

Comparing the Affordable Care Act's Financial Impact on Safety-Net Hospitals in States That Expanded Medicaid and Those That Did Not

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ABSTRACT

ISSUE: Safety-net hospitals play a vital role in delivering health care to Medicaid enrollees, the uninsured, and other vulnerable patients. By reducing the number of uninsured Americans, the Affordable Care Act (ACA) was also expected to lower these hospitals' significant uncompensated care costs and shore up their financial stability.

GOAL: To examine how the ACA's Medicaid expansion affected the financial status of safety-net hospitals in states that expanded Medicaid and in states that did not.

METHODS: Using Medicare hospital cost reports for federal fiscal years 2012 and 2015, the authors compared changes in Medicaid inpatient days as a percentage of total inpatient days, Medicaid revenues as a percentage of total net patient revenues, uncompensated care costs as a percentage of total operating costs, and hospital operating margins.

FINDINGS AND CONCLUSIONS: Medicaid expansion had a significant, favorable financial impact on safety-net hospitals. From 2012 to 2015, safety-net hospitals in expansion states, compared to those in nonexpansion states, experienced larger increases in Medicaid inpatient days and Medicaid revenues as well as reduced uncompensated care costs. These changes improved operating margins for safety-net hospitals in expansion states. Margins for safety-net hospitals in nonexpansion states, meanwhile, declined.

KEY TAKEAWAYS

- ▶ Safety-net hospitals in states that expanded Medicaid coverage have seen larger increases in Medicaid revenues as well as reduced uncompensated care costs, relative to nonexpansion states.
- ▶ Operating margins improved for safety-net hospitals in Medicaid expansion states from 2012 to 2015, while those margins declined in nonexpansion states.
- ▶ With greater financial stability, safety-net hospitals will be better able to undertake the investments needed to assume more financial risk for patient care and outcomes.



BACKGROUND

Through their missions or legal mandate, safety-net hospitals provide care to all patients, regardless of their ability to pay.¹ They include public hospitals, which are often providers of last resort in their communities; academic medical centers, which combine their teaching function with a mission to serve vulnerable populations; and certain private hospitals.

Safety-net hospitals deliver a significant level of care to low-income patients, including Medicaid enrollees and the uninsured, typically providing services that other hospitals in the community do not offer — trauma, burn care, neonatal intensive care, and inpatient behavioral health, as well as education for future physicians and other health care professionals. They are also an important source of care to uninsured individuals who are ineligible for Medicaid or subsidized marketplace coverage because of their citizenship status.²

Several studies have suggested major reductions in uncompensated care and improved financial status at safety-net institutions in states that expanded Medicaid

