

# The Financial Impact of the American Health Care Act's Medicaid Provisions on Safety-Net Hospitals

*Technical Appendix*

Dobson | DaVanzo

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## **Technical Appendix**

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# Introduction

The Dobson | DaVanzo Hospital Finance Simulation Model (HFSM) was used to produce estimates of the financial impact of the American Health Care Act (AHCA) as passed by the House of Representatives on safety-net hospitals for this report. HFSM is a hospital-level micro-simulation model that is used to estimate the impact of health care reform proposals on hospital revenues, expenses, net income and financial margins. The model is built using Medicare Hospital Cost Reports (MCRs) as the primary data source. This data source allows us to determine revenues and expenses by payer (i.e., Medicare, Medicaid, other government payers, and all other payers) and in total for each U.S. hospital.

MCRs are available for most hospitals for their fiscal years beginning during federal fiscal year 2015. This provides us with information on Medicaid utilization, costs, and revenues as well as uncompensated care costs for a two-year period following the Affordable Care Act (ACA) coverage expansions.

Our model uses these data and applies assumptions about the impact of the specific AHCA Medicaid provisions. The model then incorporates dynamics of how the assumptions impact hospital utilization, costs and revenues. The model contains hospital specific information that allows us to examine financial impacts of these policy changes across various groupings of hospitals to provide distributional impacts. The following sections describe the data used in the model as well as the assumptions and methodology for quantifying the impact of the AHCA Medicaid provisions on safety-net hospitals. The final section provides financial impacts of the AHCA Medicaid provisions under a range of assumptions regarding how states will respond to the various provisions.

# Data Sources

The HFSSM model is built using Medicare Hospital Cost Reports (MCRs) as the primary data source.<sup>1</sup> Additional cost report worksheets have recently been added to report costs and revenues for other public payers (e.g., Medicaid, CHIP, and other state and local government indigent care programs) as well as uncompensated care costs (both bad debts and charity care). In addition, the MCR reports total revenues and total operating expenses for the entire facility. This data source allows us to determine revenues and expenses by payer (i.e., Medicare, Medicaid, other government payers, and all other payers) and in total for each U.S. hospital. The following sections describe how the cost reports are used to calculate revenues and expenses for each payer category.

## 1. Medicaid Revenues and Expenses

Medicaid revenues were obtained from Worksheet S-10, line 2 of the MCR. In this section of the worksheet, hospitals are instructed to report all inpatient and outpatient payments received or expected for Medicaid covered services delivered during the cost reporting period (including payments received from Medicaid managed care programs, fee-for-service, and expansion CHIP programs). These payments exclude physician and other professional services.

Hospitals are asked if they received Medicaid Disproportionate Share Hospital (DSH) or supplemental payments during the cost reporting period (line 3). If so, they can either report these payments separately (line 5) or include them with total Medicaid payments (line 2). The MCR requests that Medicaid DSH and supplemental payments be reported net of associated provider taxes or assessments.

For this database, we separate Medicaid DSH payments from all other Medicaid payments. To do this, we supplement the MCR data with Medicaid DSH reports from CMS from 2012, which are the most recently released data.<sup>2</sup> These data include Medicaid DSH payments made to each hospital receiving DSH payments in 2012. Although these data do not correspond exactly to the cost reporting periods, we consider them to be a close proxy to the hospital's cost reporting period. For hospitals that receive Medicaid

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<sup>1</sup> The April 2017 release of the Medicare Hospital Cost Reports for cost reporting periods beginning in federal fiscal year 2015 were used for this study.

<sup>2</sup> <https://www.medicaid.gov/medicaid/financing-and-reimbursement/dsh/>.

# Data Sources

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DSH payments, we subtract DSH payments reported on the CMS DSH reports from total Medicaid payments from the MCR (lines 2 plus 5) and maintain these two payment amounts separately.

Medicaid expenses are obtained from Worksheet S-10, line 7. These were calculated as total Medicaid charges multiplied by the facility-wide cost to charge ratio (line 1).

## 2. Other Government Programs Revenues and Expenses

For other government payers we used Worksheet S-10 to obtain revenues and costs for stand-alone CHIP programs and other state or local government indigent care programs.

CHIP revenues were obtained from Worksheet S-10, line 9 and revenues for other state and local government indigent care programs (other than Medicaid and CHIP) were obtained from Worksheet S-10, line 13. Similar to the cost reporting instructions for Medicaid revenues, hospitals are instructed to report all inpatient and outpatient payments received or expected for these program's covered services delivered during the cost reporting period (including payments received from managed care programs and fee-for-service). These payments exclude physician and other professional services.

CHIP expenses were obtained from Worksheet S-10, line 11 and expenses for other state and local government indigent care programs (other than Medicaid and CHIP) were obtained from Worksheet S-10, line 15. These were calculated as total program charges multiplied by the facility-wide cost to charge ratio (line 1).

## 3. Medicare Revenues and Expenses

Medicare revenues were obtained for inpatient acute care hospitals; rehabilitation and psychiatric units; hospital-owned skilled nursing facilities; hospital-owned home health agencies; hospital outpatient services; and medical education from the following cost report Worksheets:

- Inpatient acute care IPPS Hospitals – Worksheet E, Part A
- Inpatient acute care Critical Access Hospitals – Worksheet E-3, Part V
- Inpatient Rehabilitation Units – Worksheet E-3, Part III
- Inpatient Psychiatric Units – Worksheet E-3, Part II
- Outpatient Hospital Services – Worksheet E, Part B
- Hospital Based SNF Services – Worksheet E-3, Part VI
- Hospital Based Home Health Agency – Worksheet H-4, Part II

# Data Sources

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For each service type listed above, we calculated Medicare revenues as total payment due to provider less sequestration adjustment, plus beneficiary deductibles and coinsurance amounts. This approach is similar to MedPAC's calculation of total Medicare margins.

We obtained Medicare inpatient costs from Worksheet D-1, Part II, line 49 for each type of hospital and subprovider; Medicare outpatient hospital costs were obtained from Worksheet E, Part B, lines 1 and 2 for the hospital and subprovider(s); and costs for hospital-based HHAs were obtained from Worksheet H-3.

Since revenues and costs reported in the MCRs include only traditional Medicare fee-for-service, we estimated payments to hospitals from Medicare managed care plans based on the ratio of Medicare managed care days to Medicare fee-for-service days. Thus, our model is constructed to contain an estimate of total Medicare payments for each hospital, which is the sum of traditional Medicare fee-for-service and Medicare managed care revenues and costs.

## 4. Uncompensated Care

Uncompensated care expenses were obtained from Worksheet S-10 for hospital bad debt and charity care. Charity care costs were based on total payment obligation, measured at full charges, of patients who meet the hospital's charity care criteria for care delivered during the cost reporting period for the entire facility. This may include charges for non-covered services provided to patients eligible for Medicaid or other indigent care programs. Charity care costs were estimated as charity care charges multiplied by the facility-wide cost to charge ratio (line 1). The charity care costs are reduced by the amount of expected partial payments from these patients.

Bad debt expenses include the total facility amount of bad debts written off during the cost reporting period on balances owed by patients (at full charges) regardless of the date of service. This amount is reduced by the amount of reimbursable bad debts paid for Medicare patients. Bad debt costs were estimated as bad debt charges multiplied by the facility-wide cost to charge ratio (line 1).

## 5. All Other Payers

For all other payers (e.g., private insurers) we determined revenues by subtracting the sum of Medicare, Medicaid and other government payer revenues calculated above from total hospital net patient revenues (Worksheet G-3, line 3). We determined all other payer costs by subtracting the sum of Medicare, Medicaid, other government payers, and uncompensated care costs calculated above from total hospital operating expenses (Worksheet G-3, line 4).

