# Analysis of Current and Future Disproportionate Share Hospital Allotments



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#### **Key Points**

- The Commission finds little meaningful relationship between states' disproportionate share hospital (DSH) allotments and the three factors that Congress asked the Commission to study.
  - the number of uninsured individuals;
  - the amount and sources of hospitals' uncompensated care costs; and
  - the number of hospitals with high levels of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations.
- Early reports suggest that the coverage expansions under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) are improving hospital finances in general, but the ACA's effects on hospitals that are particularly reliant on Medicaid DSH payments are not yet clear.
- The number of uninsured people declined in all states in 2014, with the largest declines in states that expanded Medicaid.
- Early reports also suggest that unpaid costs of care for the uninsured are declining in states
  that have expanded Medicaid. It is difficult to interpret these findings, however, because they
  do not include complete and timely data on hospital costs for Medicaid shortfall, which may
  increase with Medicaid expansion.
- Deemed DSH hospitals, which serve a higher share of low-income patients, are more likely to
  provide a range of primary and quaternary care services that are often not available at other
  hospitals. These hospitals also report more uncompensated care as a share of operating
  expenses than other DSH hospitals.
- Although DSH allotment reductions are required to account for state uninsured rates
  and factors related to state targeting of DSH payments to hospitals with high levels of
  uncompensated care, much of the current variation in state DSH allotments is projected to
  persist after DSH allotment reductions take effect in fiscal year (FY) 2018.



#### CHAPTER 2: Analysis of Current and Future Disproportionate Share Hospital Allotments

Pending reductions to state disproportionate share hospital (DSH) allotments are premised in part on the assumption that increased hospital revenues from coverage expansions under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) will reduce uncompensated care and thus reduce the need for DSH payments to safety-net hospitals. Early reports suggest that the coverage expansions are improving hospital finances in general, but it is not yet clear how hospitals that are particularly reliant on Medicaid DSH payments are being affected. In addition, because post-2014 data on all sources of hospital uncompensated care (particularly Medicaid shortfall) are not yet available, it is too early to evaluate whether the size of pending DSH allotment reductions is appropriate.

In the Protecting Access to Medicare Act of 2014 (P.L. 113-93), Congress required MACPAC to report annually on Medicaid DSH allotments to better understand the effects of the ACA on hospitals and the relationship between state DSH allotments and several potential indicators of their need for DSH funds. This chapter provides the specific data and analyses that Congress requested and that we have been able to obtain including:

- changes in the number of uninsured individuals;
- the amount and sources of hospitals' uncompensated care costs;
- the number of hospitals with high levels of uncompensated care that also provide

- access to essential community services for low-income, uninsured, and vulnerable populations; and,
- the relationship between state DSH allotments and each of these factors.

The first three sections of the chapter describe what we know about the indicators that Congress specified. First we provide data on the number of uninsured individuals and the extent to which uninsured rates are declining under the ACA. We then describe the types and amounts of hospital uncompensated care, preliminary evidence on how these numbers are changing, and limits in our ability to draw conclusions. We also describe our initial approach to identifying hospitals with high levels of uncompensated care that also provide essential community services.

In the fourth section, we discuss current and projected state DSH allotments and the relationship of these allotments to the indicators above. Because states' allotments are based primarily on historical spending, rather than an objective measure of their need for DSH payments, we do not find any meaningful relationships.

We close with a discussion of the effects that DSH allotment reductions may have on DSH payments to hospitals as well as policy changes that states may consider in response. We also project DSH allotments and payments to hospitals under a scenario in which all states would expand Medicaid to non-elderly adults at or below 138 percent of the federal poverty level (FPL), because state decisions about whether to expand Medicaid coverage will have important implications for the number of uninsured individuals and state levels of uncompensated care.<sup>1</sup>



## Changes in the Number of Uninsured Individuals

Medicaid DSH payments are intended to offset the uncompensated care costs of hospitals that serve a high proportion of low-income patients, including those without health insurance. Thus, a state's uninsured rate may be a useful indicator of its need for DSH funds. The number of uninsured persons declined in all states in 2014, but the levels of decline varied, in part due to state decisions about whether to expand Medicaid coverage to low-income adults under the ACA.

The national uninsured rate declined by about 3 percentage points in 2014, reflected by increases in both private and government coverage, and likely due to the availability of new coverage options under the ACA. According to the Current Population Survey, 33.0 million people (10.4 percent of the U.S. population) were uninsured for the entire calendar year in 2014, compared to 41.8 million (13.3 percent of the population) in 2013. Private coverage (including individual insurance purchased through a health insurance exchange) increased 1.8 percentage points in 2014 to 66.0 percent of the U.S. population, and government coverage (including Medicaid) increased 2.0 percentage points to 36.5 percent of the U.S. population (Smith and Medalia 2015).2

The uninsured rate declined for all age groups, but was largest for working-age adults age 19–64, who were the primary beneficiaries of ACA coverage expansions (Table 2-1). The uninsured rate for these adults fell 4.2 percentage points, and the largest declines were in the subgroups of workingage adults without children (5.8 percentage points), part-time workers (6.3 percentage points), and those without a high school diploma (7.6 percentage points) (Smith and Medalia 2015).

The uninsured rate also declined for children by 1.3 percentage points, driven primarily by an increase in public coverage (Smith and Medalia

**TABLE 2-1.** Uninsured Rate by Age Group, 2013 and 2014

	Percent ι	ıninsured	Percentage
Age	2013	2014	point change
0-18	7.5%	6.2%	-1.3%
19-64	18.5	14.3	-4.2
65 and over	1.5	1.4	-0.1
All	13.3%	10.4%	-2.9%

Source: Smith and Medalia 2015

2015). Although few states increased Medicaid or State Children's Health Insurance Program (CHIP) eligibility for children during this time period, the change has been attributed to the so-called welcome mat or woodwork effect of coverage expansions for adults, increasing enrollment among children who were already eligible for Medicaid or CHIP but not enrolled (Kenney et al. 2014).

While the uninsured rate declined in all states, states that expanded their Medicaid programs under the ACA had declines that were about twice as large as those that did not. This is true despite the fact that expansion states already had lower uninsured rates in 2013. Expansion states also had larger declines in the uninsured rate for adults at all income levels, including those above the poverty threshold (Smith and Medalia 2015).

Even with the coverage expansions under the ACA, however, there are still about 32 million people who remain uninsured, including individuals in every state. It is estimated that about half of these uninsured individuals are eligible for Medicaid, CHIP, or subsidized exchange coverage, but are not enrolled. About 15 percent of the remaining uninsured are undocumented immigrants that are not eligible for ACA coverage, and about 10 percent are those below the poverty level in states that have not expanded Medicaid under the ACA (Garfield 2015).



## **Changes in the Amount of Hospital Uncompensated Care**

A potential indicator of a state's need for Medicaid DSH funds is the uncompensated care that its hospitals provide. As with uninsured rates, the sources and amounts of hospital uncompensated care are changing. As discussed below, early reports suggest that uncompensated care is

declining, a trend consistent with the fact that more people have health coverage. However, lack of timely institution-specific data, especially data on the amount of Medicaid shortfall, limits our ability to fully understand how individual hospitals are being affected. As well, definitions of uncompensated care vary among data sources, complicating comparisons (Box 2-1).

#### BOX 2-1. Definitions and Data Sources for Uncompensated Care Costs

- American Hospital Association (AHA) annual survey—An annual survey of hospital finances that provides aggregated national estimates of uncompensated care for community hospitals.
- Medicare cost report—An annual report on hospital finances that must be submitted by all
  hospitals that receive Medicare payments (that is, most U.S. hospitals). Medicare cost reports
  define hospital uncompensated care as bad debt and charity care.
- Medicaid disproportionate share hospital (DSH) audit—A statutorily required audit of a DSH hospital's uncompensated care to ensure that Medicaid DSH payments do not exceed the hospital-specific DSH limit, which is equal to the sum of Medicaid shortfall and the unpaid costs of care for the uninsured for allowable inpatient and outpatient costs. About half of U.S. hospitals were included on DSH audits in 2011, the latest year for which data are available.

#### Medicare cost report components of uncompensated care

- Charity care—Health care services for which a hospital determines the patient does not have
  the capacity to pay and either does not charge the patient at all or charges the patient a
  discounted rate below the hospital's cost of delivering the care. The amount of charity care is
  the difference between a hospital's cost of delivering the care and the amount initially charged
  to the patient.
- **Bad debt**—Expected payment amounts that a hospital is not able to collect from patients who, according to the hospital's determination, have the financial capacity to pay.

#### Medicaid DSH audit components of uncompensated care

- Medicaid shortfall—The difference between a hospital's costs of serving Medicaid patients
  and the total amount of Medicaid payment received for those services (under both fee-forservice and managed care, excluding DSH payments).
- Unpaid costs of care for the uninsured—The difference between a hospital's costs of serving
  individuals without health coverage and the total amount of payment received for those
  services. This generally includes charity care and bad debt for individuals without health
  coverage and excludes charity care and bad debt for individuals with health coverage.