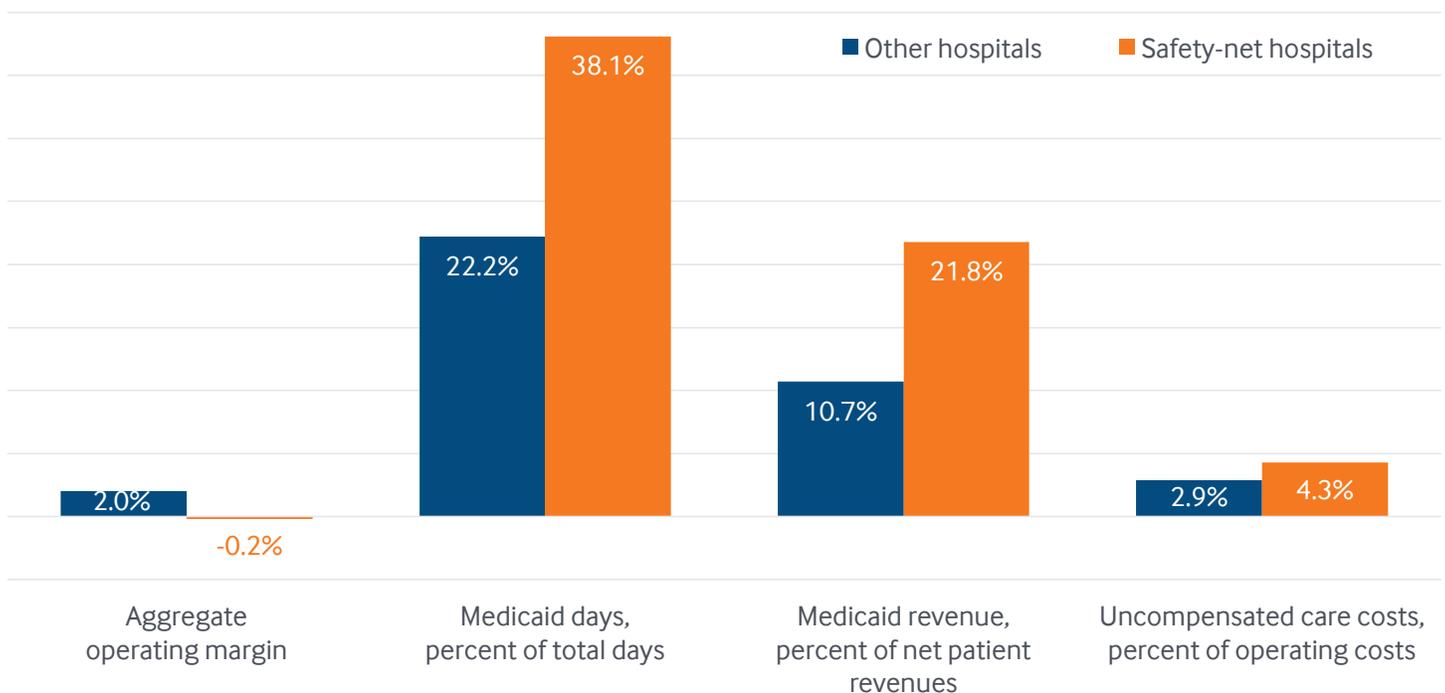
compared to those in states that did not expand.^{3,4}

However, these results were based on interviews with a limited number of safety-net health system executives and staff. Our analysis expands on this research by examining changes in key financial metrics — that is, uncompensated care, Medicaid costs and revenues, and total hospital margins—across safety-net hospitals nationally using standardized data.

When compared to other short-term acute care hospitals, hospitals that met our safety-net hospital criteria had substantially higher Medicaid revenue and uncompensated care levels than non-safety-net hospitals. Safety-net hospitals, however, had lower operating margins (Exhibit 1).

Below we discuss findings on the impact of the Affordable Care Act's (ACA) Medicaid expansion on safety-net hospitals' financial status. The ACA allowed states to expand Medicaid eligibility to nonelderly adults with incomes up to 138 percent of the federal poverty level. The reduction in the number of uninsured under the ACA coverage expansions was expected to reduce

Exhibit 1. Comparison of Key Financial Metrics for Safety-Net and Other Hospitals, 2015



Data: Dobson | DaVanzo analysis of Medicare hospital cost reports, 2012 and 2015.

the uncompensated care that hospitals provide, thus improving their financial status. As of 2015, 31 states and the District of Columbia had expanded Medicaid, while 19 states had not.⁵

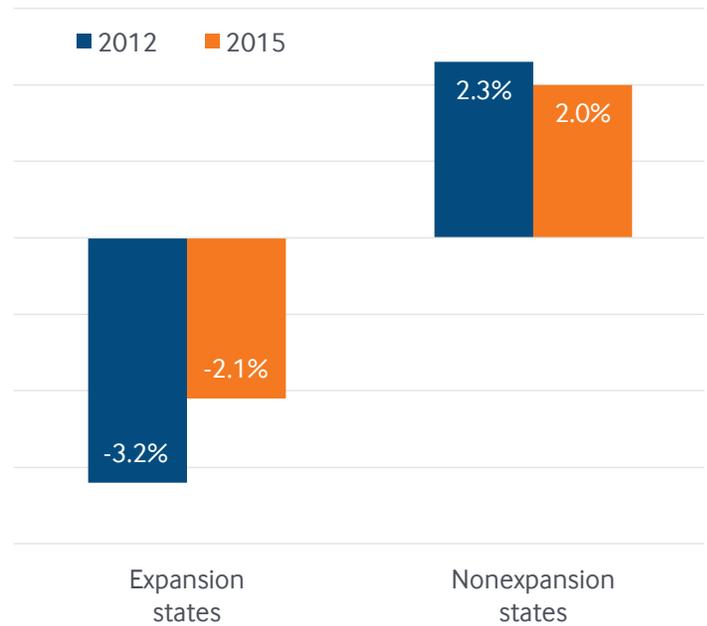
We measure changes in the financial status of safety-net hospitals in states that expanded Medicaid prior to 2015 (326 hospitals) versus safety-net hospitals in states that did not expand or expanded in 2015 or after (268 hospitals). (See “[How We Conducted This Study](#)” for complete methods.)

