



Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

Zachariah Croll, MPH, John Gale, MS, Jeremy Zuckero, BA/BS
University of Southern Maine

KEY FINDINGS

- CAHs were less likely than other rural and urban hospitals to provide certain community benefit and essential services (e.g., health screenings, community health education, enrollment assistance services, substance use treatment, psychiatric care, obstetrics care, dental services, and hospice services).
- CAHs were more likely than other rural and urban hospitals to offer adult day care, ambulance services, and long-term care services.
- CAHs reported lower rates of charity care and higher rates of non-Medicare and non-reimbursable Medicare bad debt than other rural and urban hospitals.

INTRODUCTION

Non-profit and publicly-owned hospitals, including Critical Access Hospitals (CAHs), have obligations to address the health needs of their communities. Non-profit hospitals are required to report their community benefit activities to the Internal Revenue Service using Form 990, Schedule H. Community benefit activities include programs and services that provide treatment and/or promote health in response to identified community needs. Publicly-owned hospitals are also held accountable to the needs of their communities through the oversight of their governing boards and local governments. To monitor the community impact and benefit activities of CAHs and to understand whether and how their community impact and benefit profiles differ from those of other hospitals, we compared CAHs to other rural and urban hospitals using a set of indicators developed by the Flex Monitoring Team (FMT). This report enables State Flex Programs and CAH administrators to compare the community impact and benefit profiles of CAHs nationally (Tables 1 and 2) to the performance of CAHs in their state (see links to state-specific tables on page 5). Table 1 provides data for select measures of community impact and benefit, including the provision of essential health care services that are typically difficult to access in rural communities. Table 2 provides data on hospital charity care, bad debt, and uncompensated care activities.



STATE DATA REPORT

Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

APPROACH

This report uses data from the American Hospital Association (AHA) Annual Survey Database and Worksheet S-10 cost report data from the Center for Medicare and Medicaid Services (Form CMS-2552-10) for fiscal year 2017 to compare the community benefit profiles of CAHs with those of other hospitals. We used the FMT's list of CAHs to identify hospitals in the AHA Survey data that were certified as a CAH prior to or during calendar year 2017. We linked the AHA data with the 2013 Rural Urban Continuum Codes (RUCCs) to classify the remaining hospitals as either rural (RUCCs 4 through 9) or urban (RUCCs 1 through 3), and then linked the resulting data set to Worksheet S-10 cost report data retrieved from the Center for Medicare and Medicaid Services website. The 2017 AHA database contains self-reported data on 1,344 CAHs, 809 other rural general medical and surgical hospitals, and 2,289 urban general medical and surgical hospitals located in states that participate in the Medicare Rural Hospital Flexibility Grant Program (Flex Program). Hospitals located in American Samoa, Guam, the Marshall Islands, the Northern Mariana Islands, Puerto Rico, the Virgin Islands, the District of Columbia, and the five states that do not receive Flex Program funding (Connecticut, Delaware, Maryland, New Jersey, and Rhode Island) were excluded from the analysis.

The FMT developed “core” and “financial” indicators of community benefit activity for use in this analysis. The 28 core indicators show the provision of community benefit and essential health services directly by hospitals and through participation in a health system or joint venture. The 4 financial indicators compare the levels of charity care, bad debt, total uncompensated care, and unreimbursed costs of serving patients covered by means-tested government programs (i.e., Medicaid, State Children's Health Insurance Programs (SCHIP), and other state and local indigent care programs) across all hospital types (i.e. CAH, other rural, and urban). Calculating charity care and bad debt performance as a percentage of adjusted revenue allows comparison across hospitals regardless of differences in volume, service mix, and charge rates.

Some hospitals included in the AHA database did not respond to the 2017 AHA survey. For non-responding hospitals, the service fields used in this analysis are left blank and, as a result, are treated as missing for these hospitals. Also, cost report data were not available for all hospitals in the AHA database and, conversely, some hospitals with valid cost report data did not respond to the 2017 AHA survey. As a result, hospital sample sizes differ for AHA (core) and cost report (financial) indicators. Please see table footnotes for sample size information.