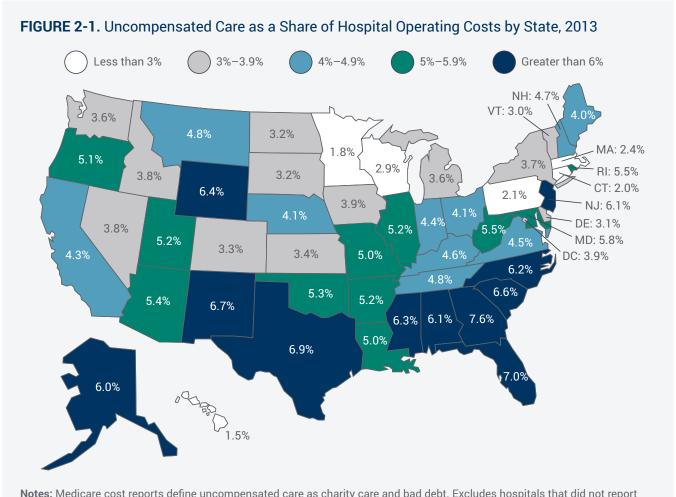
According to the American Hospital Association (AHA) annual survey, hospitals provided a total of \$46.4 billion in uncompensated care (defined as charity care and bad debt) in 2013 (AHA 2015). However, the AHA survey does not provide state or hospital-specific data, and so we used Medicare cost reports and state DSH audit reports to examine state-by-state variation in uncompensated care.

## Pre-ACA variation in hospital uncompensated care

The amount of uncompensated care provided by hospitals varied among states prior to the 2014

ACA coverage expansion. For 2013, hospitals reported \$33.8 billion in charity care and bad debt on Medicare cost reports, equal to 4.3 percent of their operating costs.<sup>3</sup> Among states, this share ranged from 1.5 percent to 7.6 percent (Figure 2-1). The majority of uncompensated care reported on Medicare cost reports was for charity care (\$19.4 billion) and the remainder was attributed to bad debt (\$14.3 billion). Medicare cost reports do not provide reliable data on the amounts of Medicaid shortfall, which is one of the components of the Medicaid DSH definition of uncompensated care.

Deemed DSH hospitals, public hospitals, and critical access hospitals reported the highest



**Notes:** Medicare cost reports define uncompensated care as charity care and bad debt. Excludes hospitals that did not report uncompensated care on their Medicare cost reports.

Source: MACPAC 2015 analysis of 2013 Medicare cost reports.



TABLE 2-2. Uncompensated Care and Cost Margins, Aggregated by Hospital Type, 2013

Hamital abayantariation	Uncompensated care as a share of	On avating mayerin	Total maynin
Hospital characteristics Hospital type	operating costs	Operating margin	Total margin
Short-term acute care hospitals	4.6%	0.9%	7.6%
Critical access hospitals	5.2	-4.1	4.3
Psychiatric hospitals	_	-0.4	4.0
Long-term hospitals	_	3.0	4.5
Rehabilitation hospitals	_	6.5	11.5
Children's hospitals	_	-4.2	12.3
Hospital ownership			
For-profit	3.4	8.1	10.6
Non-profit	3.8	0.3	7.6
Public	7.7	-5.8	5.1
DSH status			
Non-DSH hospitals	3.5	3.1	8.7
DSH hospitals, not deemed	4.0	-0.1	6.9
Deemed DSH hospitals	7.0	-3.4	7.1
All	4.3%	0.6%	7.7%

**Notes:** DSH is disproportionate share hospital. For the purposes of Medicare cost reports, uncompensated care is defined as charity care and bad debt. DSH payments are included in operating margins and total margins. Total margins include revenue that is not directly related to patient care, such as investment income, parking receipts, non-DSH state or local subsidies to hospitals, and investment income. Data exclude outlier hospitals reporting operating margins greater than 75 percent or less than negative 75 percent. Deemed DSH status was estimated based on available Medicaid and low-income utilization data. For further discussion of the methodology and limitations, see Appendix 3A.

- Dash means data not available; fewer than 60 percent of hospitals of this type reported uncompensated care data.

Source: MACPAC 2015 analysis of 2013 Medicare cost report data.

levels of uncompensated care as a share of operating expenses in 2013, and these hospitals also reported negative operating margins during this time period (Table 2-2). However, many individual hospitals—of all types—reported positive operating margins despite their uncompensated care costs, indicating that revenue from other hospital operations can fully offset hospital uncompensated care costs in some cases. When revenue that is not directly related to patient care is taken into account, all hospital types reported positive total margins in the aggregate.

On as-filed Medicaid DSH audits from 2011, the most recent year for which data are available, DSH hospitals reported a total of \$31.5 billion in uncompensated care (of which \$6.7 billion was Medicaid shortfall and \$24.8 billion was unpaid costs of care for the uninsured). However, because DSH audits are submitted for only about half of U.S. hospitals, they provide limited insight into the variation in types and amounts of uncompensated care at the state level. We also lack data on shortfall amounts attributable to other payers.



			Change in u	ninsured	Change in c		Change in N shortf	
Study	Study scope	Study period	Expansion states	Non- expansion states	Expansion states	Non- expansion states	Expansion states	Non- expansion states
Arietta 2013	Massachusetts (early expansion)	2004–2005 compared to 2006–2009	55% reduction	-	26% decrease	-	-	-
Nikpay et al. 2015	Connecticut (early expansion)	2007-2013	9% reduction	-	33% lower than without expansion	-	7%–8% increase in Medicaid share of revenue	-
CHA 2014	435 hospitals across 30 states	Q1 2013- Q1 2014	34% reduction in self-pay share of charges	No change	34% decrease	No change	23% increase in Medicaid share of charges	No change
ASPE 2015	4 large hospital systems	Q2 2013- Q2 2014	48%-72% reduction in uninsured admissions	0%-14% reduction	5%-19% decrease	4%-10% increase	17%-32% increase in Medicaid admissions	3% increase
Cunningham et al. 2015	Ascension Health System (hospitals in 16 states)	Q2 2014- Q4 2014	32% reduction in uninsured admissions and discharges	4% reduction	40% decrease	6% decrease	22% increase	36% increase

**Notes:** Q1, Q2, and Q4 refer to calendar quarters. Expansion states are those that expanded Medicaid coverage to non-elderly adults at or below 138 percent of the federal poverty level (FPL) at the time of the study.

Source: MACPAC 2015 analysis of Cunningham et al. 2015, Nikpay et al. 2015, ASPE 2015, CHA 2014, and Arietta 2013.

## Expected changes to hospital uncompensated care under the ACA

Comprehensive, state-specific data on the effects of the ACA on hospitals' uncompensated care are not yet available, but early reports suggest that ACA coverage expansions are reducing charity care and bad debt, particularly in states that have expanded Medicaid. Our analysis of changes in charity care and bad debt for a subset of hospitals that have submitted Medicare cost reports for 2014 is generally consistent with these early reports. On the other hand, Medicaid shortfall, for which we do not have sufficient data, is likely to increase because of increased Medicaid enrollment. It is not yet clear, however, how the increase in Medicaid shortfall relates to the decrease in other types of uncompensated care.

Several studies of prior health care expansions and early reports of the effect of ACA coverage expansions have found that declines in the uninsured rate were associated with declines in charity care and bad debt in Medicaid expansion states (Table 2-3). The magnitude of these reductions ranged from 5 percent to 40 percent. These studies have also found that declines in the number of uninsured are not always associated with corresponding declines in uncompensated care. One study of selected hospital systems in the second quarter of 2014 found that in states that did not expand Medicaid, bad debt and charity care increased even though admissions of uninsured patients decreased (ASPE 2014).

Most studies find that increases in Medicaid shortfall are associated with increases in coverage.

<sup>-</sup> Dash indicates that the study did not examine the particular issue.



FIGURE 2-2. Uncompensated Care as a Percentage of Hospital Operating Costs, 2011–2014 6% 5.1% 5.1% 5.0% 4.8% 5% Non-expansion state 4% 3.6% 3.6% 3.5% 3% 2.4% Expansion state 2% 1% 0% 2011 2012 2013 2014 Calendar year

**Notes:** Analysis is based on 1,371 hospitals that submitted a full year of uncompensated care data beginning January 1, 2014, and that reported data continuously from 2011 to 2014. Medicare cost reports define uncompensated care as charity care and bad debt. Expansion states are states that expanded Medicaid to non-elderly adults at or below 138 percent of the federal poverty level (FPL) before December 31, 2014.

Source: MACPAC 2015 analysis of 2011-2014 Medicare cost report data.

