A Report Prepared for the Virginia Department of Medical Assistance Services

# Hospital Uncompensated Care Costs in Virginia Prior to Medicaid Expansion

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We would like to express our thanks to Fredric Blavin, Ph.D., Senior Research Associate at the Urban Institute, for providing the confidence intervals for estimates of the impact of Medicaid expansion on hospital uncompensated care, which was used to develop lower and upper bound estimates of the potential impact of Medicaid expansion on hospital uncompensated care in Virginia.



#### **EXECUTIVE SUMMARY**

In May of 2018, the Virginia General Assembly passed legislation that expands Medicaid coverage to Virginia residents with incomes below 138 percent of the federal poverty line, beginning January 1, 2019. In addition to increasing access to care and improving health outcomes among the approximately 400,000 Virginians who are expected to enroll in coverage, Medicaid expansion is expected to substantially reduce hospital uncompensated care costs, which includes the cost of providing medical care to uninsured persons who are unable to pay for services.

The Department of Medical Assistance Services contracted with Virginia Commonwealth University School of Medicine to conduct an evaluation of Medicaid expansion. Using data from Virginia Health Information's Hospital Detail Reports, the objective of this report is to provide a baseline analysis of hospital uncompensated care costs in Virginia prior to Medicaid expansion, describe differences by type of hospital and region, and to assess the potential impact of Medicaid expansion on hospital uncompensated care.

Highlights from the report include:

- Virginia's acute care hospitals provided a total of about \$1.1 billion in uncompensated care in 2017, amounting to 5.9 percent of total operating costs. This compares with about 4 percent for hospitals nationally.
- Hospital uncompensated care costs in Virginia have been decreasing since 2013, due in part to decreases in the number of Virginians who are uninsured.
- If Virginia's experience is consistent with other states that have already expanded Medicaid, hospitals could see a reduction of between \$290 million and \$480 million in total uncompensated care costs following Medicaid expansion, reflecting a reduction of between 26 and 43 percent.
- Recent decreases combined with Medicaid expansion could see uncompensated care costs reduced by more than half of the total amount provided in 2013.
- Higher hospital uncompensated care costs are associated with lower performance on financial measures, including lower operating margins and total margins.
- The vast majority of uncompensated care costs are provided by hospitals located in urban areas. However, uncompensated care costs as a percent of operating costs are only slightly higher for hospitals in urban areas (5.9 percent) compared to rural areas (5.7 percent). Uncompensated care costs are higher (8.1 percent) for the 7 Critical Access Hospitals that serve geographically isolated areas in Virginia.
- Hospital uncompensated care costs vary across Virginia regions, which reflects in part state variation in uninsured rates.



#### **INTRODUCTION**

On January 1, 2019, Virginia became the 33<sup>rd</sup> state to expand Medicaid coverage to residents with family incomes less than or equal to 138 percent of the federal poverty line. In addition to increasing access to care and improving health outcomes among the approximately 400,000 Virginians who are expected to enroll, Medicaid expansion is expected to substantially reduce the costs of providing services to uninsured persons by hospitals and other health care providers.

Much of the costs of providing hospital care to uninsured persons are "uncompensated" and absorbed by hospitals as part of their operating expenses. The federal 1986 Emergency Medical Treatment and Labor Act requires all Medicare-participating hospitals with emergency departments to provide at least stabilizing care to patients in need, regardless of ability to pay. In addition, not-for-profit hospitals are expected to provide "community benefits" (including charity care) in exchange for tax exemptions and as a condition for certificate of public need approval. With few exceptions, two acute-care hospitals in Virginia – VCU Health System and the University of Virginia Medical Center – receive federal payments to subsidize care for the uninsured, known as Medicare and Medicaid Disproportionate Share Hospital Payments.

In states that have already expanded Medicaid, studies indicate that the increase in patient revenue from Medicaid resulted in an average reduction of between 26 to 43 percent in hospital uncompensated care costs following expansion. As a result, overall hospital financial performance improved following Medicaid expansion, especially benefitting those hospitals that tend to serve a higher number of uninsured people.