RESULTS

Services Offered by Hospitals

We compared CAH involvement in the provision of community benefit services, including essential health-care services, to that of other rural and urban hospitals. As indicated in Table 1, CAHs were less likely than other rural and urban hospitals to offer traditional community benefit programs such as health fairs, community health education, health screenings, enrollment assistance, and health research. They were also less likely to offer essential services including substance use treatment, psychiatric services, dental care, hemodialysis, obstetrics, hospice care, and palliative care, or to be designated as a certified trauma center.

On the other hand, CAHs were more likely than other rural and urban hospitals to offer services such as adult day care, ambulance services, and long-term care services including skilled nursing, intermediate, and other long-term care (e.g., residential or elderly care) services.

Finally, CAHs were more likely than other rural hospitals but less likely than urban hospitals to operate indigent care and immunization programs. CAHs and urban hospitals were both less likely than other rural hospitals to offer home health services.

Services Offered by Hospital Systems and Joint Ventures

Because hospital involvement in health systems or joint ventures can expand the availability of services within communities, we also examined the extent to which



STATE DATA REPORT

Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

services offered by hospital health systems and joint ventures contributed to improvements in the level of community benefit and/or essential services offered by hospitals. For 11 of the 28 core indicators, inclusion of services offered via health systems and joint ventures increased service availability most among CAHs followed by urban and then other rural hospitals (health fairs, community health education, any substance use services including inpatient and outpatient care, hospice programs, obstetrics, any psychiatric services including inpatient and outpatient care, and inpatient palliative care units.) For another four core indicators (health research, dental services, hemodialysis, and hospital-based palliative care programs) inclusion of services offered by health systems and joint ventures boosted availability most among CAHs and least among urban hospitals.

For nine of the core indicators, inclusion of health systems and/or joint ventures expanded service availability most among urban hospitals and least among CAHs (health screenings, immunization programs, adult day care, ambulance services, certified trauma center, and any long term care including skilled nursing, intermediate nursing, and other long-term care). Home health service availability also increased most among urban hospitals, followed by CAHs and then other rural hospitals.

Charity Care and Bad Debt Spending Patterns

The four financial indicators derived from S-10 cost report data are expressed as a percentage of adjusted revenue and can be used to estimate the relative differences in uncompensated care (i.e., charity care and bad debt) spending patterns among CAHs and other hospitals. Overall, CAHs provided the highest rates of uncompensated care followed by other rural and urban hospitals, respectively. While urban hospitals provided higher rates of charity care than other rural hospitals and CAHs, CAHs had the highest rates of non-Medicare and non-reimbursable Medicare bad debt.

Finally, the total unreimbursed cost of Medicaid, SCHIP, and state and local indigent care programs (the difference between the cost of providing services and the amount reimbursed by the programs) was highest

among CAHs, followed by urban and then other rural hospitals.

CONCLUSIONS

In general, CAHs were less likely than other rural and urban hospitals to provide certain community benefit and essential healthcare services reflected in the core indicators we examined (e.g., health fairs, enrollment assistance, health screenings, hemodialysis, obstetrics, dental, substance use, psychiatric, palliative, and hospice care). This may be partly attributable to CAHs' smaller size and more vulnerable financial status. However, a greater proportion of CAHs than other rural and urban hospitals reported offering adult day care, ambulance services, and long-term care services including skilled nursing, intermediate, and other long-term care (e.g., residential or elderly care). Indicators on which CAHs outperform other hospitals may indicate areas where CAHs fill critical gaps in the local safety net.

This report also shows that participation in health systems and joint ventures can enable hospitals to develop and offer services they cannot offer on their own. For the financial community benefit indicators we examined, CAHs reported lower rates of charity care and higher rates of bad debt than other rural and urban hospitals. However, further research is needed to better understand the factors driving variations in CAH community benefit activity, and to develop the resources and incentives needed to help CAHs further refine and target their community benefit activities.