KEY FINDINGS

Our analysis of Medicare cost report data for federal fiscal years 2012 and 2015 shows a sizable contrast in financial performance between safety-net hospitals in states that expanded Medicaid under the ACA and those in states that did not. Performance metrics included the following:

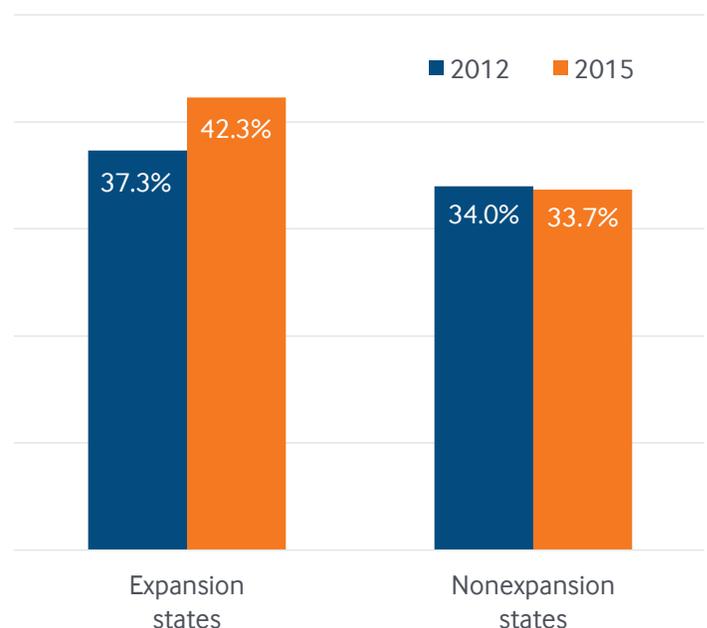
- Hospital operating margins.**⁶ Operating margins improved for safety-net hospitals located in Medicaid expansion states compared with declines for those in states that did not expand. From 2012 to 2015, operating margins for safety-net hospitals in Medicaid expansion states increased from -3.2 percent to -2.1 percent in 2015 (Exhibit 2, [Appendix A](#)). In contrast during the same period, operating margins for safety-net hospitals in nonexpansion states declined from 2.3 percent to 2.0 percent. Largely accounting for this difference were increased Medicaid revenues and reduced uncompensated care costs. Even after expansion, safety-net hospitals’ operating margins in Medicaid expansion states were lower than those in nonexpansion states.
- Medicaid inpatient days.** From 2012 to 2015, safety-net hospitals in Medicaid expansion states experienced larger growth in Medicaid utilization than those in nonexpansion states (Exhibit 3). During the study period, Medicaid inpatient days in expansion states rose 13.5 percent. In comparison, Medicaid inpatient days in nonexpansion states fell slightly, by 0.9 percent.

Exhibit 2. Change in Aggregate Operating Margins for Safety-Net Hospitals in Medicaid Expansion States Compared to Nonexpansion States, 2012–2015



Data: Dobson | DaVanzo analysis of Medicare hospital cost reports, 2012 and 2015.