# Data Sources

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## 6. Total Facility Revenues and Costs

The sum of revenues and costs across all payers (described above) provides total net patient revenues for the hospital and total operating expenses. In addition, we include total non-patient revenue (Worksheet G-3, line 25) and total other expenses (Worksheet G-3, line 28) in order to calculate hospital total margins.

## 7. Inclusion of Hospitals

For this analysis, we included only acute care hospitals and critical access hospitals that filed Medicare cost reports for federal fiscal year 2015. We excluded children's hospitals, rehabilitation hospitals, psychiatric hospitals, cancer hospitals and long term care hospitals.

The HFSM model excludes hospitals that did not report net patient revenues or operating expenses or if the hospital's operating margin was outside a reasonable range.<sup>3</sup> Hospitals were also excluded if the sum of Medicare, Medicaid and other government revenues were greater than reported net patient revenues. The data was annualized for hospitals that reported less than a full year or more than a full year of data.

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<sup>3</sup> A reasonable range for total margins was determined as being between the 25<sup>th</sup> percentile minus the interquartile range and the 75<sup>th</sup> percentile plus the interquartile range.



# Defining Safety-Net Hospitals

Safety-net hospitals have been defined by the Institutes of Medicine (IOM) as those hospitals that organize and deliver a significant level of care to low-income, uninsured and vulnerable populations and through mandate or mission offer access to care regardless of a patient’s ability to pay.<sup>4</sup> However, there is no agreement on a standard quantitative method that can be used to identify safety-net hospitals.

For this study, we used the criteria for “Deemed DSH Hospital” as our definition of safety-net hospitals. The definition of deemed DSH hospitals is hospitals that are required to receive Medicaid DSH payments because they serve a high share of low-income patients. To meet the deemed DSH hospital criteria, 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.<sup>5</sup>

For purposes of determining deemed DSH hospitals, we used the 2015 Medicare Hospital Cost Reports to identify all hospitals, including acute care, critical access, children’s, cancer, and psychiatric hospitals that reported at least one Medicaid inpatient hospital day of care (including Medicaid managed care patients). The Medicaid inpatient utilization rate (MIUR) was calculated for each hospital as Medicaid days (including both fee-for-service and managed care) divided by total hospital days of care.<sup>6</sup> The mean and standard deviation of MIUR values were computed for each state to establish a threshold equal to the mean plus one standard deviation.

The low-income utilization rate (LIUR) is computed as  $LIUR = ((A + B)/C) + (D/E)$  where:

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<sup>4</sup> Institute of Medicine (IOM). “America’s Health Care Safety Net: Intact but Endangered.” Washington, DC: National Academies Press, 2000.

<sup>5</sup> MACPAC, “Report to the Congress on Medicaid and CHIP”, March 2016.

<sup>6</sup> Medicaid days were obtained from worksheet S-3, column 7, lines 2, 3, 4, 14, 16 and 17. Total days were obtained from worksheet S-3, column 8, lines 14, 16 and 17.

# *Defining Safety-Net Hospitals*

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- A - Total Medicaid revenue paid to the hospital to determine patient services under the Medicaid state plan regardless of whether the services were furnished on a fee-for-service basis or through a managed care program (worksheet S-10, line 2).
- B - Cash subsidies received directly from state and local governments for patient services (worksheet S-10, line 18).
- C - Total revenues of the hospital for patient services, including the amount of such cash subsidies (worksheet G-3 line 3 plus worksheet S-10, line 18).
- D - Total hospital charges for hospital services attributable to charity care in the hospital's fiscal year, less any amount received for payment of these charges attributable to inpatient services (worksheet S-10 line 20 minus line 22).
- E - Total charges for hospital services in the hospital's fiscal year (worksheet C part I, column 8, line 202).

Hospitals that met the deemed DSH hospital definition of MIUR of at least one standard deviation above the mean for hospitals in the state or a LIUR of more than 25 percent were identified as safety-net hospitals for this study.

# Projecting Current Law Revenues and Expenses

In order to model the impact that health reform provisions have on hospitals over a period of time, we used the 2015 hospital cost report data as a starting point and trend revenues and costs through 2026 based on trends in population growth, utilization, service intensity, and medical inflation. This projection serves as a baseline of hospital revenues and expenses under current law. The following sections describe the data sources and assumptions used for each component of the projection methodology.

## 1. Population Growth

*Exhibit 1* shows the annual growth rates used in the HFSM model to account for the impact that the growth of the population will have on hospital revenues and expenses. Proxies were developed for each payer group in the model. We used the trend in the 65 and over population for Medicare, Medicaid enrollment projections from the CBO for Medicaid, and the growth in the non-aged population for all other payers.

**Exhibit 1: Annual Population Growth for Each Payer Category**

Year	Medicare <sup>1</sup>	Medicaid <sup>2</sup>	All Other Payers <sup>1</sup>
2016	3.1%	0.0%	0.3%
2017	3.1%	1.3%	0.3%
2018	3.1%	1.3%	0.3%
2019	3.1%	1.3%	0.3%
2020	3.1%	1.3%	0.3%
2021	2.9%	0.0%	0.2%
2022	2.9%	1.3%	0.2%
2023	2.9%	1.2%	0.2%
2024	2.9%	1.2%	0.2%
2025	2.9%	1.2%	0.2%
2026	2.0%	1.2%	0.3%

1/ U.S. Census Bureau, "Projections of the Population by Sex and Selected Age Groups for the United States: 2015 to 2060", Last Revised: May 9, 2017.

2/ CBO, "Detail of Spending and Enrollment for Medicaid for CBO's January 2017 Baseline."

# Projecting Revenue and Expenses

## 2. Utilization and Service Intensity Growth

*Exhibit 2* shows the annual change in hospital utilization and service intensity components used for the projections. For projections of hospital utilization per person, we used Medicare data on changes in inpatient hospital discharges per Medicare beneficiary from 2006 to 2014 and changes in hospital outpatient services per beneficiary from 2006 to 2014. Change in inpatient and outpatient intensity per service from 2012 to 2015 was obtained from the Health Care Cost Institute's analysis of a privately insured patient population over this period.<sup>7</sup> The utilization and service intensity changes were averaged across inpatient and outpatient services based on the proportion of Medicare payments between the two types of services.

**Exhibit 2: Annual Change in Utilization and Service Intensity for Inpatient and Outpatient Services**

Inpatient	
Change in Medicare inpatient discharges per FFS beneficiary average annual trend 2006 - 2014 1/	-2.74%
Average intensity change per service 2012-2015 2/	1.30%
Medicare Inpatient payments as a percent of total Medicare hospital payments 2014 1/	73.50%
Inpatient component of utilization change = (utilization + intensity) * % inpatient	-1.06%
Outpatient	
Change in Medicare outpatient services per FFS beneficiary average annual trend 2006 - 2014 1/	4.68%
Average intensity change per service 2012-2015 2/	0.10%
Medicare outpatient payments as a percent of total Medicare hospital payments 2014 1/	26.50%
Outpatient component of utilization change = (utilization + intensity) * % outpatient	1.27%
<b>Combined Inpatient and Outpatient Utilization Change</b>	<b>0.21%</b>

1/ MedPAC, "A Data Book: Health Care Spending and the Medicare Program", June 2016.

2/ Health Care Cost Institute, "2015 Health Care Cost and Utilization Report", 2016.

