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Medicaid Expansion: Effects On Hospital Finances And Implications For Hospitals Facing COVID-19 Challenges

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ABSTRACT **States' decisions to expand Medicaid may have important implications for their hospitals' financial ability to weather the coronavirus disease 2019 (COVID-19) pandemic. This study estimated the effects of the Affordable Care Act (ACA) Medicaid expansion on hospital finances in 2017 to update earlier findings. The analysis also explored how the ACA Medicaid expansion affects different types of hospitals by size, ownership, rurality, and safety-net status. We found that the early positive financial impact of Medicaid expansion was sustained in fiscal years 2016 and 2017 as hospitals in expansion states continued to experience decreased uncompensated care costs and increased Medicaid revenue and financial margins. The magnitude of these impacts varied by hospital type. As COVID-19 has brought hospitals to a time of great need, findings from this study provide important information on what hospitals in states that have yet to expand Medicaid could gain through expansion and what is at risk should any reversal of Medicaid expansions occur.**

Coronavirus disease 2019 (COVID-19) is stretching the capacity of the US health system. In this context, it is important to understand the most recent financial health of US hospitals. The public health crisis will likely affect hospital finances in multiple ways, such as through increased uncompensated care, given the rise in uninsurance associated with the surge in unemployment caused by the pandemic,[1] and through revenue losses due to cancellations or postponements of elective outpatient procedures. This is a particular concern for rural hospitals, as many depend on elective surgeries and outpatient services for revenue.[2]

The Affordable Care Act (ACA) has had important implications for hospital finances since being signed into law a decade ago. There have been multiple unsuccessful attempts to repeal and replace it in Congress, including the American Health Care Act of 2017, which would have repealed the state option to expand Medicaid under the ACA.[3] After the individual mandate tax penalty was reduced to $0 under the Tax Cuts and Jobs Act of 2017, the ACA has continued to face legal battles in *California v. Texas*. The Supreme Court heard this case November 10, 2020, to consider the constitutionality and severability of the individual mandate, among other issues;[4] a decision is expected in 2021. The Trump administration also worked to undermine the ACA, such as through the approval of Medicaid work requirements and the expansion of the public charge rule. These legal and executive actions likely contributed to increases in the uninsurance rate in 2018.[5]

As of August 21, 2020, thirty-nine states including Washington, D.C., had elected to expand their Medicaid programs, whereas twelve states had not.[6] States can still choose to expand Medicaid under the ACA and receive the enhanced match rate for the population covered by the

expansion.[7] However, governors and legislatures can also choose to scale back or reverse existing Medicaid expansions, and some have attempted to do so.[8]

States' decisions to expand Medicaid may have important implications for hospitals' financial ability to weather COVID-19. Earlier studies have found that hospitals in expansion states experienced larger increases in Medicaid-covered discharges and reductions in patients without insurance compared with hospitals in nonexpansion states.[9–12] Hospitals in expansion states also had larger reductions in uncompensated care costs and increases in Medicaid revenue and profit margins compared with hospitals in nonexpansion states in 2014[13,14] and 2015, with variation by hospital characteristics (for example, size, nonprofit status, location, and disproportionate share hospital status).[11,15–17] In addition, in 2015 safety-net hospitals in Medicaid expansion states experienced reduced uncompensated care costs and increased Medicaid revenue and margins, whereas margins for safety-net hospitals in nonexpansion states declined.[18] However, some financial gains that hospitals experienced after expansion may have been offset by increases in Medicaid payment shortfalls[19] or declines in revenue from nongovernment sources such as commercial insurance.[20]

This study estimated the effects of the ACA on hospital finances from 2014 to 2017 and how they differ between hospitals in states that expanded Medicaid and those in states that did not. This analysis had two main objectives. First, it expanded on prior studies by adding two years of ACA exposure data through fiscal year 2017 to provide a firmer assessment of the Medicaid expansion for states that elected to expand. Second, it explored how the ACA Medicaid expansion continued to affect different types of hospitals by size, ownership, rurality, and safety-net status. As COVID-19 has brought hospitals to a time of great need, findings from this study provide important information on what hospitals in states that have yet to expand Medicaid could gain through expansion. In addition, our results show what is at risk and what hospital types may be disproportionately affected should any reversal of Medicaid expansions occur.