One pre-ACA projection of public hospital costs in California suggested that if existing hospital payment levels persisted, then the hospitals with high Medicaid volume studied could face more uncompensated care costs after the Medicaid expansion because the increase in Medicaid shortfall was not projected to be offset by reductions in the unpaid costs of care for the uninsured (Neuhausen et al. 2014). However, a post-ACA study of hospitals in a multistate nonprofit system found that hospitals in expansion states saw reductions in charity care that were greater than their increase in Medicaid shortfall, resulting in an overall decrease in uncompensated care costs for these hospitals (Cunningham et al. 2015). Differences in Medicaid utilization rates between the hospitals studied may help explain the differences in projected changes to Medicaid shortfall.

Preliminary analysis of Medicare cost reports for 2014 also shows a decrease in uncompensated care among expansion states. For the subset of hospitals that have submitted 2014 Medicare cost reports, uncompensated care declined by about 31 percent in states that expanded Medicaid (from 3.6 percent of hospital operating costs to 2.4 percent of hospital operating costs) and declined by 2 percent in states that did not expand Medicaid (from 5.1 percent of hospital operating costs to 5.0 percent of hospital operating costs) (Figure 2-2). The decline for Medicaid expansion states was statistically significant, but hospitals in Medicaid expansion states also had significantly lower uncompensated care than non-expansion states before 2014.



We limited this analysis to 1,371 hospitals that had submitted a full year of uncompensated care data beginning January 1, 2014, to better isolate the effects of the ACA coverage expansion. The subset of hospitals that we used in this analysis includes a variety of hospitals from all states, including 624 DSH hospitals from 40 states. (For more information about our methods, see Appendix 3A.)

Based on our analysis, DSH hospitals experienced declines in uncompensated care similar to non-DSH hospitals, and bad debt and charity care both declined at similar rates. However, we do not yet have sufficient data to understand how deemed DSH hospitals in particular are being affected. Moreover, our ability to understand the full effects of the ACA on hospitals that serve high volumes of Medicaid patients is particularly limited because we do not have reliable data on Medicaid shortfall from Medicare cost reports.

# Hospitals with High Levels of Uncompensated Care That Also Provide Essential Community Services

The third indicator to be considered when analyzing a state's need for Medicaid DSH funds is the extent to which hospitals in the state with high levels of uncompensated care also provide access to what the Protecting Access to Medicare Act of 2014 (the statute calling for MACPAC's study) calls essential community services. Although the statute does not provide a specific list of services falling into this category, it describes them as services that are important to low-income and other vulnerable communities that are not available at most hospitals. The concept of essential community services is not defined elsewhere in Medicaid statute or regulation.

Lacking clear direction for identifying such hospitals, MACPAC developed a working definition based on the types of services suggested in the study requirement and the limits of available data (Box 2-2). This working definition builds on the statutory definition of deemed DSH hospitals, because as discussed in Chapter 1, deemed DSH hospitals are more likely to provide a range of additional primary and quaternary care services that are not often available at other hospitals. DSH payments are an important source of revenue for these hospitals and may allow them to maintain access to these services that their patients may not be able to obtain elsewhere.

Among the 798 deemed DSH hospitals identified, 702 provided at least one of the included services, with 303 providing two of these services and 171 providing three or more of these services. In order to be as inclusive as possible in this first report, we considered provision of just one of these services to be sufficient for inclusion as a hospital that provides essential community services. More restrictive criteria may be applied in future reports.

The 702 hospitals that provided at least one essential community service represent about 11 percent of U.S. hospitals but about 37 percent of the uncompensated care reported on Medicare cost reports for all hospitals. The number of hospitals that were identified in each state is generally proportional to the size of each state's population. Large states, including California, Texas, and New York, had more than 30 deemed DSH hospitals that provided at least one included service, while smaller states had only a few hospitals that met the criteria.

Using DSH audits, which all deemed DSH hospitals must submit, we can examine uncompensated care according to the Medicaid DSH definition, which includes Medicaid shortfall. The amount of uncompensated care as a share of hospital operating costs reported on Medicaid DSH audits by the hospitals that we identified as providing



#### BOX 2-2. Identifying Hospitals with High Levels of Uncompensated Care That Provide Essential Community Services for Low-Income, Uninsured, and Other Vulnerable Populations

The statute requires that MACPAC provide data identifying hospitals with high levels of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations, such as graduate medical education, and the continuum of primary through quaternary care, including the provision of trauma care and public health services.

In developing a working definition of such hospitals for this first report on Medicaid disproportionate share hospital (DSH) payments, the Commission began with the existing statutory definition of deemed DSH hospitals, which is based on high utilization by Medicaid patients, low-income patients, or both. In addition to serving more low-income patients, these hospitals also provide higher levels of uncompensated care than are provided at non-deemed DSH hospitals.

The essential community services included were based on those explicitly identified by statute (e.g., graduate medical education and trauma), as well as related services that could be identified through Medicare cost reports or the American Hospital Association (AHA) annual survey. Ultimately, the following services were included:

- burn services
- dental services
- graduate medical education
- HIV/AIDS care
- inpatient psychiatric services (through a psychiatric subunit or stand-alone psychiatric hospital)
- neonatal intensive care units
- obstetrics and gynecology services
- substance use disorder services
- trauma services

In this first report, deemed DSH hospitals providing at least one of these services were included in our analysis. We also included certain hospital types if they were the only hospital in their geographic area to provide certain types of services. Critical access hospitals were included because they are often the only hospital within a 25-mile radius. In addition, we included children's hospitals that were the only hospital within a 15-mile radius (measured by driving distance).

The ability to include certain services, however, was based on the availability of data. For example, it was not possible to identify hospitals that provide public health services, one of the statutory examples, based on known data sources. In addition, it was not possible to separately identify primary care as a unique service for this analysis. For future reports the Commission intends to continue to discuss and potentially refine the methodology based on the identification of new services and data sources.



<b>TABLE 2-4.</b> DSH Hospital Uncompensated Care as a Share of Hospital Operating Costs, 2011
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Type of uncompensated care	Deemed DSH hospitals that provide least one essential community service <sup>1</sup> (n = 702)	Deemed DSH hospitals (n = 798)	All DSH hospitals (n = 2,743)
Medicaid shortfall	0.8%	0.8%	1.4%
Unpaid costs of care for the uninsured	9.3	9.2	5.2
Total DSH audit uncompensated care	10.1%	10.0%	6.6%

**Notes:** DSH is disproportionate share hospital. Medicaid DSH audits define uncompensated care as Medicaid shortfall and unpaid costs of care for the uninsured. Deemed DSH status was estimated based on available Medicaid and low-income utilization data. For further discussion of the methodology and limitations, see Appendix 3A.

**Source:** MACPAC 2015 analysis of 2011 as-filed Medicaid DSH audits, 2011 and 2013 Medicare cost report data, and the 2013 American Hospital Association annual survey.

essential community services was about twice that reported by the average DSH hospital (Table 2-4). The deemed DSH hospitals that provided at least one included service also provided more uncompensated care than the average deemed DSH hospital. Overall, deemed DSH hospitals reported higher uncompensated care costs but lower Medicaid shortfall than all DSH hospitals, which may be due to the effect of other Medicaid supplemental payments to these hospitals; deemed DSH hospitals report three times as much revenue in non-DSH supplemental payments as other DSH hospitals, which helps to reduce their Medicaid shortfall.

In the analyses below, we focus on FY 2018 allotments (unreduced and reduced) rather than FY 2016 and 2017 allotments for two reasons. First, because allotments generally grow uniformly based on the Consumer Price Index for All Urban Consumers (CPI-U), their relationship to each other is not expected to change. Second, with allotment reductions scheduled to take effect in FY 2018, we can project scenarios with and without reductions and demonstrate the effect of these reductions on the three factors Congress required us to consider. We provide complete state-by-state estimates of DSH allotments for FYs 2016–2018 in Appendix 2A.

#### **DSH Allotment Projections**

Below we describe current and projected DSH allotments and compare them to state uninsured rates, hospital uncompensated care, and the number of hospitals with high levels of uncompensated care that also provide essential community services. We find that there is little meaningful relationship between DSH allotments and any of these factors, even when DSH allotment reductions take effect in FY 2018.

#### Unreduced DSH allotments

States' unreduced DSH allotments vary widely among states and are largely based on historic spending levels. For example, projected unreduced DSH allotments for FY 2018 range from less than \$15 million in six states (Delaware, Hawaii, Montana, North Dakota, South Dakota, and Wyoming) to more than \$1 billion in three states (California, New York, and Texas). As a percentage of state Medicaid spending, unreduced FY 2018 DSH allotments range from 0.1 percent in Wyoming to more than 10 percent in Louisiana

<sup>&</sup>lt;sup>1</sup> Our working definition of essential community services includes the following services: burn services, dental services, graduate medical education, HIV/AIDS care, inpatient psychiatric services (through a psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, substance use disorder services, and trauma services.