<sup>7</sup> Health Care Cost Institute, "2015 Health Care Cost and Utilization Report", 2016

# Projecting Revenue and Expenses

## 3. Medical Price Inflation

For the medical inflation component of the projection, we used the prospective payment system market basket increase projections from the CBO for 2016 through 2026, which averaged 3.1 percent per year over this period.<sup>8</sup>

*Exhibit 3* shows the annual cost and revenue projection factors that include population, utilization, service intensity, and price inflation that were applied to the 2015 baseline cost and revenue data to produce our projections through 2026.

**Exhibit 3: Annual Projection Factors for Hospital Revenues and Costs 2016 - 2026**

Year	Cost Growth			Revenue Growth		
	Medicare	Medicaid	All Other Payers	Medicare	Medicaid	All Other Payers
2016	5.8%	2.6%	3.0%	5.1%	2.6%	3.0%
2017	6.5%	4.7%	3.7%	5.4%	4.7%	3.7%
2018	6.7%	4.9%	3.9%	5.5%	4.9%	3.9%
2019	6.7%	4.8%	3.9%	5.5%	4.8%	3.9%
2020	6.6%	4.7%	3.8%	6.2%	4.7%	3.8%
2021	6.3%	3.3%	3.6%	5.9%	3.3%	3.6%
2022	6.3%	4.6%	3.6%	5.9%	4.6%	3.6%
2023	6.3%	4.6%	3.6%	5.9%	4.6%	3.6%
2024	6.3%	4.6%	3.6%	5.9%	4.6%	3.6%
2025	6.3%	4.6%	3.6%	5.9%	4.6%	3.6%
2026	5.3%	4.4%	3.5%	4.9%	4.4%	3.5%

We adjusted the annual growth in Medicare revenues to reflect the scheduled Medicare payment reductions under the ACA that includes reduction in annual market basket increases of 0.2 percent in 2016 and 0.75 percent for each year from 2017 to 2019 as well as productivity adjustments, which we estimated at 0.4 percent for each year of the projection period.

<sup>8</sup> CBO, "Medicare – Congressional Budget Office's January 2015 Baseline", January 24, 2017.

# Projecting Revenue and Expenses

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## 4. Projecting Current Law Medicaid DSH Payments

We projected Medicaid DSH payments separately from other Medicaid revenues since these payments are tied to federal funding limits that are specific to each state. The federal funding limits are increased annually by the change in the Consumer Price Index for all urban consumers (CPI-U) from the prior year. We inflated the 2012 Medicaid DSH payments for each hospital and for each year through 2016 based on the actual annual change in federal Medicaid DSH allotments over that period which averaged 1.3 percent per year. We inflated Medicaid DSH payments by projections in the CPI-U increases from 2016 to 2026 of about 2.4 percent annually. This projection provides an estimate of full DSH payments for each hospital.

However, the ACA specified scheduled reductions in federal Medicaid DSH allotments in order to account for the decrease in uncompensated care anticipated under the ACA's coverage expansions. Several pieces of legislation have been enacted since 2010 that have delayed, altered and extended the ACA's original Medicaid DSH reduction schedule.<sup>9</sup> As a result, the current schedule and amounts for the Medicaid DSH reductions are as follows:

- \$2.0 billion in FY 2018;
- \$3.0 billion in FY 2019;
- \$4.0 billion in FY 2020;
- \$5.0 billion in FY 2021;
- \$6.0 billion in FY 2022;
- \$7.0 billion in FY 2023; and,
- \$8.0 billion in FYs 2024 and 2025.

To determine the impact that the reduction in federal allotments will have on Medicaid DSH payments to hospitals, we first estimated the amount of the reductions for each state by year. The ACA requires the Secretary of Health and Human Services to develop a methodology to implement the reductions that meets specific requirements that will affect states differently. For this analysis, we used MACPAC's estimate of the percent reduction in federal allotments by state for 2018, applied these state-level reduction factors to our projection of federal DSH allotments by state from 2018 to 2025, and adjusted them to meet the targeted reductions for each year.<sup>10</sup>

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<sup>9</sup> <https://www.macpac.gov/subtopic/disproportionate-share-hospital-payments/>.

<sup>10</sup> MACPAC, "Report to Congress on Medicaid and CHIP", March 2017.

# Projecting Revenue and Expenses

Not all states make DSH payments to hospitals up to the full amount of their allotment. In some cases the allotment reduction may not affect states' actual DSH payments to hospitals if they are already spending less than the reduced DSH allotments. Therefore, we developed the following method to estimate the impact of the Medicaid DSH allotment reductions on payments to hospitals accounting for states spending below their allotments:

- Obtained total Medicaid DSH payments to hospitals and institutes for mental disease (IMDs) for each state from 2010 actual spending from the Medicaid Budget and Expenditure System Reports (CMS-64) and projected actual DSH spending to 2026 using CPI-U inflation rates;
- Projected the unreduced Medicaid DSH allotments for each state from 2018 to 2025, and applied the state's Federal Medical Assistance Percentage (FMAP) rate to determine total DSH dollars available;
- Calculated the amount of Medicaid DSH spending that was below the cap for each state from 2018 to 2026;
- Applied the state's FMAP rate to the calculated state-level allotment reductions to estimate total state and federal dollars that would be reduced by the cuts;
- Calculated the effect of the allotment reductions on DSH payments to hospitals as the difference between total reduction (state and federal) and the amount of spending under the cap.

The following table provides an example of the above calculations:

1	Federal Allotment Amount Before Reduction	\$50,000,000
2	State's FMAP	70%
3	Estimated Federal Allotment Reduction	\$4,000,000
4	Actual DSH Spending (State + Federal)	\$68,000,000
<b>Calculations of Impact Estimates</b>		
5	Total DSH Spending Cap (State + Federal) (#1 / #2)	\$71,428,571
6	Spending Gap (#5 - #4, minimum of \$0)	\$3,428,571
7	Allotment Reductions (State + Federal) (#3 / #2)	\$5,714,286
8	Impact on DSH Payments (#7 - #6, minimum of \$0)	\$2,285,714

Finally, the HFSSM model includes projections of full DSH payments based on the CMS 2012 state DSH audit reports and inflated to 2026 as described above. We use the results

# Projecting Revenue and Expenses

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from this methodology to reduce each hospital's full DSH payments in proportion to the state's overall DSH payment reduction in each year.

## 5. Current Law Projection of Hospital Revenues, Costs and Financial Margins

*Exhibit 4* presents our baseline projection of revenues and costs by payer as well as margins for safety-net hospitals from 2017 to 2026. Our projections indicate that total margins for safety-net hospitals will decline from 5.3 percent in 2015 to 2.9 percent in 2026 due to the aging of the population that results in increased share of Medicare in the payer mix, which pays most hospitals below cost. Since safety-net hospitals rely heavily on Medicaid and DSH payments, the projections show a steep decline in total margins between 2018 and 2025 due to the scheduled Medicaid DSH reductions under the ACA. However, the ACA Medicaid DSH reductions end in 2026, which results in an increase in total margins from 2.0 percent in 2025 to 2.9 percent in 2026.

Operating margins for safety-net hospitals are substantially lower than total margins, since they exclude income from non-patient activities (-1.5 percent in 2017) but show a similar downward trend through 2026. By 2026, we estimate operating margins for these hospitals will decline to -3.6 percent.