This report describes hospital uncompensated care costs in Virginia prior to Medicaid expansion. The analysis serves as a baseline with which to assess changes in hospital uncompensated care costs as Medicaid coverage increases and the number of uninsured in the state decreases. The report describes recent trends in hospital uncompensated care costs, as well as differences by type of hospital and across Virginia regions. Drawing on research from other states that have already expanded Medicaid, the report estimates the potential impact of Medicaid expansion on hospital uncompensated care costs in Virginia.



#### **HOW THE ANALYSIS WAS CONDUCTED**

Cost estimates in this report are derived using the 2012-2017 Virginia Health Information (VHI) Hospital Detail Reports.<sup>3</sup> VHI financial data on hospitals are independently audited as part of their contractual obligation with the Virginia Department of Health to submit financial data. Data for 2017 was the most recent year available at the time the analysis for this report was completed.

Consistent with the definition used by the American Hospital Association, uncompensated care is defined as the sum of charity care costs and bad debt.<sup>4</sup> Charity care includes free or discounted care provided to low-income patients for which payment is not expected. Bad debt includes unpaid costs that the hospital expected but did not receive. Bad debt includes costs incurred by both uninsured patients as well as the costs of uncovered services or copayments for insured patients.

Data from VHI reflect hospital "charges," which overstates the true "costs" of care because hospitals rarely receive the full amount of charges due to contractual allowances from both public and private payers. Charges for charity care and bad debt are converted to costs using a hospital specific cost-to-charge ratio, consistent with the methodology used by the American Hospital Association.<sup>5</sup>

We estimate uncompensated care costs for short-term acute care hospitals in Virginia, of which there were 80 in 2017. Long-term acute care hospitals, inpatient psychiatric hospitals, rehabilitation facilities and children's hospitals were excluded from the analysis.

As hospitals may inconsistently classify costs for uninsured people as bad debt, charity care, as well as different levels of charity care based on family income relative to poverty, most of the analysis does not distinguish between these different types of uncompensated care. Estimates of the potential impact of Medicaid expansion on Virginia hospital uncompensated care costs are based in part on the experiences of states that have already expanded Medicaid to create an upper and lower bound. It is possible that Virginia's experience with Medicaid expansion will differ from other states.

#### **VCU** evaluation

The Department of Medical Assistance Services contracted with Virginia Commonwealth University School of Medicine to conduct an evaluation of Medicaid expansion. The evaluation is conducted by faculty and staff from the Department of Health Behavior and Policy and the Department of Family Medicine and Population Health.



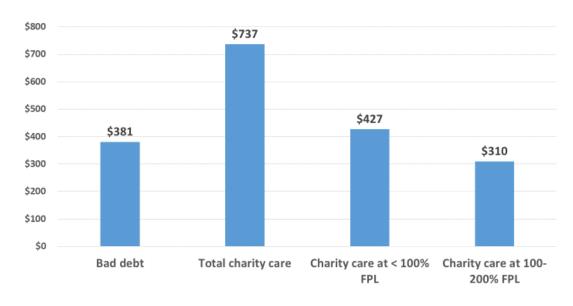
#### MORE THAN \$1 BILLION IN UNCOMPENSATED CARE COSTS IN 2017

In 2017, hospital uncompensated care costs in Virginia amounted to \$1.12 billion, representing 5.9 percent of total hospital operating costs (i.e. costs related to patient care). This is higher than the national average for hospitals, which show uncompensated care costs to be 4.2 percent of operating costs. If the volume of uncompensated care was the same in 2018 as it was in 2017, 2018 costs would amount to almost \$1.2 billion, reflecting higher costs for hospital care in general.

Charity care comprised two-thirds of hospital uncompensated costs in 2017 (\$737 million), while bad debt costs totaled \$381 million. Most charity care costs were incurred for patients with incomes less than the federal poverty line (\$427 million), while about \$300 million in costs were incurred for patients between 100-200% of the federal poverty line.