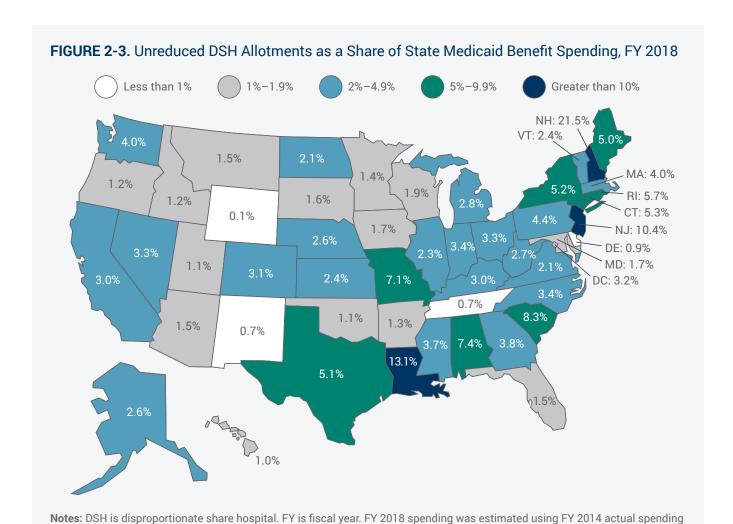


and New Hampshire (Figure 2-3). Before DSH allotment reductions, the variation in the projected DSH allotments is similar to the variation observed in prior years' DSH allotments, which is based on state historical DSH spending before federal limits were established in 1993.<sup>4</sup>

#### Reduced DSH allotments

To estimate reduced DSH allotments for FY 2018, we modeled the DSH Health Reform Methodology (DHRM) that was developed by the Centers for Medicare & Medicaid Services (CMS) to implement

allotment reductions for FYs 2014 and 2015 (before the reductions in DSH allotments were delayed). This methodology uses five factors to implement the statutory requirements to apply greater DSH reductions to states with lower uninsured rates and states that do not target their DSH payments to high-need hospitals, among other criteria (Box 2-3). Although CMS may modify this reduction methodology in future years, the DHRM incorporates all of the statutory requirements for DSH allotment reductions and is thus a reasonable starting point for estimating future DSH allotment reductions.



and national spending projections from the CMS Office of the Actuary. State and federal funds are included.

Source: Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of preliminary FY 2016 DSH allotments, Congressional Budget Office projections of the Consumer Price Index for All Urban Consumers (CPI-U), and CMS-64 FMR net

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expenditure data as of February 25, 2015.



## **BOX 2-3.** Factors Used in Disproportionate Share Hospital (DSH) Health Reform Reduction Methodology

The Centers for Medicare & Medicaid Services (CMS) DSH Health Reform Reduction Methodology (DHRM) applies five factors to calculate state disproportionate share hospital allotment reductions. The total amount by which allotments must be reduced is specified in statute (\$2 billion in FY 2018), and the DHRM provides a model for how these reductions may be distributed across states.

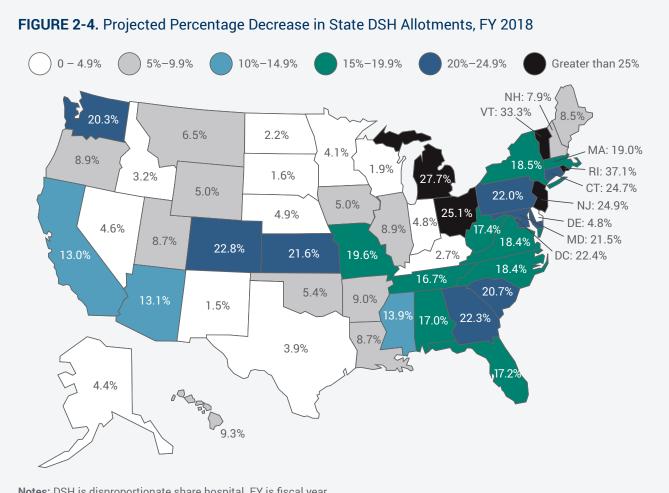
- The **low-DSH factor** allocates a smaller proportion of the total DSH allotment reductions to low-DSH states. Specifically, because the 16 low-DSH states currently receive about 4 percent of total DSH allotments, only 4 percent of DSH allotment reductions are applied to low-DSH states.
- The **uninsured percentage factor** imposes larger DSH allotment reductions on states with lower uninsured rates relative to other states. One-third of DSH reductions are based on this factor.
- The high volume of Medicaid inpatients factor imposes larger DSH allotment reductions
  on states that do not target DSH payments to hospitals with high Medicaid volume. The
  proportion of state DSH payments made to hospitals with Medicaid inpatient utilization that
  is one standard deviation above the mean (the same qualifying criteria used for deemed DSH
  hospitals) is compared among states. One-third of DSH reductions are based on this factor.
- The high level of uncompensated care factor imposes larger reductions on states that do not target DSH payments to hospitals with high levels of uncompensated care. The proportion of DSH payments made to hospitals with above-average uncompensated care as a proportion of costs for Medicaid and the uninsured is compared among states. This factor is calculated using DSH audit data, which defines uncompensated care costs as the sum of Medicaid shortfall and unpaid costs of care for the uninsured. One-third of DSH reductions are based on this factor.
- The budget neutrality factor is an adjustment to the high Medicaid and high uncompensated
  care factors that accounts for DSH allotments that were used as part of the budget neutrality
  calculations for coverage expansions under Section 1115 waivers in four states and the
  District of Columbia (see note). Specifically, funding for these coverage expansions is
  excluded from the calculation of whether DSH payments were targeted to high Medicaid or
  high uncompensated care hospitals.

**Note:** Four states—Indiana, Maine, Massachusetts, and Wisconsin—and the District of Columbia meet the statutory criteria for the budget neutrality factor.

We estimate that the \$2 billion in federal DSH allotment reductions currently scheduled for implementation in FY 2018 will have widely varying effects on individual state allotments, with state reductions ranging from 1.5 percent to 37.1 percent (Figure 2-4). Because the reduction methodology is only partially based on the current size of state allotments, the states with the largest allotments today are not necessarily

the ones that will see their allotments reduced by the greatest percentage. For example, under our model, Vermont and Rhode Island are projected to have their DSH allotments reduced by the largest percentage even though they have relatively small DSH allotments. Our analysis predicts that applying the projected reductions will not fully eliminate the current variation in size of state DSH allotments.





Notes: DSH is disproportionate share hospital. FY is fiscal year.

Source: Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of 2011 Medicare cost reports, 2011 as-filed Medicaid DSH audits, and the U.S. Census Bureau 2014 American Community Survey.

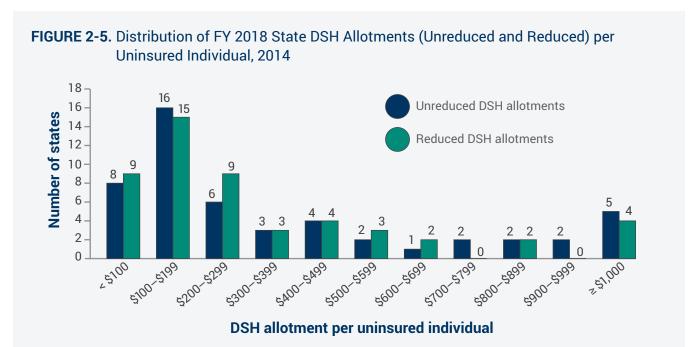
#### Relating DSH allotments to the statutorily required factors

We find little meaningful relationship between state DSH allotments and the number of uninsured individuals in a state, the amount of uncompensated care, or the number of hospitals with high uncompensated care that provide at least one essential community service. This is true for both unreduced allotment levels and under the reduction scheduled for FY 2018.

Relationship between DSH allotments and the number of uninsured individuals. In FY 2018. states' unreduced federal DSH allotments

are expected to average out to approximately \$337 per uninsured individual. However, these DSH allotments, compared on a per-uninsured individual basis, are highly dispersed among states, from \$4 per uninsured individual to more than \$2,000 per uninsured individual (Figure 2-5). After reductions are applied, these allotments are projected to average out to approximately \$283 per uninsured individual and to continue to vary widely among states (from \$4 to more than \$1,500). These estimates are based on state uninsured data from 2014, the most recent year available. While uninsured rates are expected to change over the next several years, the most significant changes are likely to be the result of





Notes: FY is fiscal year. DSH is disproportionate share hospital. DSH allotments include federal funds only.

**Source**: Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of 2011 Medicare cost reports, 2011 as-filed Medicaid DSH audits, and the U.S. Census Bureau 2014 American Community Survey.