**Exhibit 4: Current Law Revenues and Expenses by Payer, Total Margins and Operating Margins for Safety Net Hospitals 2017 - 2026**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Medicaid Revenue	\$33,530	\$35,160	\$36,861	\$38,601	\$39,879	\$41,717	\$43,632	\$45,626	\$47,707	\$49,825
Medicaid DSH	\$5,106	\$4,634	\$4,386	\$4,131	\$3,873	\$3,599	\$3,310	\$3,025	\$3,182	\$6,232
Medicare Revenue	\$49,377	\$52,120	\$55,017	\$58,437	\$61,888	\$65,543	\$69,414	\$73,514	\$77,856	\$81,652
Other Gov Revenue	\$783	\$813	\$845	\$876	\$907	\$940	\$973	\$1,008	\$1,044	\$1,080
Other Payer Revenues	\$86,543	\$89,883	\$93,353	\$96,863	\$100,311	\$103,882	\$107,580	\$111,410	\$115,376	\$119,403
Net Patient Revenue	\$175,338	\$182,610	\$190,461	\$198,908	\$206,858	\$215,682	\$224,910	\$234,583	\$245,164	\$258,192
Total Revenue	\$188,945	\$196,743	\$205,139	\$214,138	\$222,631	\$232,016	\$241,826	\$252,100	\$263,305	\$276,966
Medicaid Cost	\$37,690	\$39,521	\$41,434	\$43,390	\$44,826	\$46,892	\$49,045	\$51,286	\$53,625	\$56,006
Medicare Cost	\$50,450	\$53,840	\$57,458	\$61,262	\$65,128	\$69,237	\$73,606	\$78,251	\$83,188	\$87,581
Other Gov Cost	\$748	\$777	\$807	\$838	\$867	\$898	\$930	\$963	\$998	\$1,032
Other Payer Costs	\$81,069	\$84,199	\$87,449	\$90,737	\$93,967	\$97,312	\$100,777	\$104,364	\$108,080	\$111,852
Uncomp Care Cost	\$7,972	\$8,279	\$8,599	\$8,922	\$9,240	\$9,569	\$9,909	\$10,262	\$10,628	\$10,998
Operating Cost	\$177,929	\$186,617	\$195,747	\$205,148	\$214,028	\$223,909	\$234,267	\$245,127	\$256,518	\$267,469
Total Cost	\$179,026	\$187,756	\$196,930	\$206,376	\$215,299	\$225,226	\$235,631	\$246,539	\$257,980	\$268,982
Operating Margin	-1.5%	-2.2%	-2.8%	-3.1%	-3.5%	-3.8%	-4.2%	-4.5%	-4.6%	-3.6%
Total Margin	5.3%	4.6%	4.0%	3.6%	3.3%	2.9%	2.6%	2.2%	2.0%	2.9%

Source: Dobson | DaVanzo analysis using Medicare Hospital Cost Report Data

# *Modeling Medicaid Provisions of the AHCA*

The HFSM model estimates changes in hospital revenues, costs and net income that would result from specific provisions of the AHCA. The model applies assumptions regarding change in coverage across a population and then incorporates dynamics of how the assumptions impact hospital utilization, costs and revenues. For this study, we modeled the financial impact on safety-net hospitals of the following five Medicaid provisions that were specified in the AHCA:

- eliminating the individual mandate and the enhanced federal funding for the Medicaid expansion
- restoring Medicaid disproportionate share hospital (DSH) payments, which are scheduled to be reduced beginning in 2018
- eliminating hospital presumptive eligibility and three-month retroactive eligibility, where hospitals that treat an uninsured patient can help them apply for Medicaid and coverage for that individual can date back for a full three months prior to the month the application was filed
- establishing per-capita limits on federal Medicaid funding to states
- providing safety-net funding for states that did not expand Medicaid

The following sections describe the assumptions and methodology used to model each of these Medicaid provisions.

## **1. Eliminating the Individual Mandate**

Although the individual mandate is not specific to Medicaid, elimination of penalties associated with the mandate will impact Medicaid enrollment. The CBO estimates that fewer people would enroll in Medicaid if penalties for not having coverage were eliminated. CBO estimated a reduction of 6 million Medicaid beneficiaries by 2019. However, CBO assumes that additional states will expand Medicaid coverage in the future, which effects their estimates of the impact under the AHCA. Since this analysis models hospital level impacts, we do not attempt to predict which states may expand Medicaid. Therefore, we developed an alternative assumption regarding how Medicaid eligible individuals will respond to this provision of the AHCA.

# Modeling AHCA Medicaid Provisions

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Prior analyses of the impact of the individual mandate on coverage, estimated that total Medicaid enrollment would be 2 percent lower under the ACA if the individual mandate was repeal compared to if the mandate was maintained.<sup>11</sup> Therefore, this analysis assumes that eliminating the individual mandate will reduce total Medicaid enrollment by 0.6 percent in 2017, 1.3 percent in 2018, and 2.0 percent by 2019. We applied these percent reductions to each state regardless of whether or not they expanded Medicaid.

## 2. Eliminating Enhanced Federal Funding for The Medicaid Expansion

Currently, 31 states and the District of Columbia have expanded Medicaid to all non-Medicare eligible individuals under age 65 with incomes up to 138 percent of poverty. These states receive enhanced federal funding for newly eligible individuals (i.e., those persons who were not previously eligible for Medicaid based on the state's eligibility criteria in 2010 or who were on placed waiting lists for a capped program) at 95 percent of spending in 2017 and phasing down to 90 percent by 2020. *Exhibit 5* shows our estimate of total Medicaid enrollment and the number of newly eligible beneficiaries in each state.

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<sup>11</sup> John Sheils and Randall Haught, "Without The Individual Mandate, The Affordable Care Act Would Still Cover 23 Million; Premiums Would Rise Less Than Predicted", Health Affairs, October 2011.

# Modeling AHCA Medicaid Provisions

**Exhibit 5: Medicaid Enrollment in 2016 by State**

Location	Medicaid Expansion	Medicaid Newly Eligible	Total Medicaid	Percent Newly Eligible
United States		11,578,400	73,885,500	16%
Alabama	No	0	1,047,100	0%
Alaska	Yes	14,400	137,800	10%
Arizona	Yes	110,400	1,884,600	6%
Arkansas	Yes	278,100	767,000	36%
California	Yes	3,541,700	13,107,000	27%
Colorado	Yes	423,500	1,321,700	32%
Connecticut	Yes	194,100	856,100	23%
Delaware	Yes	11,500	221,800	5%
District of Columbia	Yes	62,600	236,500	26%
Florida	No	0	4,031,300	0%
Georgia	No	0	1,889,500	0%
Hawaii	Yes	32,300	319,300	10%
Idaho	No	0	305,300	0%
Illinois	Yes	654,200	2,925,100	22%
Indiana	Yes	240,300	1,280,300	19%
Iowa	Yes	138,500	591,400	23%
Kansas	No	0	384,900	0%
Kentucky	Yes	443,300	1,281,500	35%
Louisiana *	Yes	375,000	1,841,200	20%
Maine	No	0	272,100	0%
Maryland	Yes	248,200	1,103,700	22%
Massachusetts	Yes	0	1,845,500	0%
Michigan	Yes	601,300	2,321,200	26%
Minnesota	Yes	222,300	1,246,000	18%
Mississippi	No	0	729,700	0%
Missouri	No	0	969,200	0%
Montana	Yes	46,700	201,300	23%
Nebraska	No	0	237,000	0%
Nevada	Yes	203,900	592,400	34%
New Hampshire	Yes	52,700	192,100	27%

# Modeling AHCA Medicaid Provisions

**Exhibit 5: Medicaid Enrollment in 2016 by State (cont.)**

Location	Medicaid Expansion	Medicaid Newly Eligible	Total Medicaid	Percent Newly Eligible
New Jersey	Yes	552,400	1,682,200	33%
New Mexico	Yes	243,100	855,800	28%
New York	Yes	268,900	4,961,100	5%
North Carolina	No	0	1,986,400	0%
North Dakota *	Yes	19,400	89,300	22%
Ohio	Yes	635,700	2,983,000	21%
Oklahoma	No	0	669,200	0%
Oregon	Yes	478,800	1,102,100	43%
Pennsylvania	Yes	664,100	2,747,700	24%
Rhode Island	Yes	60,500	281,600	21%
South Carolina	No	0	1,128,600	0%
South Dakota	No	0	109,100	0%
Tennessee	No	0	1,690,000	0%
Texas	No	0	4,327,900	0%
Utah	No	0	334,900	0%
Vermont	Yes	0	209,500	0%
Virginia	No	0	992,800	0%
Washington	Yes	580,000	1,818,300	32%
West Virginia	Yes	180,500	510,200	35%
Wisconsin	No	0	1,201,800	0%
Wyoming	No	0	64,400	0%

Note: \* Medicaid enrollment of newly eligible persons was estimated for Louisiana and North Dakota.