STATE DATA REPORT

Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

TABLE 1. National Comparison of Service Indicators

| Indicator | Hospital Provides Service (%) ¹ | | | Hospital, System, or Joint Venture Provides Service (%) | | |
|--------------------------------------|--|--------------------------|--------------------|---|--------------------------|--------------------|
| | CAH ² | Other Rural ² | Urban ² | CAH ² | Other Rural ² | Urban ² |
| Community outreach | 67.3 | 77.7 | 87.1 | 72.1 | 81.7 | 91.5 |
| Enrollment assistance services | 51.7 | 63.5 | 80.1 | 58.7 | 75.5 | 90.5 |
| Health fair | 77.5 | 86.9 | 84.5 | 83.7 | 90.4 | 92.1 |
| Community health education | 83.1 | 89.1 | 90.9 | 87.9 | 91.6 | 95.7 |
| Health screenings | 84.0 | 89.1 | 88.8 | 86.6 | 91.4 | 93.9 |
| Health research | 2.1 | 11.6 | 49.5 | 10.6 | 20.5 | 67.6 |
| Immunization program | 49.3 | 42.3 | 53.0 | 57.7 | 48.4 | 68.8 |
| Indigent care clinic | 11.0 | 10.7 | 26.6 | 19.8 | 25.0 | 53.6 |
| Adult day care | 5.1 | 2.0 | 3.3 | 9.0 | 6.3 | 17.4 |
| Any substance use services | 4.9 | 13.2 | 26.6 | 16.3 | 22.5 | 51.8 |
| Substance use inpatient care | 2.5 | 6.9 | 13.5 | 8.3 | 14.1 | 35.2 |
| Substance use outpatient care | 3.3 | 10.3 | 22.8 | 13.6 | 19.0 | 46.9 |
| Ambulance services | 22.1 | 20.2 | 15.1 | 51.2 | 46.0 | 61.2 |
| Certified trauma center ³ | 44.9 | 45.3 | 49.5 | 49.8 | 50.4 | 66.7 |
| Dental services | 5.2 | 18.0 | 31.2 | 27.1 | 30.4 | 50.7 |
| Hemodialysis | 3.8 | 21.0 | 55.5 | 17.8 | 49.4 | 90.0 |
| Home health services | 24.3 | 35.2 | 24.6 | 51.7 | 62.0 | 70.5 |
| Hospice program | 16.0 | 25.5 | 27.5 | 59.9 | 64.8 | 78.6 |
| Obstetrics care | 35.5 | 81.3 | 78.0 | 43.3 | 83.6 | 88.9 |
| Any psychiatric services | 28.1 | 49.9 | 63.6 | 52.2 | 63.1 | 83.7 |
| Psychiatric inpatient care | 6.3 | 34.6 | 44.8 | 16.5 | 42.6 | 69.3 |
| Psychiatric outpatient care | 25.9 | 41.3 | 58.8 | 50.6 | 55.2 | 79.8 |
| Palliative care program | 16.9 | 28.8 | 65.4 | 33.8 | 42.5 | 80.5 |
| Inpatient palliative care unit | 5.0 | 7.4 | 16.7 | 12.2 | 13.1 | 30.0 |
| Any long-term care | 44.8 | 25.3 | 20.5 | 51.2 | 33.6 | 46.1 |
| Skilled nursing care | 39.2 | 21.5 | 15.7 | 46.2 | 29.6 | 40.7 |
| Intermediate nursing care | 14.5 | 6.1 | 7.4 | 19.5 | 11.4 | 25.8 |
| Other long-term care | 7.6 | 4.8 | 3.1 | 12.0 | 9.4 | 17.0 |

Source: 2017 American Hospital Association Annual Survey

¹ The United States Department of Agriculture’s 2013 Rural Urban Continuum Codes (RUCCs) were used to classify non-Critical Access Hospitals as either “other rural” (RUCCs 4 through 9) or “urban” (RUCCs 1 through 3).

² There were 1,344 CAHs, 809 other rural hospitals, and 2,289 urban hospitals in the U.S. in 2017. Of these, 1,013 CAHs, 605 other rural hospitals, and 1,726 urban hospitals responded to the 2017 AHA survey.

³ because of the nature and wording of the AHA survey, hospital responses may not align with state and/or American College of Surgeons (ACS) lists of certified trauma centers.