Two hospitals in Virginia provide disproportionately large amounts of uncompensated care consistent with their role as major safety net providers: Virginia Commonwealth University Health System (\$98.6 million) and University of Virginia Medical Center (\$98.4 million). Together, these two health systems account for 17.6 percent of all hospital uncompensated care in Virginia.<sup>8</sup>

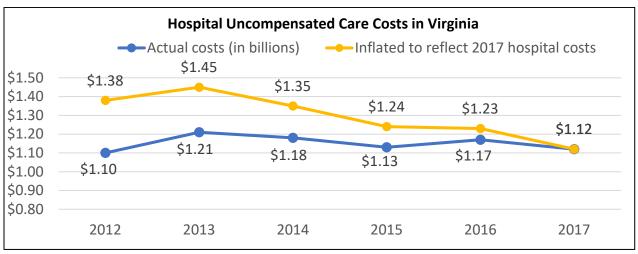
# Components of hospital uncompensated care costs for 2017 (in \$ millions)





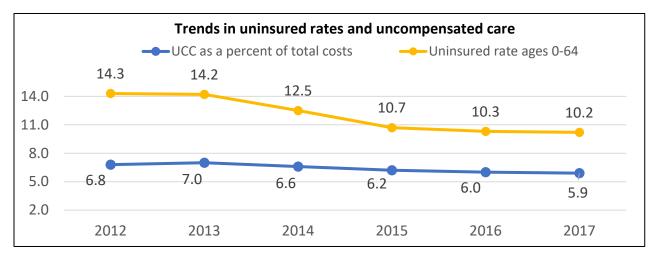
#### **HOSPITAL UNCOMPENSATED CARE COSTS DECREASING SINCE 2013**

Hospital uncompensated care costs have been decreasing since 2013. The actual costs of uncompensated care decreased by 5.8 percent, from \$1.21 billion in 2013 to \$1.12 billion in 2017. However, when prior year estimates are inflated to reflect the cost of hospital services for 2017, **uncompensated care costs decreased** by 23 percent, from \$1.45 billion in 2013 to \$1.12 billion in 2017.



Source: Virginia Health Information Hospital Detail Reports, 2012-2017.

Hospital uncompensated care costs also decreased as a percent of total operating costs, from 7 percent in 2013 to 5.9 percent in 2017. The decrease in uncompensated care costs during this period was likely driven by decreases in the number of Virginians who were uninsured. Between 2013 and 2017, the percent of Virginians ages 0-64 without health insurance decreased from 14.2 percent to 10.2 percent, resulting in an additional 267,000 Virginians who gained coverage. <sup>10</sup>



Source: Virginia Health Information Hospital Detail Reports, 2012-2017, and American Community Survey (as reported in Kaiser State Health Facts).

The increase in health insurance coverage for Virginians between 2013 and 2017 was primarily the result of increases in private health insurance coverage (over 200,000), mostly due to increases in nongroup coverage (130,000) likely obtained through the Affordable Care Act (ACA) marketplaces.

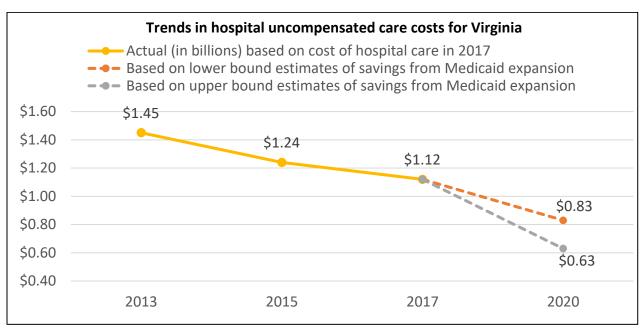


#### MEDICAID EXPANSION WILL FURTHER REDUCE HOSPITAL UNCOMPENSATED CARE COSTS

Medicaid expansion is likely to further reduce uncompensated care costs among Virginia's acute care hospitals. A recent analysis estimated that expansion will decrease the number of uninsured in Virginia by almost 250,000 people in 2019, decreasing the total number of uninsured by about one-third.<sup>11</sup>

Research shows a substantial impact of expansion on uncompensated care costs in states that have already expanded Medicaid. A study by Fredric Blavin at the Urban Institute compared changes in hospital uncompensated care costs for states that expanded Medicaid in 2014 to states that did not expand Medicaid in 2014.<sup>12</sup> The results showed that Medicaid expansion resulted in a net reduction in hospital uncompensated care costs of 34 percent.<sup>13</sup>