Study Data And Methods

DATA This analysis used data from the American Hospital Association (AHA) Annual Survey merged with data from the Centers for Medicare and Medicaid Services Healthcare Provider Cost Reporting Information System (HCRIS). The AHA data provide information on hospitals' organizational characteristics. HCRIS contains annual cost reports submitted by all Medicare-certified hospitals and provides information for constructing key financial measures.

This study examined changes during the period FY 2011–17 in total uncompensated care costs, uncompensated care costs as a percentage of total hospital expenses, Medicaid revenue, Medicaid revenue as a percentage of total hospital revenue, and profitability (operating margins and excess margins).

The analysis sample included nonfederal general medical and surgical hospitals. We included hospitals in six states (California, Connecticut, Minnesota, New Jersey, Washington, and Washington, D.C.) that extended Medicaid eligibility to low-income adults before January 2014 through a separate provision of the ACA but still experienced coverage gains after 2014. We excluded hospitals in Massachusetts because the Medicaid expansion under the state's 2006 health reform law was similar to the ACA's Medicaid expansion. To consistently assess the effects of Medicaid expansion in 2014 over time, the main sample excluded hospitals in six states (New Hampshire, Indiana, Pennsylvania, Alaska, Montana, and Louisiana) that expanded Medicaid between late 2014 and 2017. As a sensitivity analysis, we included these states in the sample. Finally, we excluded around 3 percent of hospital-year observations with missing HCRIS data or with HCRIS data that do not reflect a twelve-month fiscal year. These excluded hospitals are smaller, less likely to be part of a teaching institution, and more likely to be in nonexpansion states. We also excluded around 1 percent of hospital-year observations with missing values for a given outcome or with zero reported dollars in the uncompensated care and Medicaid revenue models. Overall, our results were robust to these sample selection criteria.

Fiscal years are defined by the calendar year end date. The pre period is FY 2011–13, and the post period is FY 2014–17. FY 2015 captures a full calendar year of exposure to the Medicaid expansion for states that expanded in 2014, but FY 2014 captures only a "transition year," or partial exposure to the expansion because many hospitals use fiscal years that do not perfectly align with the calendar year.

This analysis also stratified hospitals by metropolitan and nonmetropolitan status, hospital ownership type, size, and safety-net hospital status. Metropolitan counties included large central cities, fringes of large cities (suburbs), medium-size cities, and small cities. Metropolitan status is commonly used to determine eligibility for various public programs, as well as by researchers and others who analyze rural Amer-

ica.[21,22] Our definition of safety-net hospitals included those that are required to receive Medicaid disproportionate share hospital payments under Section 1923(b) of the Social Security Act of 1935: nonfederal, acute, short-term hospitals with a Medicaid inpatient utilization rate one standard deviation or more above the state mean for all hospitals. We held each hospital's 2013 safety-net status constant across years, given that the factors that would change their safety-net status are related to the outcomes of interest and Medicaid expansion. As a sensitivity test, we defined safety-net hospitals on the basis of hospital status each year and used a broader definition to include hospitals not required to receive disproportionate share hospital payments, such as those whose Medicaid inpatient utilization rate is one standard deviation or more above the state mean for private hospitals, which tends to be lower than the state mean for all hospitals.[23]

ANALYTIC APPROACH This analysis used multivariate difference-in-differences models to compare changes in financial outcomes for hospitals in twenty-five states that expanded Medicaid eligibility in early 2014 (or beforehand) relative to changes in financial outcomes for hospitals in nineteen states that did not expand Medicaid. Early evidence shows that the Medicaid expansion alone has altered hospitals' payer mix. In 2014 the hospital share of Medicaid inpatients increased in expansion states, with a mirror-image decline in the hospital share of uninsured inpatients, but the share of privately insured inpatients remained relatively unchanged.[9]