Exhibit 3. From 2012 to 2015, Medicaid’s Share of Safety-Net Hospitals’ Inpatient Days Rose Only in Expansion States



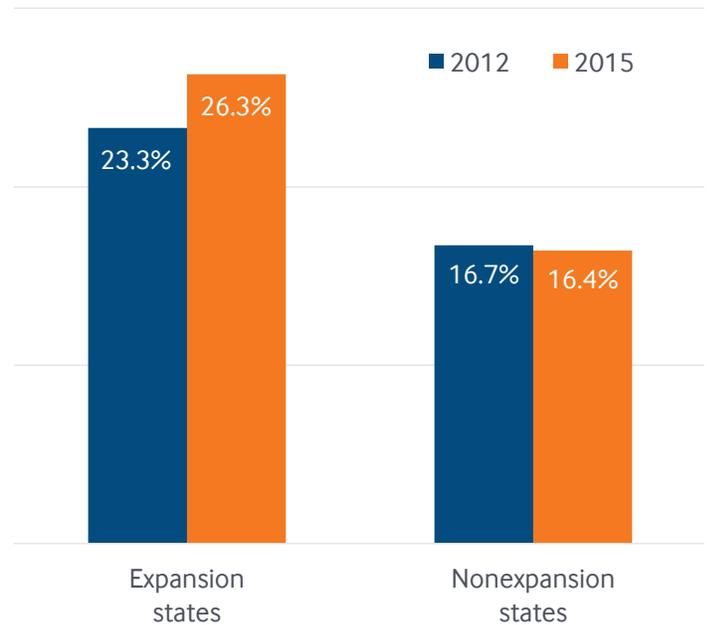
Data: Dobson | DaVanzo analysis of Medicare hospital cost reports, 2012 and 2015.

- Medicaid revenues and costs.**⁷ The rise in use of safety-net hospitals in Medicaid expansion states resulted in these hospitals' increased Medicaid revenue and costs compared to a slight decline in nonexpansion states (Exhibit 4). From 2012 to 2015, safety-net hospitals' Medicaid revenues as a share of net patient revenues rose 12.7 percent in Medicaid expansion states. In contrast, during the same period, safety-net hospitals' Medicaid revenues as a share of net patient revenues declined 1.8 percent in nonexpansion states. However, safety-net hospitals' profit margins on Medicaid patients fell from 6.8 percent to 0.7 percent in expansion states, suggesting that the revenues received for newly eligible patients did not keep pace with the higher cost of treating these patients.
- Uncompensated care costs.**⁸ In 2012, safety-net hospitals' uncompensated care costs as a percent of total hospital operating costs equaled 6.7 percent in expansion states compared to 5.7 percent in nonexpansion states (Exhibit 5). By 2015, however, the safety-net hospitals' share of uncompensated care declined to 3.5 percent in expansion states, or a reduction of 47.4 percent. By comparison, in nonexpansion states that year, uncompensated care costs as a share of total hospital operating costs fell to 5.3 percent, a 7.8 percent reduction.

DISCUSSION

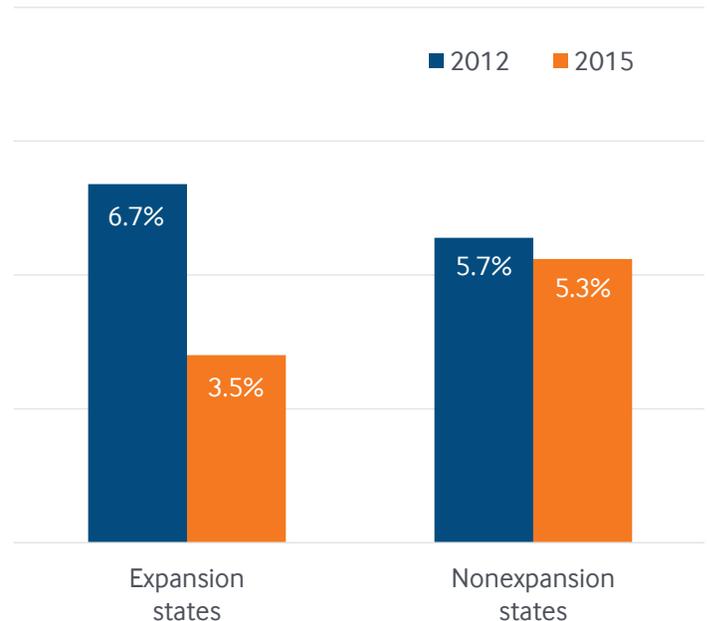
These data suggest that the Medicaid expansion created by the ACA had a significant positive financial impact on safety-net hospitals in states that expanded Medicaid eligibility relative to those in states that did not expand. Safety-net hospitals in expansion states saw larger increases in Medicaid patient volume and revenue, reduced uncompensated care, and improved financial margins compared to safety-net hospitals in nonexpansion states. Although our study's results are specific to safety-net hospitals, other studies have found similar trends across all hospitals in expansion and nonexpansion states.⁹