We used the confidence intervals in the study by Blavin to estimate a lower and upper bound of the potential impact of Medicaid expansion on hospital uncompensated care costs in Virginia. Based on this analysis, Virginia hospitals as a group could experience between a 26 percent and 43 percent reduction in hospital uncompensated care costs, or a savings of between \$290 million and \$480 million. The upper bound estimate lowers uncompensated care costs to about \$630 million following Medicaid expansion, while the lower bound estimate decreases uncompensated care costs to about \$830 million. As a percent of total costs, uncompensated care could decrease to between 3.4 percent and 4.4 percent, which would be below or roughly equal to the national average of 4.2 percent.



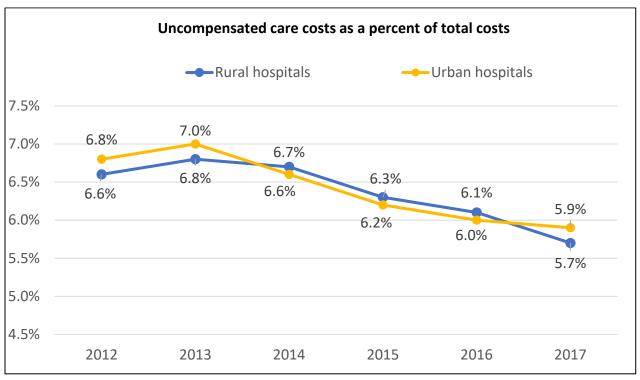
Source: Virginia Health Information Hospital Detail Reports, 2013-2017. Estimates for 2020 derived from Blavin, F. How Has the ACA Changed Finances for Different Types of Hospitals? Updated Insights From the 2015 Cost Report Data. Urban Institute (April, 2017).



#### **URBAN AND RURAL HOSPITALS**

The 54 acute care hospitals located in urban areas provided a total of \$1.04 billion in uncompensated care costs in 2017, accounting for 93 percent of all hospital uncompensated care costs in Viriginia. There are 26 acute care hospitals in rural areas that provided \$76 million in uncompensated care in 2017, accounting for 7 percent of all such costs.

Despite the differences in size and volume, urban and rural hospitals as a whole provide similar levels of uncompensated care as a percent of operating expenses. Uncompensated care amounted to 5.9 percent of operating costs for urban hospitals in 2017, only slightly higher than the 5.7 percent in costs for rural hospitals. Uncompensated care costs have declined since 2013 for both urban and rural hospitals.



Source: Virginia Health Information Hospital Detail Reports, 2012-2017.

There are 7 Critical Access Hospitals in Virginia, all but one of which are located in rural areas. These are hospitals with 25 beds or fewer located at least 35 miles from another hospital, so are often in geographically isolated areas of the state. Created through the federal Balanced Budget Act of 1997 as a result of a series of rural hospital closures, hospitals designated as Critical Access Hospitals receive higher Medicare payments to improve their financial viability and reduce the risk of closure. In 2017, Critical Access Hospitals provided a total of \$17.8 million in hospital uncompensated care, representing 8.1 percent of operating expenses.

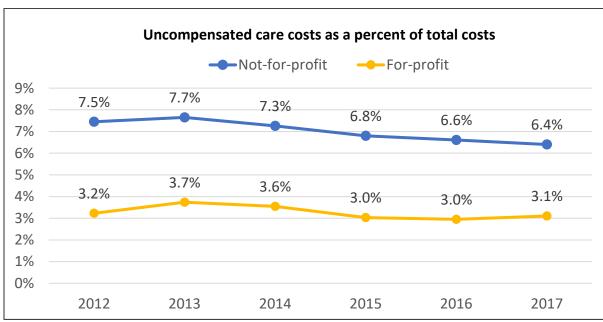


#### FOR PROFIT AND NOT FOR PROFIT HOSPITALS

Most of Virginia's acute-care hospitals are not-for-profit. To maintain their tax exempt status, not-for-profit hospitals must demonstrate that they provide "community benefit," which includes charity care as well as other community health-related services. Virginia law also requires not-for-profit hospitals to provide community benefit as a condition for certificate of public need approvals. For-profit hospitals have no such requirement.