The regression models included four separate post-period dummies for FY 2014–17 interacted with Medicaid expansion status. Each interaction term captured the effect of the ACA in a given year among states that expanded in 2014 compared with states that did not expand relative to the pre period; for example, the FY 2017 interaction term captured the effect of the Medicaid expansion in FY 2017 relative to the FY 2011–13 period. FY 2014 interacted with Medicaid expansion is the effect in FY 2014 relative to the pre period, which captures less than a full calendar year of exposure to the Medicaid expansion for most hospitals.

Each model included hospital fixed effects, fiscal year–specific dummy variables, and a random error term. The hospital fixed effects controlled for time-invariant differences across hospitals. We also included a set of control variables based on theoretical differences in motivation and behavior between different types of hospitals that likely affect their financial indicators and could also change over time, including hospital ownership, size, system status, and teaching hospital status. For example, although in theory nonprofit hospitals are accountable to their communities and are motivated by a number of factors other than profits, empirical findings have been mixed in documenting differences in behavior between nonprofit and for-profit hospitals.[24] In addition, we included control variables for hospitals' provision of substance use disorder and burn care services, which are costly services commonly used by uninsured people that might not be profitable to the hospital but provide value to the community.[25]

Reversal or weakening of Medicaid expansion would have significant financial implications for hospitals.

The models also controlled for market characteristics that in theory would affect hospital financial indicators, including the level of competition in the hospital referral region, as measured by the Herfindahl-Hirschman Index, and the unemployment rate. To the extent that these measures change over time, inclusion of these control variables was necessary to isolate the impact of Medicaid expansion on hospital financial outcomes. Additional theoretical discussion of these hospital and market characteristics is in the online appendix.[26]

We also implemented an event study specification to formally test for differences in trends between hospitals in expansion and nonexpansion states before 2014. We interacted each fiscal-year dummy variable with the Medicaid expansion dummy and assessed whether the pre-period interactions were statistically zero. This model also showed the effects of the Medicaid expansion in each year relative to 2013, the excluded reference period.

In addition, this study incorporated various robustness and sensitivity models. First, we winsorized all outcome variables at the first and ninety-ninth percentiles. This approach affects more observations than the case-by-case approach used in the main analysis. Second, we estimated models including the six late Medicaid expanders in the treatment group. Third, we limited the sample to only the subset of hospitals that provided data for all seven fiscal years in the analysis period. Finally, to provide more insight into changes over time, we estimated a model

that included dummy variables for each fiscal year-quarter end date and the interaction terms between each quarter in the post period and Medicaid expansion status.

All estimates were unweighted to reflect changes in mean values associated with the average hospital in the sample. Robust standard errors were clustered at the hospital level to correct for possible heteroskedasticity and autocorrelation, and statistical significance is denoted at the 1 percent, 5 percent, and 10 percent levels.

LIMITATIONS This analysis had several limitations. HCRIS has known limitations with item nonresponse and data quality, which we addressed by examining individual data elements (for example, trimming the data so that some erroneously reported values are treated as "missing") and through winzorizing.[27] The difference-in-differences analysis also reduced biases from accounting or reporting errors, assuming they did not emerge differentially between hospitals in expansion and nonexpansion states after 2013.

Another potential limitation is that this analysis focused on only a limited number of financial outcomes available on HCRIS. There are several other measure categories that determine hospitals' overall financial health, including liquidity (for example, days' cash on hand), solvency (for example, long-term debt to total capitalization), and adequacy of capital investment (for example, average age of plant).