Source: Medicaid Enrollment January-March 2016 - The Henry J. Kaiser Family Foundation

Under the AHCA, the federal government will eliminate the enhanced federal matching rate for new Medicaid expansion group enrollees. States that have expanded Medicaid to non-aged adults as of December 31, 2019 will continue to receive the enhanced matching rate for newly eligible people enrolled as of December 31, 2019 who do not have a break in coverage for more than one month after that date. States may continue to enroll new applicants, but will only receive the state's standard matching rate for spending for these people. The CBO estimates that elimination of the enhanced federal funding would reduce Medicaid enrollment by 14 million by 2026. For modeling this provision, we assume the following:

# Modeling AHCA Medicaid Provisions

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- For this analysis, we do not assume that any additional states beyond those that have already done so will expand Medicaid prior to 2020.
- We assume that 4 states (DE, MA, NY and VT) will continue with the expansion and fund the difference between the states' regular FMAP and enhanced FMAP with state funds. These states were selected because expansion enrollees account for 5 percent or less of total Medicaid enrollees and covered all adults to near or above 138 percent of FPL prior to the ACA. For these 4 states, we assume there is no change in Medicaid enrollment from current law except for the impact of the individual mandate.
- We assume that 8 states (AR, AZ, IL, IN, MI, NH, NM, and WA) will discontinue the expansion beginning in 2020. These states have triggers in statute to discontinue the expansion when federal funding is reduced.<sup>12</sup> For these 8 states, we assume that all newly eligible Medicaid beneficiaries are dis-enrolled in 2020.
- We assume that the remainder of expansion states will continue to cover grandfathered expansion group enrollees as of 12/31/2019, but will not enroll new expansion eligible people or re-enroll those who have a lapse of coverage. For these states, we use CBO's assumption that turnover in the Medicaid program will lose 66 percent of expansion enrollees by 2022 and 95 percent by 2024.<sup>13</sup> Thus 5 percent will continue as long term Medicaid enrollees.

Using these assumptions, we modeled the impact of reduced Medicaid enrollment as described in the following section.

### 3. Modeling Reductions in Medicaid Coverage

Eliminating the individual mandate and the Medicaid expansion will reduce Medicaid enrollment. Using Medicaid enrollment data and the assumptions described above, we calculated the percent reduction in total Medicaid enrollment for each state from 2017 to 2026. As Medicaid enrollees lose coverage, hospitals will lose Medicaid payments for the services that would have been provided to these patients. For each hospital, we reduce Medicaid revenues and costs in proportion to the percent reduction in Medicaid enrollment for the state in which the hospital is located. This is done for each year of the projection period 2017-2026.

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<sup>12</sup> POLITICO, "GOP Idea For Phasing Out Medicaid Expansion Could Backfire", May 18, 2017.

<sup>13</sup> CBO, "Cost Estimate: American Health Care Act", March 13, 2017.

# Modeling AHCA Medicaid Provisions

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We assume that 10 percent of persons losing Medicaid coverage will obtain private employer-based coverage or market place coverage. This assumption is based on a recent analysis of crowd-out within the Wisconsin BadgerCarePlus program for 2016.<sup>14</sup> The remaining 90 percent of persons losing Medicaid coverage are assumed to become uninsured.

***Impact on revenues and costs for persons moving to private coverage:*** Using the crowd-out assumption, we assume that 10 percent of Medicaid costs that were calculated to be reduced as a function of reduced Medicaid enrollment are added to the hospital's costs for privately insured patients. Private insurance revenues in the model are recomputed by multiplying the additional costs by the private insurer payment-to-cost ratio for that hospital. This process increases hospital revenues and costs for privately insured patients.

***Impact on revenues and costs for persons becoming uninsured:*** We assume that 90 percent of Medicaid costs that were calculated to be reduced as a function of reduced Medicaid enrollment will become hospital uncompensated care costs. A number of studies have shown that the uninsured consume far less healthcare services than insured persons with similar economic and demographic characteristics and have attempted to estimate the potential utilization increase as uninsured persons become insured.<sup>15,16</sup> For this analysis, we reverse engineered the results of those studies and estimate that a newly uninsured population will reduce utilization of hospital services by about 44 percent. For modeling purposes, we reduce these costs by 44 percent, which are then added to hospital uncompensated care costs. This process increases hospital uncompensated care costs for new uninsured patients.

## 4. Restoring Medicaid DSH Payments

The AHCA restores most of the Medicaid DSH reductions specified under the ACA. The ACA DSH reductions are scheduled to begin in 2018 and end in 2025. The AHCA entirely restores DSH payments for states that did not expand Medicaid. For expansion states, the AHCA maintains the ACA's DSH payment reductions for 2018 and 2019, but restores DSH payments starting in 2020.

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<sup>14</sup> Dague. Estimates of Crowd-out from a Public Health Insurance Expansion Using Administrative Data. NBER Working Paper Series. May 2011.

<sup>15</sup> Institute of Medicine (US) Committee on the Consequences of Uninsurance. Hidden Costs, Values Lost: Uninsurance in America. Washington (DC): National Academies Press (US); 2003. 3, Spending on Health Care for Uninsured Americans: How Much, and Who Pays? Available from: <https://www.ncbi.nlm.nih.gov/books/NBK221653/>.

<sup>16</sup> Levine et al. The Impact of Coverage Shifts on Hospital Utilization. McKinsey. May 2013. The McKinsey, in 2013, conducted a study of existing literature on change in the newly insured' utilization behavior, and then built their own model to estimate potential utilization increases by type of service (i.e., inpatient, outpatient, and emergency) as the uninsured gain their coverage.

# Modeling AHCA Medicaid Provisions

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As described in the section above on “Projecting Current Law Medicaid DSH Payments,” we projected each hospital’s Medicaid DSH payments through 2026 before applying the ACA’s scheduled reductions as well as after the reduction methodology is applied. To model this provision, we assume that DSH payments to hospitals in nonexpansion states revert back to the DSH amounts calculated before applying the ACA’s DSH reduction methodology beginning in 2018. We assume that DSH payments to hospitals in expansion states revert back to the DSH amounts calculated before applying the ACA’s DSH reduction methodology beginning in 2020.

## 5. Eliminating Hospital Presumptive and Three-Month Retroactive Eligibility

The AHCA repeals hospital presumptive eligibility determination beginning in 2020 and eliminates the three-month retroactive coverage requirement beginning in FY 2017. The hospital presumptive eligibility provision under the ACA provided hospitals with the prerogative to make presumptive eligibility determinations for low-income people who may be eligible for Medicaid but are not enrolled. The ability to enroll patients at the point of service reduces hospitals’ uncompensated care and the retroactive coverage provisions allow hospitals to collect Medicaid payments for services provided to these patients up to three months prior to being enrolled.