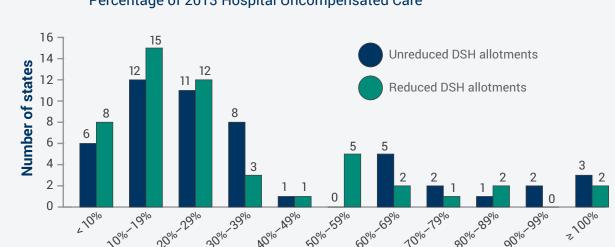


FIGURE 2-6. Distribution of FY 2018 State DSH Allotments (Unreduced and Reduced) as a Percentage of 2013 Hospital Uncompensated Care

#### DSH allotment as a percentage of hospital uncompensated care in the state

**Notes:** FY is fiscal year. DSH is disproportionate share hospital. DSH allotments include federal funds only. To project uncompensated care costs for FY 2018, uncompensated care costs from 2013 were adjusted for inflation using the Consumer Price Index for All Urban Consumers (CPI-U). Uncompensated care is based on Medicare cost reports, which define uncompensated care as charity care and bad debt.

**Source:** Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of 2011 Medicare cost reports, 2011 as-filed Medicaid DSH audits, and the U.S. Census Bureau 2014 American Community Survey.



state decisions regarding Medicaid expansion, which we cannot reliably predict.

Relationship between DSH allotments and hospital uncompensated care. Before DSH allotment reductions, FY 2018 federal DSH allotments are equal to 37 percent of 2013 hospital charity care and bad debt (in the aggregate and adjusted for inflation). However, the share of DSH allotments as a percentage of uncompensated care varies widely by state, ranging from less than 10 percent in six states to more than 100 percent in three states. After DSH allotment reductions, FY 2018 federal DSH allotments are equal to 31 percent of 2013 uncompensated care in the aggregate, but the wide variation between states remains (Figure 2-6).

Data limitations hamper our efforts to compare projected DSH allotments to state uncompensated care levels. The most recent uncompensated care data available from Medicare cost reports is from 2013, and it does not reflect the ACA coverage expansions that began in 2014. While we know that amounts and types of uncompensated care have changed, our data is not sufficiently reliable to take these changes into account when developing estimates of 2018 uncompensated care. In addition, we cannot reliably calculate Medicaid shortfall using Medicare cost report data.

Based on the preliminary reports and analyses described earlier (Table 2-3 and Figure 2-2), we expect that future changes in uncompensated care will be greatest in states that have expanded their Medicaid programs. State Medicaid expansion decisions will not affect the disparity in current state DSH allotments, but these decisions may have important implications for the ability of future DSH allotments, particularly reduced allotments, to cover uncompensated care costs. We plan to examine this issue more closely as future data allow.

Relationship between DSH allotments and hospitals with high levels of uncompensated care that also provide essential community services.

At the national level, the average federal DSH

allotment (unreduced) per deemed DSH hospital that provides at least one essential community service is projected to be about \$17.6 million in FY 2018. At the state level, the average DSH allotment (unreduced) for these hospitals varies widely, ranging from less than \$5 million to more than \$50 million (Figure 2-7). Our models show that DSH allotment reductions reduce DSH payments to these hospitals slightly, but that the variation among states remains. To take different sizes of hospitals into account, we also adjusted for the number of beds per hospital, but we still find no meaningful relationship between state DSH allotments and the number of hospitals with high uncompensated care that provide at least one essential community service.

#### Potential State Responses to Allotment Reductions

State decisions regarding DSH payment policies could have a substantial effect on DSH payments to specific hospitals and on individual states' DSH allotments under the DHRM reduction methodology. However, our preliminary modeling of DSH allotment reductions for FY 2018 does not take into account changes in state behavior that might be prompted by the incentives underlying the DHRM. Below we explore how state responses to the targeting of DSH payments could affect individual hospitals and how state decisions to expand Medicaid might affect overall state allotments. More information about our methods for each of these analyses is included in Appendix 3A.

## Strategic targeting of DSH payments to particular hospitals

DSH allotment reductions do not require states to change their targeting of DSH payments, but the methodology that CMS uses to implement them will likely create incentives for states to target DSH allotments to hospitals with high Medicaid



**FIGURE 2-7.** Distribution of FY 2018 State DSH Allotments (Unreduced and Reduced) per Deemed DSH Hospital Providing at Least One Essential Community Service<sup>1</sup> (millions)



DSH allotment per deemed DSH hospital that provides at least one essential community service (millions)

**Notes:** FY is fiscal year. DSH is disproportionate share hospital. DSH allotments include federal funds only. Excludes two states without hospitals that meet our definition for inclusion.

<sup>1</sup> Deemed DSH status was estimated based on available Medicaid and low-income utilization data. Our working definition of essential community services includes the following services: burn services, dental services, graduate medical education, HIV/ AIDS care, inpatient psychiatric services (through a psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, substance use disorder services, and trauma services. For further discussion of the methodology and limitations, see Appendix 3A.

**Source:** Dobson DaVanzo and KNG Health 2015 analysis for MACPAC of 2011 and 2013 Medicare cost reports, 2011 as-filed Medicaid DSH audits, the U.S. Census Bureau 2014 American Community Survey, and the 2013 American Hospital Association annual survey.

utilization and high levels of uncompensated care. As a result, we modeled the effects on DSH payments under two targeting scenarios:

- DSH payments if states pass along a proportional reduction to each hospital; and
- DSH payments if states redistribute DSH payments strategically to minimize future reductions.

Overall, we find that deemed DSH hospitals would benefit if states responded strategically to the DSH targeting incentives included in the DHRM (Table 2-5). The incentives created by the reduction methodology appear to encourage a more targeted distribution of DSH payments, but it remains to be seen whether these incentives are powerful enough to overcome the state-level factors that currently drive DSH payment decisions, such as local politics and considerations about the sources of non-federal funding for DSH payments. Additional data on the effects of the strategic targeting model on particular hospital types are provided in Appendix 2A, and limitations of this model are discussed in Appendix 3A.

In our modeling of the hospital-level effects of DSH allotment reductions, we assume that some states will not spend their full DSH allotment. As discussed in Chapter 1, \$1.2 billion in federal DSH allotments went unspent in 2012. In our FY 2018 model of unreduced DSH allotments, approximately \$1.4 billion in federal DSH allotments would remain unspent. To draw down



**TABLE 2-5.** Estimated DSH Payments (Unreduced and Reduced) under Different Targeting Scenarios, FY 2018

			Proportiona	al reduction	Strategic	reduction
Deemed DSH status	Number of hospitals	Unreduced DSH payments	DSH payments (millions)	Percent change	DSH payments (millions)	Percent change
Deemed DSH hospitals	798	\$12,293	\$10,441	-15%	\$13,027	6%
DSH hospitals, not deemed	1,945	6,492	5,538	-15	2,843	-56
All DSH hospitals	2,743	\$18,784	\$15,979	-15%	\$15,870	-16%

**Notes:** DSH is disproportionate share hospital. FY is fiscal year. DSH payments include state and federal funds. Numbers do not sum due to rounding. Excludes 90 DSH hospitals that did not submit a Medicare cost report. Deemed DSH status was estimated by MACPAC based on available Medicaid and low-income utilization data. For further discussion of the methodology and limitations, see Appendix 3A.

**Source:** Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of 2011 Medicare cost reports, 2011 as-filed Medicaid DSH audits, and the U.S. Census Bureau 2014 American Community Survey.

these unspent DSH allotments, states would have to provide additional state matching funds.

Our preliminary analysis of 2011 DSH audits and survey data from the U.S. Government Accountability Office suggests that state sources of non-federal funding may affect the distribution of DSH payments. In 2011, states that financed DSH payments with above-average levels of health care-related taxes distributed DSH payments to about twice as many hospitals (as a share of all hospitals in the state). States that financed DSH with above-average levels of intergovernmental transfers and certified public expenditures distributed about twice as much DSH funding to public hospitals (as a share of all DSH spending in the state).

### Effects of Medicaid expansion on allotment reductions

Our analysis shows that under a scenario in which every state expands its Medicaid program to cover non-elderly adults at or below 138 percent FPL, aggregate DSH allotment reduction amounts in FY 2018 are not much different from amounts projected based on the status quo scenario (Table 2-6). This may be because the uninsured

TABLE 2-6. Change in Aggregate State DSH
Allotments under Different Medicaid
Expansion Scenarios, FY 2018

Expansion status as of December 31, 2014	Status quo	All states expanded Medicaid coverage
Medicaid expansion states	-18.0%	-17.7%
Non-Medicaid expansion states	-11.6	-12.1
All states	-16.2%	-16.2%

**Notes:** DSH is disproportionate share hospital. FY is fiscal year. Status quo projection is based on 2014 uninsured data; as a result, only states that expanded Medicaid to non-elderly adults at or below 138 percent of the federal poverty level by December 31, 2014, are classified as Medicaid expansion states in this analysis.