Exhibit 4. From 2012 to 2015, Medicaid's Share of Safety-Net Hospitals' Net Patient Revenue Rose Only in Expansion States



Data: Dobson | DaVanzo analysis of Medicare hospital cost reports, 2012 and 2015.

Exhibit 5. From 2012 to 2015, Uncompensated Care Costs as a Share of Safety-Net Hospitals' Operating Expenses Dropped Substantially Only in Expansion States



Data: Dobson | DaVanzo analysis of Medicare hospital cost reports, 2012 and 2015.

The improved financial stability of safety-net hospitals could allow these hospitals to continue expanding outpatient capacity, invest in strategies to improve care coordination, hire new staff, and develop better infrastructure to monitor costs.¹⁰ Such investments can also help prepare hospitals for new payment arrangements that may require them to assume more financial risk for patient care and outcomes. Improvements not only benefit the institutions and Medicaid patients but the communities these hospitals serve.

Current attempts to repeal the ACA aim to eliminate the Medicaid expansions over time and curtail Medicaid spending by more than \$800 billion over 10 years. The Congressional Budget Office estimates that about 14 million people could lose their Medicaid coverage by 2026, which would have an adverse effect on safety-net hospitals in those states. Specifically, safety-net hospitals' gains in reduced uncompensated care and improved overall financial margins could be lost in the future.

HOW WE CONDUCTED THIS STUDY

For this analysis, we used data from Medicare's hospital cost reports (MCRs) for federal fiscal years 2012 and 2015. Although MCRs were originally designed as a tool to apportion overall facility expenses to Medicare patients and to report Medicare payments, additional schedules (S-10) have been added to report costs and revenues for other public payers (e.g., Medicaid, the Children's Health Insurance Program (CHIP), and other state and local government indigent care programs) as well as uncompensated care costs (both bad debts and charity care). In addition, MCRs include a facility's total revenues and total expenses. MCRs were available for most hospitals for their fiscal years beginning in 2015, which provided us with information on Medicaid utilization, costs, and revenues as well as uncompensated care costs for a two-year period following the ACA coverage expansions; these data allowed us to examine changes following ACA implementation.

The analysis database excluded hospitals that did not report total revenues and total expenses or that had operating margins outside a reasonable range.¹¹ Only hospitals with valid revenues and costs in both 2012 and 2015 were included in the analysis. Data were

annualized for hospitals that reported for less than a full year or more than a full year.

Because there is no agreement on a standard method used to identify safety-net hospitals, we used the definition of a disproportionate share hospital (DSH) — one that serves a high share of low-income patients.¹² To meet the criteria to be deemed DSH, hospitals must have a Medicaid inpatient utilization rate of at least one standard deviation above the mean for hospitals in the state that receive Medicaid payments, or a low-income utilization rate that exceeds 25 percent.¹³ Accordingly, these hospitals must receive Medicaid DSH payments.

We applied this definition to 2015 MCR data, which yielded 660 short-term acute care safety-net hospitals (excluding children's hospitals, rehabilitation hospitals, psychiatric hospitals, and long-term care hospitals). However, to examine trends over time, we included only the 594 hospitals that had completed MCRs for both 2012 and 2015.

We identified safety-net hospitals in states that expanded Medicaid prior to 2015 to differentiate safety-net hospitals in Medicaid expansion and nonexpansion states. We included safety-net hospitals in states that expanded Medicaid in 2015 or after in the nonexpansion-state category.