Actuarial analyses of Medicaid payments have shown that about 5 percent of Medicaid payments occur during the retrospective eligibility period.<sup>17</sup> Discussions with an officer of a safety-net hospital who estimated the potential impact of eliminating retroactive eligibility on their facility also found that it would result in about a 5 percent loss of Medicaid revenue.

To model the impact of this provision, we assumed that total Medicaid revenues for each hospital are reduced by 5 percent in each year from 2020 to 2026. We also assumed that hospitals would continue to provide these services to patients, but the costs incurred would become uncompensated care. Therefore, 5 percent of Medicaid costs for each hospital and each year are moved from Medicaid to uncompensated care.

## 6. Imposing Federal Per-Capita Limits on Medicaid Spending

The AHCA incorporates per-capita limits on Medicaid spending beginning in 2020. Per-capita limits are determined by enrollee category (aged, disabled, children, expansion adults, and other adults). The caps exclude Medicaid DSH payments, Medicare copayments, and enrollees in certain eligibility groups. Per-capita limits will be based on

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<sup>17</sup> The Lewin Group, “Assessment of Medicaid Managed Care Expansion Options In Illinois”, Prepared for: Commission on Government Forecasting and Accountability, May 3, 2005. <http://www.ilmaternal.org/IMCHC%20Misc/LewinGroupreportMay2005.pdf>.



# Modeling AHCA Medicaid Provisions

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2016 spending per enrollee and trended to future years by the medical component of CPI (plus one percent for aged and disable eligibility groups). If Medicaid spending exceeds the limits, then federal dollars as a percent of total spending will decline over time leaving states with a larger burden of the cost. In order to control their spending liability, states will need to incorporate cost cutting measures such as eligibility limits, reduced provider payments, reduced optional benefits, waiting lists for waiver serves, or some combination of the above.

Using projections of Medicaid spending per-enrollee from the CMS Office of the Actuary and CBO projections of changes in medical CPI of 3.7 percent annually, we estimate that the per-capita limits would gradually reduce federal Medicaid spending by 1.4 percent in 2020 and by 4.6 percent by 2026. *Exhibit 6* presents the data used to produce this assumption.

However, it is difficult to determine how states will respond to these limits on federal spending. For this analysis, we assume that states will reduce overall spending to stay within these limits and will not use additional state funding. We also assume one-half of the spending reductions will be achieved by reducing provider payment levels.

To model the impact of this provision on hospitals, we reduced Medicaid revenues to hospitals in each year as follows in order to reflect the assumption that half of the impact will be accomplished through reduced provider payments:

- 2020 – 0.7%
- 2021 – 0.9%
- 2022 – 1.1%
- 2023 – 1.4%
- 2024 – 1.7%
- 2025 – 2.0%
- 2026 – 2.3%

# Modeling AHCA Medicaid Provisions

**Exhibit 6: Estimated Distribution on Annual AHCA Safety-Net Funding by State**

	2020	2021	2022	2023	2024	2025	2026
<b>Projected Enrollment (millions) <sup>1</sup></b>							
Aged	6.4	6.6	6.9	7.1	7.3	7.5	7.7
Disabled	11.0	11.1	11.2	11.3	11.4	11.5	11.6
Children	29.5	29.9	30.3	30.6	30.9	31.1	31.3
Adults	16.2	16.4	16.5	16.6	16.7	16.8	16.9
Expansion Adults	12.7	12.8	13.0	13.0	13.1	13.2	13.3
Total	75.8	76.8	77.9	78.6	79.4	80.1	80.8
<b>Federal &amp; state spending per enrollee <sup>1</sup></b>							
Aged	\$16,969	\$17,626	\$18,326	\$19,083	\$19,910	\$20,780	\$21,688
Disabled	\$24,003	\$25,207	\$26,487	\$27,854	\$29,321	\$30,877	\$32,516
Children	\$4,130	\$4,328	\$4,538	\$4,761	\$4,997	\$5,246	\$5,507
Adults	\$6,381	\$6,709	\$7,057	\$7,425	\$7,815	\$8,227	\$8,661
Expansion Adults	\$5,981	\$6,309	\$6,659	\$7,027	\$7,421	\$7,838	\$8,278
<b>Projected per enrollee spending limits (federal &amp; state)</b>							
Aged	\$17,365	\$18,182	\$19,036	\$19,931	\$20,868	\$21,848	\$22,875
Disabled	\$24,132	\$25,266	\$26,454	\$27,697	\$28,999	\$30,362	\$31,789
Children	\$3,999	\$4,147	\$4,300	\$4,459	\$4,624	\$4,795	\$4,973
Adults	\$6,031	\$6,254	\$6,485	\$6,725	\$6,974	\$7,232	\$7,500
Expansion Adults	\$6,853	\$7,106	\$7,369	\$7,642	\$7,925	\$8,218	\$8,522
<b>Spending per enrollee above caps</b>							
Aged	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Disabled	\$0	\$0	\$33	\$157	\$322	\$515	\$727
Children	\$131	\$181	\$238	\$302	\$373	\$451	\$534
Adults	\$350	\$455	\$572	\$700	\$841	\$995	\$1,161
Expansion Adults	\$0	\$0	\$0	\$0	\$0	\$0	\$0

1/ CMS Office of the Actuary, "2016 Actuarial Report on the Financial Outlook for Medicaid", 2016.

## 7. Providing Safety-Net Funding to Non-Expansion States

The AHCA would provide \$2.0 billion per year from 2018 to 2022 to states that did not adopt the Medicaid expansion in order to help supplement payments to safety-net providers that treat Medicaid patients. The safety-net funds are allocated to states based on each state's number of individuals below 138 percent of FPL relative to all non-expansion states. *Exhibit 7* shows our estimate of the annual distribution of AHCA safety-net funding for each of the nonexpansion states.

# Modeling AHCA Medicaid Provisions

**Exhibit 7: Estimated Distribution on Annual AHCA Safety-Net Funding by State**

State	Estimated Population Under 138% FPL <sup>1</sup>	Distribution of Population under 138% FPL	Annual Distribution of Safety Net Funds (millions)
Alabama	1,172,010	4.3%	\$86.8
Florida	4,826,686	17.9%	\$357.3
Georgia	2,567,966	9.5%	\$190.1
Idaho	333,506	1.2%	\$24.7
Kansas	588,822	2.2%	\$43.6
Maine	256,210	0.9%	\$19.0
Missouri	1,009,246	3.7%	\$74.7
Mississippi	846,032	3.1%	\$62.6
North Carolina	2,256,606	8.4%	\$167.1
Nebraska	316,784	1.2%	\$23.5
Oklahoma	926,060	3.4%	\$68.6
South Carolina	1,069,794	4.0%	\$79.2
South Dakota	175,818	0.7%	\$13.0
Tennessee	1,494,448	5.5%	\$110.6
Texas	6,123,688	22.7%	\$453.4
Utah	487,226	1.8%	\$36.1
Virginia	1,441,276	5.3%	\$106.7
Wisconsin	1,032,370	3.8%	\$76.4
Wyoming	89,684	0.3%	\$6.6
<b>Total</b>	<b>27,014,232</b>	<b>100.0%</b>	<b>\$2,000.0</b>

1/ Distribution of Total Population by Federal Poverty Level in 2015 | The Henry J. Kaiser Family Foundation

The AHCA does not specify how the safety-net funds are to be used and states would have considerable flexibility to use these funds how they see appropriate. However, payments to individual providers cannot exceed the costs of treating uninsured patients plus the provider’s payment shortfall under Medicaid.