Finally, changes in overall financial health for hospitals in a given state will likely depend on a host of factors not assessed in this study, such as the coverage status of residents before the ACA, Medicaid eligibility thresholds, Medicaid reimbursement levels, and the state and local government support that hospitals receive for providing uncompensated care. For example, the net impact of Medicaid expansion on hospitals' financial position would be positive only if a state's Medicaid reimbursement rate was higher than what hospitals would have collected from uninsured people if they had not gained Medicaid eligibility.[9]

Study Results

HOSPITAL CHARACTERISTICS AND TRENDS IN OUTCOMES Appendix exhibit 1 shows the characteristics of hospitals in 2017, by state Medicaid expansion status.[26] Overall, hospitals in expansion states were more likely to be nonprofit, be larger, have a teaching affiliation, and be located in metropolitan areas compared with hospitals in nonexpansion states. The mean county-level unemployment rate in 2017 was 0.5 percentage points higher among hospitals in expansion states (4.7 percent) than among hospitals in nonexpansion states (4.2 percent).

From FY 2013 to FY 2017, mean annual uncompensated care costs as a share of total expenses declined by 1.8 percentage points among hospitals in Medicaid expansion states, with most of this change occurring in FY 2015. In contrast, during this period mean annual uncompensated care costs as a share of total expenses increased by 0.5 percentage points among hospitals in nonexpansion states (exhibit 1). Trends in uncompensated care costs in real dollar terms are generally consistent with these findings (data not shown).

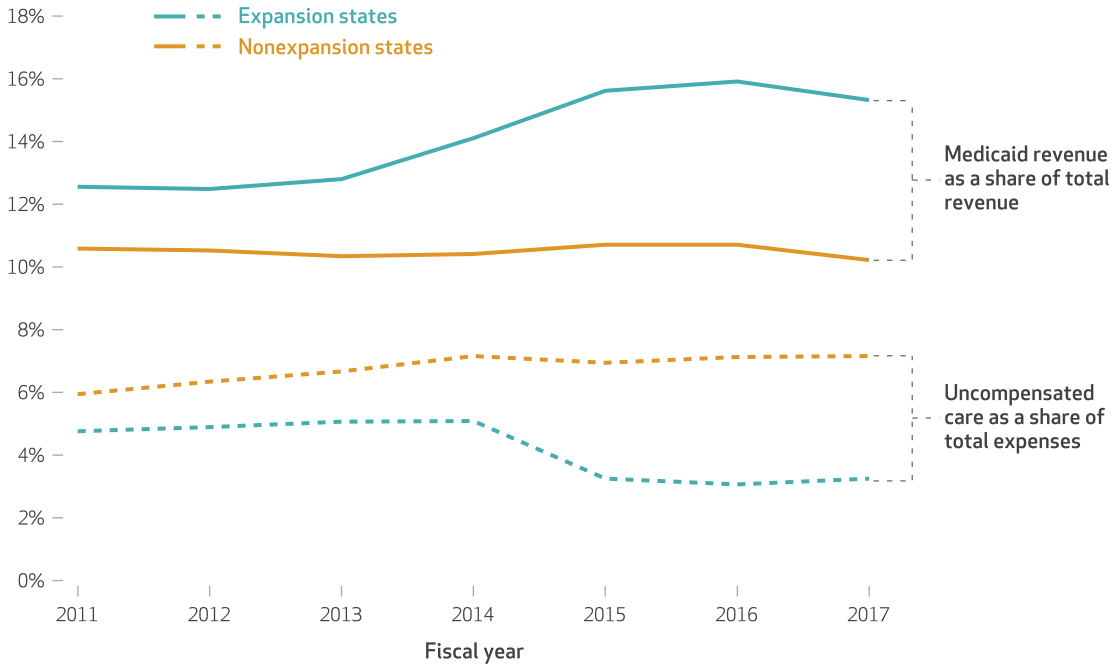
Mean annual Medicaid revenue as a share of total revenue increased significantly in the post-ACA period among hospitals in expansion states and remained relatively flat among hospitals in nonexpansion states (exhibit 1). Mean annual Medicaid revenue as a percentage of total revenue increased by 2.5 percentage points from FY 2013 to FY 2017 among hospitals in Medicaid expansion states, with nearly all of the increase occurring in FY 2014 and FY 2015. In contrast, Medicaid revenue remained roughly constant among hospitals in nonexpansion states during this period. Trends in Medicaid revenue in real dollar terms are consistent with these findings (data not shown).