Sources: Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of 2011 Medicare cost reports, 2011 as-filed Medicaid DSH audits, the U.S. Census Bureau 2014 American Community Survey, and Holahan et al. 2013.

percentage factor in the DHRM is based on states' relative uninsured rates, and decreases in the number of uninsured persons in all states as a result of Medicaid expansion may not have a large effect on the relative rate of the states' uninsured population. We did not model the effects of



Medicaid expansion on other factors of the DHRM, but we do not expect large changes to these factors as a result of Medicaid expansion.<sup>5</sup>

#### **Conclusion**

The ACA is changing the number of uninsured patients and the amount of hospital uncompensated care, but state DSH allotments are unlikely to bear any meaningful relationship to these factors, even under pending DSH allotment reductions. The incentives included in CMS's initial methodology for reducing DSH allotments would encourage states to target more DSH payments to deemed DSH hospitals; at the same time, it appears that they would not discourage states from expanding Medicaid coverage. However, because comprehensive state- and hospital-specific data are not yet available, we cannot make projections based on the full effects of the ACA.

The following chapter explores our data limitations in detail, including the Commission's recommendations for data improvements that are necessary to fully understand the effects of DSH allotment reductions.

#### **Endnotes**

- The ACA set a single income eligibility disregard equal to 5 percentage points of the federal poverty level (FPL). For this reason, eligibility is often referred to at its effective level of 138 percent FPL, even though the federal statute specifies 133 percent FPL.
- In the Current Population Survey, a monthly survey of households conducted by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics, estimates of health insurance coverage are not mutually exclusive. People can be covered by more than one type of health insurance during the year.
- Only 74 percent of all hospitals reported uncompensated care on Medicare cost reports in 2013. In light of questions about the reliability of Medicare cost report data, the Centers for Medicare & Medicaid Services (CMS) is working with hospitals to improve the accuracy and completeness of uncompensated care reporting (CMS 2015).
- <sup>4</sup> Before DSH allotment reductions take effect in FY 2018, DSH allotments are scheduled to increase according to the Consumer Price Index for All Urban Consumers.
- <sup>5</sup> Although overall Medicaid utilization and uncompensated care are expected to change in states that expand Medicaid, such changes are not expected to have a substantial effect on the high volume of Medicaid inpatients factor or the high level of uncompensated care factor used in the CMS DSH Health Reform Reduction Methodology, since these factors are calculated based on relative Medicaid utilization and relative uncompensated care within a state.

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#### **APPENDIX 2A: State-Level Data**

TABLE 2A-1. Current and Projected State DSH Allotments, FYs 2016–2017 (millions)

		Fiscal year 201	16		Fiscal year 201	7
State	Total	Federal	State	Total	Federal	State
Total	\$21,186.9	\$11,909.9	\$ 9,277.1	\$21,520.0	\$12,096.1	\$ 9,423.8
Alabama	478.3	334.2	144.1	486.4	339.9	146.6
Alaska	44.3	22.1	22.1	45.0	22.5	22.5
Arizona	159.7	110.0	49.6	162.4	111.9	50.5
Arkansas	67.0	46.9	20.1	68.1	47.7	20.4
California	2,382.8	1,191.4	1,191.4	2,423.3	1,211.6	1,211.6
Colorado	198.2	100.5	97.7	201.6	102.2	99.3
Connecticut	434.7	217.4	217.4	442.1	221.1	221.1
Delaware	17.9	9.8	8.1	18.2	10.0	8.2
District of Columbia	95.1	66.6	28.5	96.7	67.7	29.0
Florida	358.3	217.4	140.9	364.4	221.1	143.3
Georgia	432.4	292.1	140.3	439.7	297.0	142.7
Hawaii	19.6	10.6	9.0	20.0	10.8	9.2
Idaho	25.1	17.9	7.2	25.5	18.2	7.3
Illinois	459.1	233.7	225.5	467.0	237.6	229.3
Indiana	348.8	232.3	116.5	354.7	236.2	118.5
lowa	77.9	42.8	35.1	79.3	43.5	35.7
Kansas	80.1	44.8	35.3	81.5	45.6	35.9
Kentucky	224.1	157.6	66.5	227.9	160.3	67.6
Louisiana	1,176.6	732.0	444.6	1,176.6	732.0	444.6
Maine	182.1	114.1	68.0	185.2	116.1	69.1
Maryland	165.7	82.9	82.9	168.6	84.3	84.3
Massachusetts	662.9	331.5	331.5	674.2	337.1	337.1
Michigan	439.0	288.0	151.0	446.5	292.9	153.6
Minnesota	162.3	81.2	81.2	165.1	82.6	82.6
Mississippi	223.5	165.7	57.7	227.3	168.6	58.7
Missouri	813.6	514.9	298.8	827.5	523.6	303.8
Montana	18.9	12.3	6.6	19.2	12.5	6.7
Nebraska	60.1	30.8	29.4	61.1	31.3	29.9
Nevada	77.4	50.3	27.1	78.7	51.1	27.6
New Hampshire	341.5	170.7	170.7	341.5	170.7	170.7
New Jersey	1,399.2	699.6	699.6	1,423.0	711.5	711.5
New Mexico	31.5	22.1	9.3	32.0	22.5	9.5
New York	3,491.3	1,745.6	1,745.6	3,550.6	1,775.3	1,775.3
North Carolina	484.0	320.6	163.4	492.2	326.1	166.2



TABLE 2A-1. (continued)

	ı	Fiscal year 201	6	ı	Fiscal year 201	7
State	Total	Federal	State	Total	Federal	State
North Dakota	\$ 20.8	\$ 10.4	\$ 10.4	\$ 21.1	\$ 10.6	\$ 10.6
Ohio	706.7	441.5	265.2	718.8	449.0	269.8
Oklahoma	64.5	39.4	25.2	65.6	40.0	25.6
Oregon	76.4	49.2	27.2	77.7	50.0	27.7
Pennsylvania	1,172.8	610.0	562.8	1192.7	620.3	572.4
Rhode Island	140.1	70.6	69.5	142.5	71.8	70.6
South Carolina	500.7	355.9	144.8	509.2	362.0	147.3
South Dakota	23.3	12.0	11.3	23.7	12.2	11.4
Tennessee	81.6	53.1	28.5	81.6	53.1	28.5
Texas	1,819.1	1,039.2	779.8	1,850.0	1,056.9	793.1
Utah	30.4	21.3	9.0	30.9	21.7	9.2
Vermont	45.4	24.5	20.9	46.1	24.9	21.3
Virginia	190.4	95.2	95.2	193.7	96.8	96.8
Washington	402.1	201.1	201.1	408.9	204.5	204.5
West Virginia	102.7	73.4	29.4	104.5	74.6	29.9
Wisconsin	176.4	102.7	73.7	179.4	104.5	74.9
Wyoming	0.5	0.2	0.2	0.5	0.3	0.3

Notes: DSH is disproportionate share hospital. FY is fiscal year.

**Source:** Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of preliminary FY 2016 DSH allotments and Congressional Budget Office projections of the Consumer Price Index for All Urban Consumers (CPI-U).



TABLE 2A-2. Projected FY 2018 DSH Allotments under Various Reduction Scenarios (millions)