For this analysis, we assume that up to one-half of the funds appropriated to each non-expansion state would be paid to the safety-net hospitals in this study since they are the hospitals that are required to receive DSH payments. As specified under the legislation, we assume that payments to individual providers are limited to the costs of treating uninsured patients plus the provider’s payment shortfall under Medicaid (cost of treating Medicaid patients that exceeds Medicaid and DSH payments) in that year.

# Modeling AHCA Medicaid Provisions

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## 8. Impact of the AHCA Medicaid Provisions on Safety-Net Hospitals

*Exhibit 8* presents estimates of revenues and expenses by payer as well as financial margins after the impact of the AHCA Medicaid provisions. *Exhibit 9* shows the change in revenues and expenses by payer under the AHCA compared to current law.

**Exhibit 8: Revenues and Expenses by Payer for Safety Net Hospitals after the AHCA Medicaid Provisions 2017 - 2026**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Medicaid Revenue	\$33,295	\$34,703	\$36,124	\$34,158	\$34,120	\$34,039	\$34,804	\$35,557	\$37,067	\$38,599
Medicaid DSH	\$5,106	\$4,781	\$4,629	\$5,405	\$5,535	\$5,668	\$5,804	\$5,943	\$6,086	\$6,232
Medicare Revenue	\$49,377	\$52,120	\$55,017	\$58,437	\$61,888	\$65,543	\$69,414	\$73,514	\$77,856	\$81,652
Other Gov Revenue	\$783	\$813	\$845	\$876	\$907	\$940	\$973	\$1,008	\$1,044	\$1,080
Other Payer Revenues	\$86,571	\$89,939	\$93,443	\$97,152	\$100,764	\$104,576	\$108,404	\$112,375	\$116,385	\$120,456
Net Patient Revenue	\$175,132	\$183,229	\$190,930	\$196,902	\$204,088	\$211,639	\$219,399	\$228,397	\$238,437	\$248,020
Total Revenue	\$188,740	\$197,362	\$205,609	\$212,132	\$219,860	\$227,973	\$236,315	\$245,914	\$256,579	\$266,794
Medicaid Cost	\$37,426	\$39,007	\$40,605	\$38,720	\$38,748	\$38,733	\$39,711	\$40,688	\$42,543	\$44,432
Medicare Cost	\$50,450	\$53,840	\$57,458	\$61,262	\$65,128	\$69,237	\$73,606	\$78,251	\$83,188	\$87,581
Other Gov Cost	\$748	\$777	\$807	\$838	\$867	\$898	\$930	\$963	\$998	\$1,032
Other Payer Costs	\$81,096	\$84,250	\$87,532	\$91,000	\$94,371	\$97,924	\$101,501	\$105,210	\$108,964	\$112,775
Uncomp Care Cost	\$8,109	\$8,547	\$9,031	\$12,331	\$13,384	\$14,797	\$15,774	\$16,811	\$17,475	\$18,149
Operating Cost	\$177,829	\$186,422	\$195,433	\$204,151	\$212,497	\$221,590	\$231,522	\$241,922	\$253,167	\$263,970
Total Cost	\$178,926	\$187,561	\$196,616	\$205,379	\$213,769	\$222,907	\$232,886	\$243,334	\$254,630	\$265,483
Operating Margin	-1.5%	-1.7%	-2.4%	-3.7%	-4.1%	-4.7%	-5.5%	-5.9%	-6.2%	-6.4%
Total Margin	5.2%	5.0%	4.4%	3.2%	2.8%	2.2%	1.5%	1.0%	0.8%	0.5%

Source: Dobson | DaVanzo analysis using Medicare Hospital Cost Report Data

**Exhibit 9: Change in Revenues and Expenses by Payer for Safety Net Hospitals Under the AHCA Compared to Current Law 2017 – 2026**

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2017-26
Medicaid Revenue	(\$235)	(\$457)	(\$737)	(\$4,443)	(\$5,758)	(\$7,678)	(\$8,828)	(\$10,069)	(\$10,640)	(\$11,225)	(\$60,071)
Medicaid DSH	\$0	\$147	\$243	\$1,274	\$1,662	\$2,068	\$2,494	\$2,918	\$2,904	\$0	\$13,711
Medicare Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Gov Revenue	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Payer Revenues	\$29	\$56	\$90	\$290	\$453	\$694	\$824	\$965	\$1,009	\$1,054	\$5,464
Net Patient Revenue	(\$206)	\$619	\$470	(\$2,006)	(\$2,770)	(\$4,042)	(\$5,511)	(\$6,186)	(\$6,727)	(\$10,172)	(\$36,531)
Total Revenue	(\$206)	\$619	\$470	(\$2,006)	(\$2,770)	(\$4,042)	(\$5,511)	(\$6,186)	(\$6,727)	(\$10,172)	(\$36,531)
Medicaid Cost	(\$264)	(\$514)	(\$829)	(\$4,669)	(\$6,078)	(\$8,159)	(\$9,334)	(\$10,598)	(\$11,082)	(\$11,574)	(\$63,101)
Medicare Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Gov Cost	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Other Payer Costs	\$26	\$51	\$83	\$263	\$404	\$612	\$724	\$846	\$884	\$924	\$4,818
Uncomp Care Cost	\$137	\$268	\$432	\$3,409	\$4,144	\$5,228	\$5,865	\$6,548	\$6,847	\$7,151	\$40,029
Operating Cost	(\$100)	(\$195)	(\$314)	(\$997)	(\$1,530)	(\$2,319)	(\$2,745)	(\$3,204)	(\$3,350)	(\$3,499)	(\$18,254)
Total Cost	(\$100)	(\$195)	(\$314)	(\$997)	(\$1,530)	(\$2,319)	(\$2,745)	(\$3,204)	(\$3,350)	(\$3,499)	(\$18,254)
Operating Margin	-0.1%	0.5%	0.4%	-0.5%	-0.7%	-0.9%	-1.4%	-1.4%	-1.5%	-2.8%	
Total Margin	-0.1%	0.4%	0.4%	-0.4%	-0.5%	-0.7%	-1.1%	-1.2%	-1.3%	-2.4%	

Source: Dobson | DaVanzo analysis using Medicare Hospital Cost Report Data

# *Impact of the AHCA Under Alternative Assumptions*

The federal funding reductions from the Medicaid provisions in the AHCA will effect states differently, particularly states that expanded Medicaid compared to states that did not expand, so it is difficult to predict how each state will respond to the legislation. For example, the above analyses assume that only 8 states will completely discontinue the expansion prior to 2020. However, more states may decide to discontinue instead of attempting to maintain a program where enrollees cannot be added at the enhanced federal matching rate. Under the Medicaid per-capita limits, we estimate that states will need to reduce spending in order to stay within the federal limits. In order to control their spending, states could incorporate various cost cutting measures in addition to provider payment reductions such as eligibility limits, reduced optional benefits, incorporating waiting lists for specific waiver services or some combination of these options. Finally, non-expansion states will have considerable flexibility for how they will use the safety-net funding and how they distribute these funds to providers.

Therefore, we performed a set of sensitivity analyses in order to provide a range of potential financial impacts as they relate to safety-net hospitals. The assumptions used for the analyses presented above provide our “mid-range” estimate for the impact of the AHCA on safety-net hospital. We used the following sets of assumptions to lay out low and high impact scenarios.