Levels of hospital uncompensated care are considerably higher in not-for-profit than for-profit hospitals.

- Sixty-one not-for-profit hospitals provided a total of \$1.03 billion in uncompensated care in 2017, representing 6.4% of total operating costs. Excluding VCU and UVA health systems, other not-for-profit hospitals in Virginia provided \$833 million in uncompensated care, amounting to 6.3% of costs.
- Nineteen for-profit hospitals provided \$88.4 million in uncompensated care in 2017, representing 3.1% of total operating costs.
- Uncompensated care levels as a percentage of total costs decreased between 2013 and 2017 for both not-for-profit and for-profit hospitals.



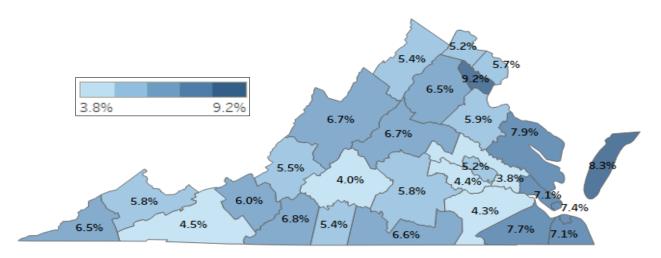
Source: Virginia Health Information Hospital Detail Reports, 2012-2017.



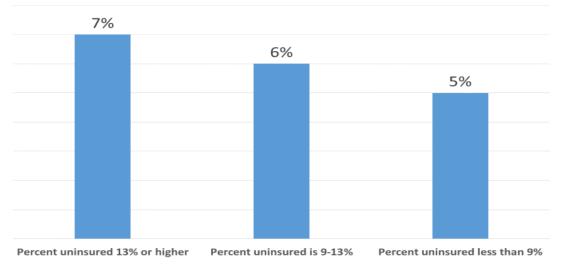
# REGIONAL VARIATION IN UNCOMPENSATED CARE COSTS

Hospital uncompensated care costs vary considerably across Virginia health planning districts, from a high of 9.2 percent of total operating costs to a low of 3.8 percent of costs. Districts with higher levels of uncompensated care also tend to have higher uninsured rates. For example, uncompensated care averages almost 7 percent of total costs in districts where 13 percent or more of the population is uninsured. In areas where less than 9 percent of the population is uninsured, uncompensated care is about 5 percent of total costs.

#### Hospital uncompensated care costs (as a percent of total costs) by Virginia Health Planning District



# Average uncompensated care costs (as a percent of total costs) by uninsured rate in health planning district





#### UNCOMPENSATED CARE COSTS AND HOSPITAL FINANCIAL PERFORMANCE

Hospitals with lower uncompensated care costs tend to perform better financially. Two common measures of financial performance are operating margins and total margins. Operating margins reflect the difference between revenue related to patient care and the costs of patient care, expressed as a proportion of patient-related revenue. <sup>15</sup> The total margin is a more comprehensive measure of profitability, as it includes all revenue sources, including from investments, charitable contributions, and the sales of goods and services not related to patient care. In both measures, positive margins show that revenues exceeded costs — indicating that hospitals are profitable — while negative margins indicate that costs exceeded revenues.

As a group, Virginia hospitals had both high operating and total margins in 2017 (7.9 percent operating margin and 9.6 percent total margin).<sup>16</sup> Nevertheless, twenty-four hospitals (30 percent of all acute care hospitals) had negative total margins in 2017.

Hospitals with higher uncompensated care costs tend to be less profitable compared to hospitals with lower uncompensated care costs. Among hospitals with uncompensated care costs greater than 8 percent of costs (about one-fourth of hospitals), operating margins were 3.3 percent, while the total margin was 4.6 percent. Almost half of these hospitals (47 percent) had negative total margins. For hospitals with the lowest uncompensated care costs (less than 4.5 percent of costs), operating margins were 9.1 percent, while the total margin was 11.6 percent.