	Unre	Unreduced allotme	nent		Reduced allotment (status quo)	allotment s quo)		(Me	Reduced allotment (Medicaid expansion scenario)	allotment nsion scena	ario)
State	Total	Federal	State	Total	Federal	State	Percent change	Total	Federal	State	Percent change
Total	\$22,005.2	\$12,369.2	\$ 9,636	\$18,429.6	\$10,369.2	\$ 8,060.4	-16.2%	\$18,455.3	\$10,369.2	\$ 8,086.1	-16.1%
Alabama	497.6	347.7	149.9	413.0	288.6	124.4	-17	397.4	277.7	119.7	-20
Alaska	46.1	23.0	23.0	44.1	22.0	22.0	-4	44.0	22.0	22.0	-5
Arizona	1.991	114.5	51.6	144.3	99.4	44.8	-13	146.1	100.7	45.4	-12
Arkansas	2.69	48.8	20.9	63.4	44.4	19.0	6-	63.3	44.3	19.0	6-
California	2,479.0	1,239.5	1,239.5	2,157.8	1,078.9	1,078.9	-13	2,186.0	1,093.0	1,093.0	-12
Colorado	206.2	104.6	101.6	159.1	80.7	78.4	-23	160.8	81.6	79.2	-22
Connecticut	452.3	226.1	226.1	340.4	170.2	170.2	-25	344.0	172.0	172.0	-24
Delaware	18.7	10.2	8.4	17.8	9.7	8.0	-5	17.8	6.7	8.0	-5
District of Columbia	6.86	69.3	29.7	7.97	53.7	23.0	-22	77.7	54.4	23.3	-21
Florida	372.7	226.1	146.6	308.7	187.3	121.4	-17	307.4	186.5	120.9	-18
Georgia	449.8	303.9	146.0	349.4	236.0	113.4	-22	346.8	234.3	112.6	-23
Hawaii	20.4	11.0	9.4	18.5	10.0	8.5	6-	18.5	10.0	8.5	6-
Idaho	26.1	18.6	7.5	25.3	18.0	7.3	ကု	25.2	18.0	7.3	ငှ
Illinois	477.7	243.1	234.6	435.2	221.5	213.7	6-	436.1	221.9	214.2	6-
Indiana	362.9	241.7	121.2	345.5	230.1	115.4	-5	341.2	227.3	114.0	9-
Iowa	81.1	44.5	36.6	77.0	42.3	34.7	-5	77.6	42.6	35.0	-4
Kansas	83.3	46.6	36.7	65.3	36.5	28.8	-22	65.2	36.5	28.7	-22
Kentucky	233.1	163.9	69.2	183.6	129.1	54.5	-21	185.2	130.3	55.0	-21
Louisiana	1,203.7	748.8	454.9	1,099.3	683.8	415.4	6-	1,079.1	671.3	407.8	-10
Maine	189.4	118.7	70.7	173.4	108.7	64.7	φ	170.1	106.6	63.5	-10
Maryland	172.4	86.2	86.2	135.3	2.79	67.7	-22	137.0	68.5	68.5	-21
Massachusetts	2.689	344.9	344.9	558.7	279.4	279.4	-19	597.3	298.7	298.7	-13
Michigan	456.8	299.6	1.57.1	330.3	216.7	113.6	-28	333.0	218.5	114.6	-27
Minnesota	168.9	84.4	84.4	162.0	81.0	81.0	-4	162.8	81.4	81.4	-4
Mississippi	232.5	172.4	0.09	200.1	148.4	21.7	-14	197.1	146.2	50.9	-15
Missouri	846.5	535.7	310.8	680.5	430.6	249.9	-20	661.8	418.8	243.0	-22
Montana	19.7	12.8	8.9	18.4	12.0	6.4	9-	18.4	12.0	6.4	-7
Nebraska	62.5	32.0	30.5	59.5	30.4	29.0	-5	59.3	30.4	29.0	-5



TABLE 2A-2. (continued)

	:				Reduced	Reduced allotment			Reduced allotment	allotment	
	Unre	Unreduced allotment	nent		(status duo)	onb s		(Me	(Medicaid expansion scenario)	nsion scena	ario)
							Percent				Percent
State	Total	Federal	State	Total	Federal	State	change	Total	Federal	State	change
Nevada	\$ 80.5	\$ 52.3	\$ 28.2	\$ 76.8	\$ 49.9	\$ 26.9	-5%	\$ 77.4	\$ 50.2	\$ 27.1	-4%
New Hampshire	341.5	170.7	170.7	314.4	157.2	157.2	φ	313.0	156.5	156.5	φ
New Jersey	1,455.8	727.9	727.9	1,093.3	546.6	546.6	-25	1,095.7	547.9	547.9	-25
New Mexico	32.7	23.0	9.7	32.2	22.7	9.6	-	32.2	22.7	9.5	-2
New York	3,632.3	1,816.2	1,816.2	2,960.5	1,480.3	1,480.3	-18	3,000.9	1,500.4	1,500.4	-17
North Carolina	503.5	333.6	170.0	410.7	272.1	138.7	-18	410.8	272.1	138.7	-18
North Dakota	21.6	10.8	10.8	21.1	10.6	10.6	-2	21.1	10.6	10.6	-2
Ohio	735.3	459.3	276.0	550.6	344.0	206.6	-25	539.5	337.0	202.5	-27
Oklahoma	67.1	40.9	26.2	63.5	38.7	24.8	-5	63.4	38.6	24.7	9-
Oregon	79.5	51.2	28.3	72.4	46.6	25.8	6-	72.5	46.7	25.8	6-
Pennsylvania	1,220.1	634.6	585.5	951.7	495.0	456.7	-22	936.6	487.1	449.5	-23
Rhode Island	145.8	73.5	72.3	91.7	46.3	45.5	-37	94.3	47.5	46.8	-35
South Carolina	521.0	370.3	150.7	413.4	293.8	119.5	-21	408.6	290.4	118.2	-22
South Dakota	24.2	12.5	11.7	23.8	12.3	11.5	-2	23.7	12.3	11.5	-2
Tennessee	81.6	53.1	28.5	0.89	44.3	23.8	-17	6.99	43.5	23.4	-18
Texas	1,892.5	1,081.2	811.3	1,818.6	1,039.0	779.6	-4	1,810.4	1,034.3	776.1	-4
Utah	31.6	22.2	9.4	28.8	20.3	8.6	6-	28.7	20.2	8.6	6-
Vermont	47.2	25.4	21.8	31.5	17.0	14.5	-33	32.7	17.6	15.1	-31
Virginia	198.1	99.1	99.1	161.7	80.8	80.8	-18	159.9	79.9	79.9	-19
Washington	418.4	209.2	209.2	333.5	166.7	166.7	-20	343.9	172.0	172.0	-18
West Virginia	106.9	76.3	30.5	88.2	63.0	25.2	-17	86.9	62.0	24.8	-19
Wisconsin	183.6	106.9	7.97	180.0	104.8	75.2	-2	179.5	104.5	75.0	-2
Wyoming	0.5	0.3	0.3	0.5	0.2	0.2	-5	0.5	0.2	0.2	-5

August economic baseline. Reduced allotments are calculated based on the DSH Health Reform Methodology that CMS initially developed to apply DSH reductions to FY 2014. Under the status quo scenario, we assume that the only states that will expand their Medicaid programs to 138 percent of the federal poverty level are those that had expanded Notes: FY is fiscal year. DSH is disproportionate share hospital. Unreduced allotments for 2018 are projected from preliminary 2016 allotments provided by the Centers for Medicare & Medicaid Services (CMS) and using fiscal year Consumer Price Index for All Urban Consumers (CPI-U) projections from the Congressional Budget Office (CBO) by December 31, 2014. Under the Medicaid expansion scenario, we assume that all states will expand their Medicaid programs.

the Consumer Price Index for All Urban Consumers (CPI-U), 2011 as-filed Medicaid DSH audits, 2011 Medicare cost reports, and the U.S. Census Bureau 2014 American Source: Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of preliminary FY 2016 DSH allotments, Congressional Budget Office projections of Community Survey.



 TABLE 2A-3. Projected FY 2018 DSH Payments under Various Reduction Scenarios by Hospital Type (millions)

			Proportions	Proportional reduction	Strategic reduction	eduction
	Number of	Unreduced	Reduced	Percent	Reduced	Percent
State	DSH hospitals	DSH payments	payments	change	payments	change
Total	2,743	\$18,784	\$15,979	-15%	\$15,870	-16%
Deemed DSH status						
Deemed DSH hospitals	798	12,293	10,441	-15	13,027	9
DSH Hospitals, not deemed	1,945	6,492	5,538	-15	2,843	-56
Type of hospital						
Short-term acute care hospitals	1,891	14,941	12,693	-15	13,293	-11
Critical access hospitals	558	354	280	-21	195	-45
Psychiatric hospitals	174	3,097	2,679	-13	1,647	-47
Long-term hospitals	34	89	22	-17	47	-30
Rehabilitation hospitals	35	13	11	-11	10	-18
Children's hospitals	51	311	258	-17	229	118
Type of ownership						
For-profit	447	835	229	-19	897	7
Non-profit	1,521	5,439	4,708	-13	4,804	-12
Public	775	12,510	10,593	-15	10,169	-19
Urban/rural status						
Urban	1,615	17,009	14,545	-14	14,789	-13
Rural	1,128	1,775	1,434	-19	1,081	-39
Teaching status						
Non-teaching	2,013	5,687	4,744	-17	3,659	-36
Fewer than 100 residents	493	4,365	3,612	-17	3,668	-16
100 or more residents	237	8,731	7,623	-13	8,543	-2
Institutions for mental diseases (IMD) status	S					
IMD	166	3,095	2,677	-14	1,643	-47
Non-IMD	2,577	15,689	13,302	-15	14,227	6-

eduction methodology but do not change the total amount of DSH spending that they make. Deemed DSH status was estimated based on available Medicaid and low-income lospitals in a state. Strategic reduction model assumes that states change their targeting of DSH payments in response to the incentives created by the DSH allotment Excludes DSH hospitals that did not submit a Medicare cost report (n = 90). Proportional reduction model assumes that DSH payments are reduced proportionally across Notes: FY is fiscal year. DSH is disproportionate share hospital. DSH payments include state and federal funds. Dollar amounts may not sum up to total due to rounding. utilization data. For further discussion of the methodology and limitations, see Appendix 3A.