Immediately after the 2014 Medicaid expansion, operating margins increased among hospitals in expansion states relative to hospitals in nonexpansion states. Mean annual operating margins in expansion states increased by 0.54 percentage points in FY 2014 and 2.1 percentage points in FY 2015, whereas operating margins in nonexpansion states declined by 0.58 percentage points in FY 2014 and increased by 0.86 percentage points in FY 2015. However, mean operating margins in both expansion and nonexpansion states decreased in FY 2016 and FY 2017, with slightly larger declines occurring in expansion states (appendix exhibit 2A).[26] The patterns and trends for mean annual excess margins are consistent with those observed for operating margins (appendix exhibit 2B).[26]

IMPACTS OF MEDICAID EXPANSION IN 2017 In the fully adjusted difference-in-differences regression analyses, in 2017 Medicaid expansion was associated with a significant $6.4 million decline in mean uncompensated care costs and a significant 2.6-percentage-point decline in mean uncompensated care costs as a percentage of total expenses relative to the 2011–13 pre period (exhibit 2). The $6.4 million decline in uncompensated care costs represents a 53.3 percent decrease relative to the FY 2011–13 baseline mean of $12.0 million among hospitals in expansion states.

EXHIBIT 1

Trends in mean annual uncompensated care costs (as a share of total expenses) and Medicaid revenue (as a share of total revenue) for hospitals in Medicaid expansion and nonexpansion states, fiscal years 2011–17



SOURCE Centers for Medicare and Medicaid Services Healthcare Cost Report Information System data, fiscal years 2011–17.

Medicaid expansion also significantly increased Medicaid revenue (exhibit 2). Relative to the 2011–13 pre period, expansion in 2017 was associated with a $8.6 million annual increase in mean Medicaid revenue and a 3.6-percentage-point increase in Medicaid revenue as a percentage of total revenue. Compared with the baseline mean of $32.9 million among hospitals in expan-

EXHIBIT 2

Difference-in-differences estimates: changes in mean hospital uncompensated care, Medicaid revenue, and margins in fiscal year 2017 versus fiscal years 2011–13

	2011–13 mean		2017 mean		Difference-in-differences	
	Nonexpansion states	Expansion states	Nonexpansion states	Expansion states	Unadjusted	Regression adjusted
UNCOMPENSATED CARE COSTS						
Cost, $ millions	10.9	12.0	12.2	8.4	–4.9	–6.4***
Percent of total expenses	6.2	4.8	7.1	3.2	–2.4	–2.6***
MEDICAID REVENUE						
Revenue, $ millions	19.3	32.9	17.6	39.4	8.2	8.6***
Percent of total revenue	10.1	12.2	10.1	15.9	3.7	3.6***
PROFITS						
Operating margins (percentage points)	–4.5	–3.8	–6.6	–4.6	1.3	1.7***
Excess margins (percentage points)	5.0	4.1	2.7	4.3	2.4	2.2***

SOURCE American Hospital Association Annual Survey database; Centers for Medicare and Medicaid Services Healthcare Cost Report Information System. **NOTES** Sample excludes hospitals in six states that expanded Medicaid between July 2014 and 2017 (New Hampshire, Indiana, Pennsylvania, Alaska, Montana, and Louisiana) and Massachusetts, as explained in the text. All regression-adjusted models control for hospital and year fixed effects, hospital ownership type, size, teaching and system status, the provision of substance use disorder and burn services, urban/rural status, percent of the hospital's county that is unemployed, and Herfindahl-Hirschman Index. The sample varies slightly from year to year based on reporting. Uncompensated care and Medicaid revenue models are also estimated among observations with nonzero dollars. Robust standard errors are clustered at the hospital level. Uncompensated care and Medicaid revenue are expressed in millions of dollars and inflated to 2018 dollars using the Consumer Price Index for All Urban Consumers: Hospitals and Related Services. ***$p < 0.01$

sion states, the $8.6 million increase represents a 26.1 percent increase in Medicaid revenue. Medicaid expansion also significantly improved mean operating margins (1.7 percentage points) and excess margins (2.2 percentage points) in 2017 relative to the 2011–13 pre-ACA period.