	Operating margin	Total margin	Hospitals with negative total margins (%)
All Virginia acute care hospitals	7.9%	9.6%	30%
Level of uncompensated care			
(as a % of total costs)			
More than 8%	3.3%	4.6%	47%
4.5% to 8%	8.1%	9.7%	23%
Less than 4.5%	9.1%	11.6%	29%
Critical Access Hospitals	-8.1%	-2.8%	71%
Other rural hospitals	3.2%	6.8%	45%
Urban hospitals	8.4%	9.9%	19%
Not-for-profit hospitals	7.5%	9.6%	26%
For-profit hospitals	9.8%	9.9%	37%
Source: Virginia Health Information Hospital Detail Reports, 2017.			

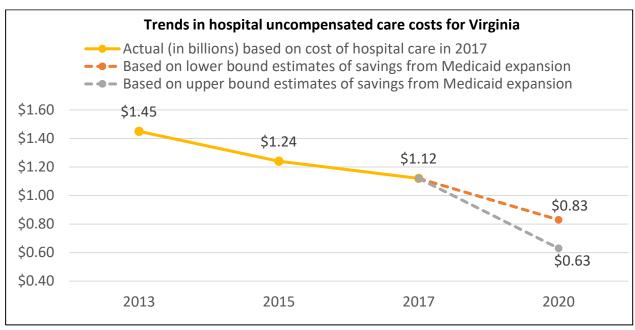
Financial performance also varied by other characteristics of hospitals associated with high levels of uncompensated care. Urban hospitals have both higher operating and total margins compared to rural hospitals. However, five of the seven Critical Access Hospitals had negative margins, with the result that operating margins were -8.1 percent overall for Critical Access Hospitals, while total margins were -2.8 percent.



#### CONCLUSION

Medicaid expansion will reduce uncompensated care costs for Virginia's hospitals. Experiences with Medicaid expansion in other states show a net reduction of between 26 and 43 percent in hospital uncompensated care costs associated with Medicaid expansion. If Virginia has a similar experience, Medicaid expansion could result in savings of between \$290 million and \$480 million in uncompensated care costs for hospitals. This will reduce total uncompensated care costs to between \$630 million and \$830 million (based on 2017 hospital costs). As a percent of operating costs, hospital uncompensated care would decrease from 5.9 percent in 2017 to between 3.4 and 4.4 percent.

The reduction in uncompensated care costs due to Medicaid expansion would reflect an acceleration of trends since these costs peaked in 2013, just before new coverage became available to Virginians through the ACA health insurance marketplaces. Combined with the anticipated impact of Medicaid expansion, Virginia hospitals could see their uncompensated care costs reduced by more than half of the amount they provided in 2013.



Source: Virginia Health Information Hospital Detail Reports, 2013-2017. Estimates for 2020 derived from Blavin, F. How Has the ACA Changed Finances for Different Types of Hospitals? Updated Insights From the 2015 Cost Report Data. Urban Institute (April, 2017).

Reductions in uncompensated care costs should improve overall hospital financial performance, especially for the state's Critical Access Hospitals and other financially vulnerable hospitals. Prior research indicates that hospitals serving the highest proportion of uninsured patients will experience the greatest decrease in uncompensated care costs.<sup>17</sup> This will free up hospital resources to expand capacity, offer new services, and invest in new technologies. Future reports will monitor the actual reductions in uncompensated care to assess their impact on Virginia's hospitals.



# APPENDIX: DEFINITION OF HOSPITAL FINANCIAL MEASURES

**Charity care costs**. The costs of care provided to low income people for which payment is not expected or received. Virginia Health Information (VHI) Hospital Detail Reports include charity care costs for patients at different income levels, including those with family incomes less than 100% of the federal poverty line, between 100-200% of the federal poverty line, and greater than 200% of the federal poverty line.

**Bad bebt costs.** The costs of providing services for which payment was expected but not received.

**Total uncompensated care costs**. The sum of bad debt and charity care costs.

**Hospital cost-to-charge ratio.** Charity care is reported as "charges" in the VHI data. A hospital specific cost-to-charge ratio is used to estimate uncompensated care "costs" for hospitals.