NOTES

- ¹ Institute of Medicine, *America's Health Care Safety Net: Intact but Endangered* (National Academies Press, 2000).
- ² P. Cunningham and L. Felland, *Environmental Scan to Identify the Major Research Questions and Metrics for Monitoring the Effects of the Affordable Care Act on Safety Net Hospitals* (Center for Studying Health System Change, June 2013).
- ³ A. Searing and J. Hoadley, *Beyond the Reduction in Uncompensated Care: Medicaid Expansion Is Having a Positive Impact on Safety Net Hospitals and Clinics* (Georgetown University Health Policy Institute, Center for Children and Families, June 2016).
- ⁴ L. Felland, P. Cunningham, A. Doubleday et al., *Effects of the Affordable Care Act on Safety Net Hospitals* (Mathematica Policy Research, Nov. 2016).
- ⁵ Expansion states included: Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Hawaii, Illinois, Iowa, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Rhode Island, Vermont, Washington, and West Virginia. Although Alaska, Indiana, Louisiana, Montana, and Pennsylvania have expanded Medicaid, they are included among our nonexpansion states, since they expanded in 2015 (the last year of our database) or later. In addition, six states — California, Colorado, Connecticut, Minnesota, New Jersey, and Washington, as well as the District of Columbia — expanded Medicaid prior to 2014. However, we included hospitals in these states in our study as expansion states since the trend in Medicaid utilization and revenue as well as uncompensated care costs observed for hospitals in these closely resembled the trends observed in other expansion states over the 2012–2015 period.
- ⁶ Hospitals operating margins were calculated as:

$$\frac{(\text{net patient revenues} - \text{operating expenses})}{\text{net patient revenues}}$$
 Operating margin measures hospitals' profitability on the income or losses derived from patient care. An operating margin of 2.0 percent means that each dollar of patient revenues generates \$0.02 in profits. Operating margin is often a better measure of a hospital's sustainable profitability than total hospital margins, because it focuses on revenue from patient care as opposed to income from other, less dependable sources, such as investment income.
- ⁷ Medicaid revenue includes payment received for all covered inpatient and outpatient services except physician or other professional services; it also includes payments received from Medicaid managed care plans, disproportionate share hospital (DSH) and supplemental payments net of associated provider taxes or assessments.
- ⁸ Uncompensated care costs were defined as charity care costs net of partial payments by patients plus non-Medicare and Medicare nonreimbursable bad debt costs.
- ⁹ F. Blavin, *How Has the ACA Changed Finances for Different Types of Hospitals? Updated Insights from 2015 Cost Report Data* (Urban Institute, April 2017).
- ¹⁰ L. Felland, P. Cunningham, A. Doubleday et al., *Effects of the Affordable Care Act on Safety Net Hospitals* (Mathematica Policy Research, Nov. 2016).
- ¹¹ A reasonable range for total margins was determined to be between the 25th percentile minus two times the interquartile range and the 75th percentile plus two times the interquartile range.

- ¹² K. Carey and M.-Y. Lin, “Hospital Readmissions Reduction Program: Safety-Net Hospitals Show Improvement, Modifications to Penalty Formula Still Needed,” *Health Affairs*, Oct. 2016 35(10):1918–23; M. Gilman, E. K. Adams, J. M. Hockenberry et al., “Safety-Net Hospitals More Likely Than Other Hospitals to Fare Poorly Under Medicare’s Value-Based Purchasing,” *Health Affairs*, March 2015 34(3):398–405; S. H. Sheingold, R. Zuckerman, and A. Shartzter, “Understanding Medicare Hospital Readmission Rates and Differing Penalties Between Safety-Net and Other Hospitals,” *Health Affairs*, Jan. 2016 35(1):124–31; N. M. Kane, S. J. Singer, J. R. Clark et al., “Strained Local and State Government Finances Among Current Realities That Threaten Public Hospitals’ Profitability,” *Health Affairs*, Aug. 2012 31(8):1680–89; and J. P. Sutton, R. E. Washington, K. R. Fingar et al., *Characteristics of Safety-Net Hospitals*, 2014 HCUP Statistical Brief #213 (Agency for Healthcare Research and Quality, Oct. 2016).
- ¹⁵ Medicaid and CHIP Payment and Access Commission, *Report to the Congress on Medicaid and CHIP* (MACPAC, March 2016).