VARIATION IN IMPACTS ACROSS HOSPITALS In metropolitan and nonmetropolitan areas, Medicaid expansion decreased mean uncompensated care costs and increased average Medicaid revenue, with the larger changes seen in hospitals in metropolitan areas (exhibit 3). In contrast, the estimated effects of the Medicaid expansion on profit margins were larger in nonmetropolitan areas and statistically insignificant in metropolitan areas.

Medicaid expansion decreased uncompensated care costs and increased Medicaid revenue among hospitals of all ownership types (exhibit 3). However, looking at hospitals by profit status, the expansion's estimated effects on uncompensated care as a percentage of total costs (−4.1 percentage points versus −2.3 percentage points), Medicaid revenue as a percentage of total revenue (5.3 percentage points versus 3.4 percentage points), and excess margins (3.2 percentage points versus 1.6 percentage points) were larger for for-profit than nonprofit hospitals.

Medicaid expansion decreased uncompensated care costs and increased Medicaid revenue among hospitals of all sizes (exhibit 3). However, the magnitude of these changes was larger among medium-size and large hospitals than among small hospitals when uncompensated care costs and Medicaid revenue were standardized as percentages of total costs and revenue, respectively. Medicaid expansion significantly improved margins among small hospitals with fewer than 100 beds but did not significantly affect margins for medium-size or large hospitals.

Finally, Medicaid expansion decreased mean uncompensated care costs and increased average Medicaid revenue and excess margins for both safety-net and non-safety-net hospitals (exhibit 3). Although the magnitude of the decrease in mean uncompensated care costs was larger for safety-net than for non-safety-net hospitals (−$9.5 million versus −$5.8 million), the average change in uncompensated care costs as a share of total expenses was similar for both types of hospitals (−2.5 percentage points and −2.6 percentage points, respectively). Expansion resulted in double the increase in excess margins for safety-net compared with non-safety-net hospitals (4.0 percentage points and 1.9 percentage points, respectively). Although operating margins increased for non-safety-net hospitals as a result of expansion, there was not a statistically significant change in operating margins for safety-net hospitals. However, there

EXHIBIT 3

Difference-in-differences estimates: changes in mean hospital uncompensated care, Medicaid revenue, and margins, by hospital characteristics, fiscal year 2017 versus fiscal years 2011–13

	Metropolitan status		Ownership type			Hospital size (no. of beds)			Safety-net hospital	
Outcome	Metro	Nonmetro	Nonprofit	For profit	Government	Small (<100)	Medium (100–299)	Large (300+)	Yes	No
UNCOMPENSATED CARE COSTS										
Cost, $ millions	−10.0***	−0.9***	−5.6***	−6.3***	−7.2***	−0.9***	−6.8***	−18.7***	−9.5***	−5.8***
Percent of total expenses	−3.2***	−1.8***	−2.3***	−4.1***	−2.0***	−2.0***	−3.3***	−3.0***	−2.5***	−2.6***
MEDICAID REVENUE										
Revenue, $ millions	13.5***	2.2***	9.4***	8.6***	6.8***	2.0***	8.0***	27.5***	7.6***	8.7***
Percent of total revenue	4.3***	2.7***	3.4***	5.3***	4.0***	3.1***	4.3***	4.1***	3.7***	3.5***
PROFITS										
Operating margins (percentage points)	0.7	2.8***	0.3	2.4	4.7***	2.2**	1.0	0.5	2.9	1.5**
Excess margins (percentage points)	0.8	3.7***	1.6***	3.2**	2.3*	3.3***	1.1	0.5	4.0**	1.9***