Cost-to-charge ratio = (Total operating expenses – bad debt) / (Gross patient revenue + other operating revenue)

Uncompensated care costs = Uncompensated care charges \* cost-to-charge ratio

**Operating costs.** The sum of labor, non-labor, capital, taxes, and bad debt expense.

**Operating margins.** A ratio that measures profitability based on activities related to patient care.

(net patient revenue – operating costs) / net patient revenue

**Total margins.** A ratio that measures profitability more comprehensively as it includes income from sources other than that related to patient care, such as from investments, donations, receipts from parking lots, gift shops, etc...

(net patient revenue – operating costs + other income) / (net patient revenue + other income)



#### **NOTES**

https://www.urban.org/sites/default/files/publication/89446/2001215-how-has-the-aca-changed-finances-for-different-types-of-hospitals.pdf.

- <sup>14</sup> Virginia Health Planning Districts were modified to combine Alexandria, Arlington, Fairfax city and Fairfax county; Richmond city and Henrico county; include Roanoke city with Alleghany district; combine Chesapeake, Portsmouth and Virginia Beach; and combine Hampton and Norfolk.
- <sup>15</sup> Cecil G. Sheps Center for Health Services Research. A Primer on Interpreting Hospital Margins (July, 2003). http://www.shepscenter.unc.edu/rural/pubs/other/Primer.pdf
- <sup>16</sup> These are aggregate margins for the group, and therefore reflect averages that are weighted based on hospital revenue.
- <sup>17</sup> Dranove D, Garthwaite C, Ody C. Uncompensated Care Decreased At Hospitals In Medicaid Expansion States But Not At Hospitals In Nonexpansion States. Health Aff(Millwood). 2016 Aug 1;35(8):1471-9.



<sup>&</sup>lt;sup>1</sup> Blavin, F. How Has the ACA Changed Finances for Different Types of Hospitals? Updated Insights From the 2015 Cost Report Data. Urban Institute (April, 2017).

https://www.urban.org/sites/default/files/publication/89446/2001215-how-has-the-aca-changed-finances-for-different-types-of-hospitals.pdf

<sup>&</sup>lt;sup>2</sup> Dranove D, Garthwaite C, Ody C. Uncompensated Care Decreased At Hospitals In Medicaid Expansion States But Not At Hospitals In Nonexpansion States. Health Aff(Millwood). 2016 Aug 1;35(8):1471-9.

<sup>&</sup>lt;sup>3</sup> Virginia Health Information. Hospital Detail Reports. http://www.vhi.org/Products/industryreport.asp

<sup>&</sup>lt;sup>4</sup> American Hospital Association. Uncompensated Care Fact Sheet (December, 2016). https://www.aha.org/system/files/2018-09/uncompensatedcarefactsheet.pdf.

<sup>&</sup>lt;sup>5</sup> American Hospital Association. Uncompensated Care Fact Sheet

<sup>&</sup>lt;sup>6</sup> American Hospital Association. Uncompensated Care Fact Sheet.

<sup>&</sup>lt;sup>7</sup> Based on the Consumer Price Index for for Hospital Services from the U.S. Bureau of Labor Statistics

<sup>&</sup>lt;sup>8</sup> Estimates of uncompensated care for these two health systems exclude federal subsidies they receive through the Medicare and Medicaid Disproprotionate Share Hospital payments.

<sup>&</sup>lt;sup>9</sup> Based on the Consumer Price Index for for Hospital Services from the U.S. Bureau of Labor Statistics.

<sup>&</sup>lt;sup>10</sup> Estimates from the American Community Survey, as reported by Kaiser State Health Facts. https://www.kff.org/state-category/health-coverage-uninsured/

<sup>&</sup>lt;sup>11</sup> Buettgens M. The Implications of Medicaid Expansion in the Remaining States: 2018 Update. Urban Institute (May, 2018). https://www.urban.org/research/publication/implications-medicaid-expansion-remaining-states-2018-update

<sup>&</sup>lt;sup>12</sup>Blavin, F. How Has the ACA Changed Finances for Different Types of Hospitals? Updated Insights From the 2015 Cost Report Data. Urban Institute (April, 2017).

<sup>&</sup>lt;sup>13</sup> The methodology used in the study by Blavin accounts for decreases in uncompensated care in non-expansion states between 2013 and 2015 that occurred due to increases in coverage through the ACA marketplaces, increases in Medicaid through non-expansion eligibility criteria, and other sources of health insurance coverage.