Appendix A. Change in Key Metrics for Safety-Net Hospitals in Medicaid Expansion States Compared to Nonexpansion States, 2012–2015

	Safety-net hospitals in Medicaid expansion states (n=326)			Safety-net hospitals in nonexpansion states (n=268)		
	2012	2015	Percent change 2012–2015	2012	2015	Percent change 2012–2015
Net patient revenue per hospital	\$217,360,310	\$250,117,605	15.1%	\$216,065,097	\$254,850,103	18.0%
Operating expenses per hospital	\$224,270,482	\$255,314,387	13.8%	\$211,098,002	\$249,667,404	18.3%
Aggregate operating margin ^a	–3.2%	–2.1%	1.1%	2.3%	2.0%	–0.3%
Total inpatient days per hospital	44,542	44,370	–0.4%	49,549	50,894	2.7%
Medicaid inpatient days per hospital	16,594	18,765	13.1%	16,824	17,133	1.8%
Medicaid days as percent of total days	37.3%	42.3%	13.5%	34.0%	33.7%	–0.9%
Medicaid revenues per hospital ^b	\$50,703,241	\$65,731,157	29.6%	\$36,104,108	\$41,823,748	15.8%
Medicaid costs per hospital	\$47,241,970	\$65,287,140	38.2%	\$33,291,564	\$38,265,984	14.9%
Aggregate Medicaid margin ^a	6.8%	0.7%	–6.2%	7.8%	8.5%	0.7%
Medicaid revenue / Net patient revenue	23.3%	26.3%	12.7%	16.7%	16.4%	–1.8%
Uncompensated care cost per hospital ^c	\$15,020,459	\$8,997,433	–40.1%	\$12,136,010	\$13,229,992	9.0%
Uncompensated care cost / Operating cost	6.7%	3.5%	–47.4%	5.7%	5.3%	–7.8%

^a The difference from 2012 to 2015 is computed as a percentage-point change.

^b Medicaid revenues include payment received for all covered inpatient and outpatient services except physician or other professional services; they also include payments received from Medicaid managed care plans, disproportionate share hospital (DSH) and supplemental payments net of associated provider taxes or assessments.

^c Uncompensated care costs are defined as charity care costs net of partial payments by patients plus non-Medicare and Medicare nonreimbursable bad debt costs.

Data: Dobson | DaVanzo analysis of Medicare hospitals cost reports, 2012 and 2015.

ABOUT THE AUTHORS

Allen Dobson, Ph.D., is cofounder and president of Dobson DaVanzo & Associates, LLC. Over the past several years, Dr. Dobson has studied Medicare's Prospective Payment Systems (PPS) and Physician Payment System and has led efforts to model the impact of physician and hospital payment policies upon stakeholders using micro-simulation and econometric techniques. He also led a series of state Medicaid studies. Dr. Dobson developed estimates for the Institute of Medicine Committee on Medicare Benefit Extensions of the likely cost to Medicare of expanding preventive benefits. Before cofounding Dobson | DaVanzo, Dr. Dobson was a senior vice president at The Lewin Group. Prior to that, he was director of the Office of Research at the Health Care Financing Administration during the period that Medicare PPS was developed and implemented. Dr. Dobson earned his Ph.D. in Economics from Washington University in St. Louis.

Joan E. DaVanzo, Ph.D., M.S.W., is chief executive officer of Dobson | DaVanzo. Before she cofounded the firm, she served as vice president at The Lewin Group for almost a decade. Her research interests include Medicare payment policy and the sociomedical aspects of normal aging. Dr. DaVanzo has expertise in both qualitative and quantitative analyses and brings a clinical perspective to her consulting work. She also has extensive experience in the use and interpretation of large datasets, such as Medicare claims files, Medical Expenditure Panel Survey, Medicare Current Beneficiary Survey, and National Health and Nutrition Examination Survey. Dr. DaVanzo received a Ph.D. in Public Health from the University of California, Los Angeles, and a Master of Social Work degree from the New York University School of Social Work.

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