SOURCE American Hospital Association Annual Survey database; Centers for Medicare and Medicaid Services Healthcare Cost Report Information System. **NOTES** Each sample excludes hospitals in six states that expanded Medicaid between July 2014 and 2017 (New Hampshire, Indiana, Pennsylvania, Alaska, Montana, and Louisiana), states that expanded Medicaid under Affordable Care Act authority before 2014 (California, Connecticut, Minnesota, New Jersey, Washington, and Washington, D.C.), and Massachusetts, as explained in the text. Regression-adjusted model controls are explained in the exhibit 2 notes. The sample varies slightly from year to year based on reporting. Uncompensated care and Medicaid revenue models are also estimated among observations with nonzero dollars. Robust standard errors are clustered at the hospital level in each regression model. Estimates are inflated to 2018 dollars using the Consumer Price Index for All Urban Consumers: Hospitals and Related Services for the variables expressed in dollars. *$p < 0.10$ **$p < 0.05$ ***$p < 0.01$

were statistically significant increases in operating margins for both safety-net and non-safety-net hospitals when the alternative definitions were used (appendix exhibit 3).[26]

YEAR-BY-YEAR IMPACTS Exhibit 4 shows the results from the event study model with each year interacted with Medicaid expansion status (with FY 2013 being the excluded reference period). For most outcomes, the interaction terms for the years before Medicaid expansion were close to zero in magnitude and were not statistically significant. In two instances (uncompensated care costs share in FY 2011 and Medicaid revenue share in FY 2011), the outcomes were trending in opposite directions relative to the estimated impacts of Medicaid expansion. Consistent with the descriptive trends in exhibit 1, these results show that differential trends in outcomes among hospitals in expansion and nonexpansion states leading up to FY 2014 did not drive the key findings in our main model.

The estimated effects of the Medicaid expansion in fiscal years 2016 and 2017 were comparable to the effects observed in FY 2015, suggesting that the improvements in hospital finances in FY 2015 were not a one-time effect that dissipated over time. The estimated effects in FY 2014 were smaller than the effects in subsequent years, as this measure did not adjust for the share of the fiscal year during which the hospital was exposed to the expansion. That is, the FY 2014 estimates only captured partial-year exposure to Medicaid expansion (a transition year), whereas the FY 2015 estimates represent the impacts associated with the first full year after Medicaid expansion.

It is important to note that these effects are relative to FY 2013, as opposed to the FY 2011–13 reference period in the main model.

SENSITIVITY ANALYSIS RESULTS When the six late Medicaid expansion states were included in the sample as part of the treatment group, the FY 2017 effects (relative to FY 2011–13) associated with each outcome were slightly smaller in magnitude but remained statistically significant. When the sample was limited to only those hospitals that contributed data throughout the entire study period (balanced panel), the estimated effects were very similar to those from the main model. When we used a more aggressive approach (winsorizing) to edit and impute erroneously coded values, our main FY 2017 findings also remained statistically significant and similar in magnitude (appendix exhibit 4).[26] Finally, when we used fiscal year quarters instead of year variables, we found that Medicaid expansion was associated with lower total uncompensated care costs, lower uncompensated care costs as a percentage of total costs, and higher Medicaid revenue as a proportion of total revenue in nearly every quarter relative to the FY 2011–13 period. We observed a similar trend in the operating and excess margins models, although there were more quarters with statistically insignificant effects (appendix exhibit 5).[26]

Discussion

These results show that the early positive financial impact of Medicaid expansion on hospitals was sustained in FY 2016 and FY 2017. Although Medicaid expansion benefited all hospital types,

EXHIBIT 4

Event study regression estimates: changes in mean hospital uncompensated care, Medicaid revenue, and margins