## **Low Impact Scenario:**

- ***Medicaid Expansion*** – similar to our mid-range assumptions, we assume that four states (DE, MA, NY and VT) will continue with the expansion and fund the difference between the states’ regular FMAP and enhanced FMAP with state funds. We assume that the remainder of expansion states will continue to cover grandfathered expansion group enrollees as of 12/31/2019, but will not re-enroll expansion eligible people who have a lapse of coverage. For these states, we use CBO’s assumption that Medicaid turnover will lose 66 percent of expansion enrollees by 2022 and 95 percent by 2024. Thus 5 percent will continue long term Medicaid.

# Impact Under Alternative Assumptions

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- **Federal Limits on Per-Capita Spending** - similar to our mid-range assumptions, we assume that states will reduce overall spending to stay within these limits and will not use additional state funding. However, we assume one-quarter instead of one-half the spending reductions will come from lower provider payment levels.
- **Safety Net Funds to Non-Expansion States** – the low-range scenario assumes that up to 75 percent of available funds (compared to one-half in the mid-range scenario) appropriated to non-expansion states would be paid to safety-net hospitals. As specified under the legislation, we assume that payments to individual providers are limited to the costs of treating uninsured patients plus the provider’s payment shortfall under Medicaid (including regular and DSH payments) in that year.

## High Impact Scenario:

- **Medicaid Expansion** – for this scenario, we assume that all Medicaid expansion states will discontinue the expansion in 2020 due to the reduced federal funding and will not maintain coverage of grandfathered expansion enrollees.
- **Federal Limits on Per-Capita Spending** - similar to our mid-range assumptions, we assume that states will reduce overall spending to stay within these limits and will not use additional state funding. However, we assume 75 percent of the spending reductions will come from lower provider payment levels compared to our assumption of one-half in the mid-range scenario.
- **Safety Net Funds to Non-Expansion States** – the low-range scenario assumes that up to 25 percent of available funds (compared to one-half in the mid-range scenario) appropriated to non-expansion states would be paid to safety-net hospitals. As specified under the legislation, we assume that payments to individual providers are limited to the costs of treating uninsured patients plus the provider’s payment shortfall under Medicaid (including regular and DSH payments) in that year.

Based on the high and low range assumptions described above, we estimate that the Medicaid provisions specified in the AHCA would reduce revenues to safety-net hospitals relative to current law by between \$30.4 and \$50.8 billion over the 2017 to 2026 period (*Exhibit 10*). As individuals lose coverage and use less hospital services, we estimate that hospital expenses would be reduced between \$17.2 and \$23.9 billion. This would result in a reduction in net income to safety-net hospitals totaling between \$13.3 and \$26.9 billion (or an 18% to 36% reduction in net income relative to current law) over this 10-year period.



## Impact Under Alternative Assumptions

**Exhibit 10: Change in Key Financial Performance Metrics for Safety-Net Hospitals Under Various Assumption Scenarios (2017 – 2026)**

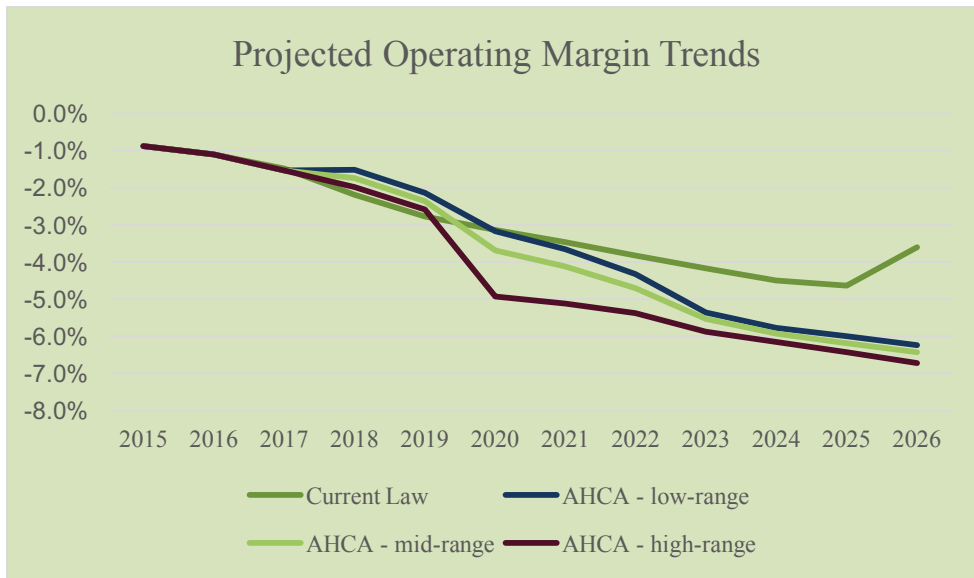
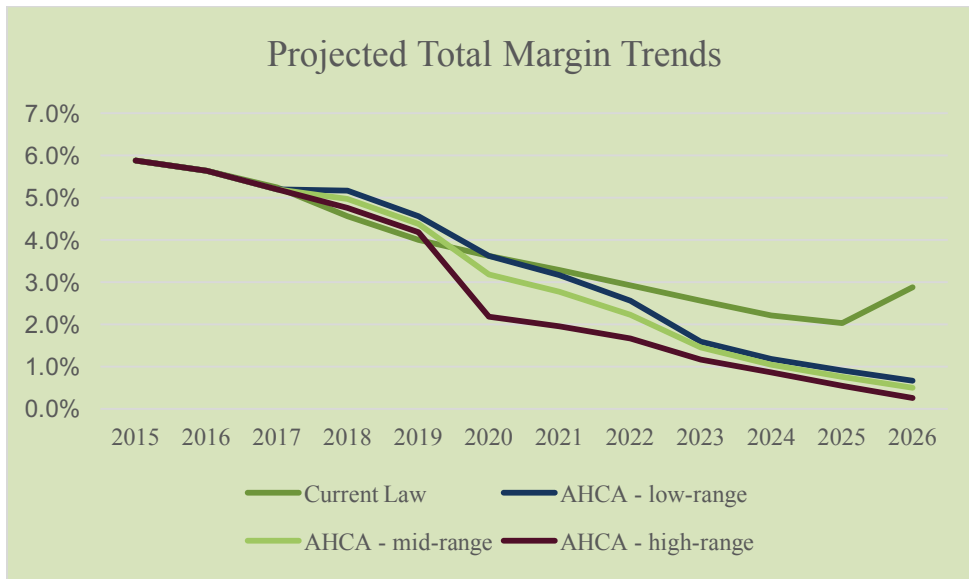
	Total Revenues (millions)	Total Expenses (millions)	Excess Income/(Loss) (millions)
<b>Current Law</b>	\$2,293,810	\$2,219,745	\$74,064
Low-range Estimate	(\$30,422)	(\$17,160)	(\$13,262)
Mid-Range Estimate (Presented Above)	(\$36,531)	(\$18,254)	(\$18,277)
High-range Estimate	(\$50,844)	(\$23,949)	(\$26,895)

Source: Dobson | DaVanzo analysis using Medicare Hospital Cost Report Data

The impact on safety-net hospital total and operating margins under the three scenarios is driven primarily by the assumptions regarding how states will respond to the elimination of enhanced federal funding for the Medicaid expansion. *Exhibit 11* shows that a substantial reduction in margins would occur beginning in 2020 if all states discontinued the Medicaid expansion as assumed in the high-range estimate. However, under all three scenarios the total and operating margins will decline significantly relative to current law by 2026 due primarily to the decline in the Medicaid expansion enrollment regardless of whether states discontinue the expansion or due to the turnover in Medicaid enrollment.

# Impact Under Alternative Assumptions

**Exhibit 11: Projected Total and Operating Margins for Safety-Net Hospitals Under Various Assumption Scenarios 2015 - 2026**



Source: Dobson | DaVanzo analysis using Medicare Hospital Cost Report Data