STATE DATA REPORT

Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

TABLE 2. National Comparison of Uncompensated Care and Unreimbursed Cost of Means-Tested Government Programs

| Indicator (expressed as a mean percentage of adjusted revenue) | % CAH ¹ | % Other Rural ¹ | % Urban ¹ |
|---|--------------------|----------------------------|----------------------|
| Total uncompensated care costs (combined charity care and bad debt) | 6.2 | 6.0 | 5.4 |
| Charity care costs | 2.1 | 2.4 | 3.2 |
| Bad debt costs (non-Medicare and non-reimbursable Medicare) | 4.1 | 3.7 | 2.2 |
| Unreimbursed costs of means-tested government programs (Medicaid, SCHIP, and state/local indigent care) | 3.5 | 2.9 | 3.2 |

Source: 2017 Medicare Hospital Cost Reports, Form CMS-2552-10

¹ There were 1,344 CAHs, 809 other rural hospitals, and 2,289 urban hospitals in the U.S. in 2017. Of these, 1,174 CAHs, 697 other rural hospitals, and 1,827 urban hospitals reported valid cost report data.

Notes:

- Comparison hospitals include all general medical and surgical hospitals operating in the 45 states where CAHs operate. Due to refinements in the comparison group construction methodology and data cleaning process, data for other rural and urban hospitals in this report are not comparable to data for other rural and urban hospitals in reports released prior to August 2016. CAH data are comparable across years.
- Cost report data include Worksheet S-10 line 19 (total unreimbursed cost for Medicaid, SCHIP, and state and local indigent care programs); line 23, column 3 (cost of charity care), line 29 (cost of non-Medicare and non-reimbursable Medicare bad debt expense); and line 30 (cost of uncompensated care). Hospital revenue data are from Worksheet G-3 line 3 (net patient revenues).
- Hospitals that did not report net patient revenues or any of the four cost report indicators we examined were removed from the cost report analyses. Four hospitals (two CAHs and two urban hospitals) that reported one or more cost report indicator spending total that exceeded their net patient revenues were also removed from the cost report analyses to ensure the quality and integrity of the data.



STATE DATA REPORT

Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

State Comparison of Service Indicators: Tennessee

| Indicator | Hospital Provides Service (%) ¹ | | | Hospital, System, or Joint Venture Provides Service (%) | | |
|--------------------------------------|--|--------------------------|--------------------|---|--------------------------|--------------------|
| | CAH ² | Other Rural ² | Urban ² | CAH ² | Other Rural ² | Urban ² |
| Community outreach | 62.5 | 62.5 | 87.9 | 75.0 | 62.5 | 93.9 |
| Enrollment assistance services | 50.0 | 50.0 | 78.8 | 50.0 | 62.5 | 97.0 |
| Health fair | 87.5 | 93.8 | 87.9 | 87.5 | 93.8 | 93.9 |
| Community health education | 75.0 | 93.8 | 93.9 | 75.0 | 93.8 | 97.0 |
| Health screenings | 75.0 | 87.5 | 81.8 | 87.5 | 87.5 | 93.9 |
| Health research | 0.0 | 0.0 | 45.5 | 25.0 | 0.0 | 63.6 |
| Immunization program | 12.5 | 31.3 | 36.4 | 25.0 | 31.3 | 48.5 |
| Indigent care clinic | 12.5 | 6.3 | 12.1 | 12.5 | 6.3 | 21.2 |
| Adult day care | 0.0 | 6.3 | 3.0 | 12.5 | 18.8 | 30.3 |
| Any substance use services | 0.0 | 6.3 | 21.2 | 25.0 | 18.8 | 60.6 |
| Substance use inpatient care | 0.0 | 6.3 | 15.2 | 25.0 | 18.8 | 51.5 |
| Substance use outpatient care | 0.0 | 0.0 | 18.2 | 25.0 | 12.5 | 57.6 |
| Ambulance services | 0.0 | 31.3 | 30.3 | 50.0 | 56.3 | 72.7 |
| Certified trauma center ³ | 12.5 | 0.0 | 30.3 | 25.0 | 0.0 | 45.5 |
| Dental services | 0.0 | 12.5 | 27.3 | 25.0 | 12.5 | 39.4 |
| Hemodialysis | 0.0 | 6.3 | 54.6 | 25.0 | 31.3 | 84.9 |
| Home health services | 12.5 | 18.8 | 24.2 | 37.5 | 56.3 | 72.7 |
| Hospice program | 12.5 | 18.8 | 33.3 | 50.0 | 50.0 | 90.9 |
| Obstetrics care | 0.0 | 68.8 | 69.7 | 25.0 | 68.8 | 90.9 |
| Any psychiatric services | 37.5 | 37.5 | 54.6 | 50.0 | 56.3 | 84.9 |
| Psychiatric inpatient care | 0.0 | 25.0 | 39.4 | 25.0 | 37.5 | 72.7 |
| Psychiatric outpatient care | 37.5 | 31.3 | 45.5 | 50.0 | 50.0 | 81.8 |
| Palliative care program | 12.5 | 6.3 | 57.6 | 50.0 | 31.3 | 78.8 |
| Inpatient palliative care unit | 0.0 | 6.3 | 15.2 | 12.5 | 6.3 | 18.2 |
| Any long-term care | 25.0 | 31.3 | 21.2 | 50.0 | 37.5 | 57.6 |
| Skilled nursing care | 25.0 | 31.3 | 12.1 | 50.0 | 37.5 | 51.5 |
| Intermediate nursing care | 0.0 | 12.5 | 15.2 | 25.0 | 18.8 | 57.6 |
| Other long-term care | 0.0 | 0.0 | 0.0 | 12.5 | 0.0 | 12.1 |