	Fiscal year, interacted with Medicaid expansion status					
Outcome	**2011**	**2012**	**2014**	**2015**	**2016**	**2017**
UNCOMPENSATED CARE COSTS						
Costs, $ millions	0.5	0.1	1.3	−6.8***	−6.5***	−6.2***
Percent of total expenses	0.4**	0.1	−0.5***	−2.2***	−2.6***	−2.4***
MEDICAID REVENUE						
Revenues, $ millions	0.5	−0.7	2.3***	6.7***	7.4***	8.5***
Percent of total revenue	−0.6**	−0.3	1.2***	2.3***	2.6***	3.3***
PROFITS						
Operating margins (percentage points)	−0.7	−0.1	0.8*	2.2***	2.0***	1.5**
Excess margins (percentage points)	−0.4	−0.2	0.3	1.2***	1.4***	2.0***

SOURCE American Hospital Association Annual Survey database; Centers for Medicare and Medicaid Services Healthcare Cost Reporting Information System. **NOTES** Samples of states are described in the exhibit 3 notes. Regression-adjusted model controls are explained in the exhibit 2 notes. The sample varies slightly from year to year based on reporting. Uncompensated care and Medicaid revenue models are also estimated among observations with nonzero dollars. Robust standard errors are clustered at the hospital level. Estimates are inflated to 2018 dollars using the Consumer Price Index All Urban Consumers: Hospitals and Related Services for the variables expressed in dollars. Reference year is 2013. *$p < 0.10$ **$p < 0.05$ ***$p < 0.01$

the magnitude of the effects varied by location, hospital size, profit status, and safety-net status.

Reversal or weakening of Medicaid expansion would have significant financial implications for hospitals. The Congressional Budget Office projected that repealing the ACA's individual mandate would result in thirteen million people losing coverage by 2027, nearly 40 percent of whom would have received Medicaid without the repeal.[28] This loss of coverage would place additional financial burdens on hospitals, and particularly safety-net hospitals, where uninsured people often seek care. Given the period covered by available data, our study likely did not pick up the effects of recent increases in uninsurance during the Trump presidency on hospital finances, as the most recent HCRIS data (FY 2017) mostly cover calendar year 2016.

Moreover, the Trump administration granted states more flexibility in their Medicaid programs in recent years, such as by allowing Section 1115 Medicaid demonstration waivers to include work requirements, starting 2018, and allowing states to receive a portion of their Medicaid funding as a block grant to limit spending and program size.[29,30] The extent to which states have taken advantage of this flexibility could affect whether hospitals sustain the initial gains that came from expansion.

As the effects of COVID-19 on the health care system continue to unfold, nonexpansion states should consider the potential financial benefit for their hospitals if they adopt expansion. People with underlying health conditions are at greater risk for severe COVID-19-associated disease, and chronic conditions are more common among those with lower incomes in the US, many of whom are concentrated in southern states that have yet to expand Medicaid.[31] Both Medicaid coverage and the viability of safety-net hospitals that treat the most vulnerable and rely heavily on Medicaid for payment are essential for addressing the crisis among those who are most at risk.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act of 2020 included financial resources to provide some relief to hospitals in the wake of the crisis, including $175 billion in provider relief funds for hospitals and other health care providers.[32] Despite this financial relief, hospitals in expansion states are at an advantage in terms of their financial situation going into the crisis.

Conclusion

As the nation works to address the public health crisis of the COVID-19 pandemic through policy and technological and medical innovations, it is also important not to lose sight of the existing resources and policies that are available to states. Medicaid could be an even more important source of revenue for hospitals, given the huge financial hit they are taking under COVID-19. At the same time, the effect of the pandemic may be so large that it overshadows some of the differences that have emerged between expansion and nonexpansion states in the years since 2014. Policies that erode Medicaid coverage, enrollment, benefits, and reimbursement have the potential to erode the financial gains that hospitals have seen as a result of expansion as well. Amid national concerns about the financial viability of hospitals, Medicaid expansion remains an important policy tool to continue supporting the institutions that are at the front lines of addressing the crisis of COVID-19. ■

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NOTES

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