 and 2016, median uncompensated care as a percentage of operating expense declined across CAHs, other rural hospitals, and urban hospitals, and also declined across census regions. However, between 2015-2016, it increased for hospitals with less than \$20 million in net patient revenue and decreased for hospitals with more than \$20 million in net patient revenue. In 2016, the hospitals with the highest median uncompensated care as a percentage of operating expense were CAHs, other rural hospitals, and urban hospitals in the South. Among hospital types, other rural hospitals had the highest median percentage of uncompensated care, and urban hospitals had the lowest median percentage. Nine of the 10 states with the highest median uncompensated care as a percentage of operating expense were located in the South.

With higher rates of uncompensated care, small rural hospitals are at higher risk of unprofitability, financial distress and closure.¹⁰ Reporting issues are also important to acknowledge because they can obscure whether a hospital qualifies for tax exempt status and/or CMS payment programs designed to support safety net hospitals. Understanding uncompensated care and how it is measured will continue to be important for hospitals to stay in business and successfully meet the needs of their community.

Acknowledgements

Helpful comments from Sarah Young and Craig Caplan of the Federal Office of Rural Health Policy are gratefully acknowledged.

REFERENCES AND NOTES

1. Key Facts about the Uninsured Population (2017). Kaiser Family Foundation. Available at: <http://files.kff.org/attachment/Fact-Sheet-Key-Facts-about-the-Uninsured-Population>.
2. The Affordable Care Act and Insurance Coverage in Rural Areas (2014). Kaiser Family Foundation Available at: <https://www.kff.org/uninsured/issue-brief/the-affordable-care-act-and-insurance-coverage-in-rural-areas/>.
3. Gale JA, Croom J, Croll Z, Coburn A. Charity Care and Bad Debt Activities of Tax-Exempt Critical Access Hospitals (2015). Flex Monitoring Team. Available at: <http://www.flexmonitoring.org/wp-content/uploads/2015/06/PB38.pdf>.
4. Banow T. Charity Care Spending Flat among Top Hospitals. *Modern Healthcare*, January 6, 2018. Available at: <http://www.modernhealthcare.com/article/20180106/NEWS/180109941>.
5. Disproportionate Share Hospitals (2017). Health Services and Resources Administration, US DHHS. Available at: <https://www.hrsa.gov/opa/eligibility-and-registration/hospitals/disproportionate-share-hospitals/index.html>.
6. Updates to Medicare's Cost Report Worksheet S-10 to Capture Uncompensated Care Data (2017). Centers for Medicare & Medicaid Services. Available at: <https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNMattersArticles/Downloads/se17031.pdf>. There are now two sets of Medicare payments: Medicare DSH which is 25% of the pre-ACA level and which uses the pre-ACA formula, and Medicare uncompensated care payments which are subject to the new S-10 distribution and ACA-related changes in funding levels. Therefore, only part of the Medicare payments are linked to S-10 data.
7. Review of the 340B Drug Pricing Program (2018). US Department of Energy and Commerce. Available at: https://energycommerce.house.gov/wp-content/uploads/2018/01/20180110Review_of_the_340B_Drug_Pricing_Program.pdf.
8. Grassley C. Some Tax-exempt Hospitals are Lax at Providing Charity Care and Accountability. *First Opinion, STAT*, September 17, 2017. Available at: <https://www.statnews.com/2017/09/18/hospitals-tax-exempt-accountability/>.
9. Defining the rural population. Federal Office of Health Policy. Health Resources and Services Administration, US DHHS. Available at: <https://www.hrsa.gov/rural-health/about-us/definition/index.html>.
10. Kaufman B, Pink G, Holmes GM. Prediction of Financial Distress among Rural Hospitals (2016). NC Rural Health Research Program, UNC-Chapel Hill. Available at: <http://www.shepscenter.unc.edu/wp-content/uploads/2016/01/2015Prediction-of-Distress.pdf>.

This study was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement # U1GRH07633. The information, conclusions and opinions expressed in this brief are those of the authors and no endorsement by FORHP, HRSA, HHS, or The University of North Carolina is intended or should be inferred.



UNC
THE CECIL G. SHEPS CENTER
FOR HEALTH SERVICES RESEARCH

North Carolina Rural Health Research Program
The Cecil G. Sheps Center for Health Services Research
The University of North Carolina at Chapel Hill
919-966-5011 | www.shepscenter.unc.edu/programs-projects/rural-health