Source: 2017 American Hospital Association Annual Survey

¹ The United States Department of Agriculture's 2013 Rural Urban Continuum Codes (RUCCs) were used to classify non-Critical Access Hospitals as either "other rural" (RUCCs 4 through 9) or "urban" (RUCCs 1 through 3).

² There were 15 CAHs, 35 other rural hospitals, and 57 urban hospitals in Tennessee in 2017. Of these, 8 CAHs, 16 other rural hospitals, and 33 urban hospitals responded to the 2017 AHA survey.

³ Because of the nature and wording of the AHA survey, hospital responses may not align with state and/or American College of Surgeons (ACS) lists of certified trauma centers.



STATE DATA REPORT

Community Impact and Benefit Activities of Critical Access, Other Rural, and Urban Hospitals, 2017

National Comparison of Uncompensated Care and Unreimbursed Cost of Means-Tested Government Programs: Tennessee

| Indicator (expressed as a mean percentage of adjusted revenue) | % CAH ¹ | % Other Rural ¹ | % Urban ¹ |
|---|--------------------|----------------------------|----------------------|
| Total uncompensated care costs (combined charity care and bad debt) | 11.6 | 7.2 | 7.8 |
| Charity care costs | 6.2 | 4.0 | 5.3 |
| Bad debt costs (non-Medicare and non-reimbursable Medicare) | 5.4 | 3.2 | 2.5 |
| Unreimbursed costs of means-tested government programs (Medicaid, SCHIP, and state/local indigent care) | 3.1 | 6.1 | 3.6 |

Source: 2017 Medicare Hospital Cost Reports, Form CMS-2552-10

¹ There were 15 CAHs, 35 other rural hospitals, and 57 urban hospitals in Tennessee in 2017. Of these, 13 CAHs, 32 other rural hospitals, and 48 urban hospitals reported valid cost report data.

Notes:

- Comparison hospitals include all general medical and surgical hospitals operating in Tennessee. Due to refinements in the comparison group construction methodology and data cleaning process, data for other rural and urban hospitals in this report are not comparable to data for other rural and urban hospitals in reports released prior to August 2016. CAH data are comparable across years.
- Cost report data include Worksheet S-10 line 19 (total unreimbursed cost for Medicaid, SCHIP, and state and local indigent care programs); line 23, column 3 (cost of charity care), line 29 (cost of non-Medicare and non-reimbursable Medicare bad debt expense); and line 30 (cost of uncompensated care). Hospital revenue data are from Worksheet G-3 line 3 (net patient revenues).