Sources: Dobson DaVanzo & Associates and KNG Health 2015 analysis for MACPAC of DSH audit data, Medicare cost reports, the U.S. Census Bureau American Community Survey; and Holahan, J., M. Buettgens, and S. Dorn, 2013, The cost of not expanding Medicaid, Washington, DC: Kaiser Family Foundation, http://kff.org/medicaid/report/thecost-of-not-expanding-medicaid/.



TABLE 2A-4. Number of Uninsured and Uninsured Rate by State, 2013–2014

	20	013	20	14		erence ess 2013)
State	Number (millions)	Percent of state population	Number (millions)	Percent of state population	Number (millions)	Percentage point
Total	45,181	14.5%	36,670	11.7%	-8,510	-2.8%
Alabama	645	13.6	579	12.1	-66	-1.4
Alaska	132	18.5	122	17.2	-10	-1.3
Arizona	1118	17.1	903	13.6	-215	-3.5
Arkansas	465	16.0	343	11.8	-122	-4.2
California	6,500	17.2	4,767	12.4	-1,733	-4.7
Colorado	729	14.1	543	10.3	-187	-3.8
Connecticut	333	9.4	245	6.9	-87	-2.5
Delaware	83	9.1	72	7.8	-12	-1.4
District of Columbia	42	6.7	34	5.3	-8	-1.4
Florida	3,853	20.0	3,245	16.6	-608	-3.4
Georgia	1,846	18.8	1,568	15.8	-278	-3.0
Hawaii	91	6.7	72	5.3	-19	-1.5
Idaho	257	16.2	219	13.6	-39	-2.6
Illinois	1,618	12.7	1,238	9.7	-380	-3.0
Indiana	903	14.0	776	11.9	-127	-2.0
Iowa	248	8.1	189	6.2	-59	-2.0
Kansas	348	12.3	291	10.2	-57	-2.0
Kentucky	616	14.3	366	8.5	-250	-5.8
Louisiana	751	16.6	672	14.8	-80	-1.8
Maine	147	11.2	134	10.1	-13	-1.0
Maryland	593	10.2	463	7.9	-130	-2.3
Massachusetts	247	3.7	219	3.3	-28	-0.4
Michigan	1,072	11.0	837	8.5	-235	-2.4
Minnesota	440	8.2	317	5.9	-123	-2.3
Mississippi	500	17.1	424	14.5	-76	-2.6
Missouri	773	13.0	694	11.7	-79	-1.4
Montana	165	16.5	143	14.2	-21	-2.2
Nebraska	209	11.3	179	9.7	-29	-1.7
Nevada	570	20.7	427	15.2	-143	-5.5
New Hampshire	140	10.7	120	9.2	-20	-1.5
New Jersey	1,160	13.2	965	10.9	-195	-2.3
New Mexico	382	18.6	298	14.5	-85	-4.1



#### TABLE 2A-4. (continued)

	20	)13	20	)14		erence ess 2013)
State	Number (millions)	Percent of state population	Number (millions)	Percent of state population	Number (millions)	Percentage point
New York	2,070	10.7%	1,697	8.7%	-373	-2.0%
North Carolina	1,509	15.6	1,276	13.1	-233	-2.6
North Dakota	73	10.4	57	7.9	-16	-2.5
Ohio	1,258	11.0	955	8.4	-302	-2.7
Oklahoma	666	17.7	584	15.4	-82	-2.3
Oregon	571	14.7	383	9.7	-188	-4.9
Pennsylvania	1,222	9.7	1,065	8.5	-158	-1.3
Rhode Island	120	11.6	77	7.4	-43	-4.2
South Carolina	739	15.8	642	13.6	-97	-2.2
South Dakota	93	11.3	82	9.8	-11	-1.5
Tennessee	887	13.9	776	12.0	-110	-1.8
Texas	5,748	22.1	5,047	19.1	-701	-3.1
Utah	402	14.0	366	12.5	-37	-1.5
Vermont	45	7.2	31	5.0	-14	-2.3
Virginia	991	12.3	884	10.9	-107	-1.4
Washington	960	14.0	643	9.2	-317	-4.7
West Virginia	255	14.0	156	8.6	-99	-5.4
Wisconsin	518	9.1	418	7.3	-100	-1.8
Wyoming	77	13.4	69	12.0	-8	-1.5

**Notes:** In 2013, there were a series of changes in how these data were collected that could affect some estimates. These changes include the addition of the Internet as a mode of data collection, the end of the content portion of Failed Edit Follow-Up interviewing and the loss of one monthly panel due to the federal government shut down in October 2013. For more information, see <a href="http://census.gov/programs-surveys/acs/technical-documentation/user-notes.html">http://census.gov/programs-surveys/acs/technical-documentation/user-notes.html</a>.

**Source:** Smith, J., and C. Medalia, 2015, *Health insurance coverage in the United States: 2014*, Current Population Reports, P60-253. Washington, DC: U.S. Census Bureau, https://www.census.gov/content/dam/Census/library/publications/2015/demo/p60-253.pdf.



TABLE 2A-5. State Levels of Uncompensated Care, 2013

State	Total uncompensated care (millions)	Uncompensated care as a share of hospital operating costs
Total	\$ 33,599	4.6%
Alabama	527	6.1
Alaska	102	6.0
Arizona	708	5.4
Arkansas	234	5.2
California	3,506	4.3
Colorado	405	3.3
Connecticut	154	2.0
Delaware	76	3.1
District of Columbia	67	2.0
Florida	2,400	7.0
Georgia	1,350	7.6
Hawaii	39	1.5
Idaho	141	3.8
Illinois	1,579	5.2
Indiana	857	4.4
lowa	300	3.9
Kansas	232	3.4
Kentucky	519	4.6
Louisiana	565	5.0
Maine	179	4.0
Maryland	738	5.8
Massachusetts	509	2.4
Michigan	917	3.6
Minnesota	279	1.8
Mississippi	451	6.3
Missouri	761	5.0
Montana	146	4.8
Nebraska	198	4.1
Nevada	159	3.8
New Hampshire	187	4.7
New Jersey	1,007	6.1
New Mexico	277	6.7



#### TABLE 2A-5. (continued)

State	Total uncompensated care (millions)	Uncompensated care as a share of hospital operating costs
New York	\$ 1,953	3.7%
North Carolina	1,395	6.2
North Dakota	101	3.2
Ohio	1,264	4.1
Oklahoma	446	5.3
Oregon	416	5.1
Pennsylvania	734	2.1
Rhode Island	156	5.5
South Carolina	593	6.6
South Dakota	101	3.2
Tennessee	415	4.8
Texas	3,852	6.9
Utah	293	5.2
Vermont	33	3.0
Virginia	882	4.5
Washington	586	3.6
West Virginia	257	5.5
Wisconsin	475	2.9
Wyoming	76	6.4

**Notes:** Medicare cost reports define uncompensated care as charity care and bad debt. Excludes hospitals without uncompensated care reported on their Medicare cost reports.

Source: MACPAC 2015 analysis of 2013 Medicare cost reports.



TABLE 2A-6. Deemed DSH Hospitals That Provide at Least One Essential Community Service, 2011

State         DSH hospitals browing beamed DSH hospitals that provide community service by the property of hospitals (all)         Number of hospitals beams or essential community service community service community service property of the property of		•					•	
State         (all)         Number         Percent         Number         Percent         Number         Percent           Total         6,000         2,743         46%         798         13%         702         12%           Alabama         125         94         75         9         7         7         6           Alaska         21         4         19         1         5         1         5           Arizona         102         41         40         40         39         32         31           Arkansas         100         2         2         1         1         1         1           Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         16         28         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23			DSH ho	ospitals	Deemed DS	SH hospitals	that pro least one	ovide at essential
Alabama         125         94         75         9         7         7         6           Alaska         21         4         19         1         5         1         5           Arizona         102         41         40         40         39         32         31           Arkansas         100         2         2         1         1         1         1           California         415         43         10         40         10         35         8           Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14 <th< th=""><th>State</th><th></th><th>Number</th><th>Percent</th><th>Number</th><th>Percent</th><th>Number</th><th>Percent</th></th<>	State		Number	Percent	Number	Percent	Number	Percent
Alaska         21         4         19         1         5         1         5           Arizona         102         41         40         40         39         32         31           Arkansas         100         2         2         1         1         1         1           California         415         43         10         40         10         35         8           Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3	Total	6,000	2,743	46%	798	13%	702	12%
Arizona         102         41         40         40         39         32         31           Arkansas         100         2         2         1         1         1         1           California         415         43         10         40         10         35         8           Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5 <t< td=""><td>Alabama</td><td>125</td><td>94</td><td>75</td><td>9</td><td>7</td><td>7</td><td>6</td></t<>	Alabama	125	94	75	9	7	7	6
Arkansas         100         2         2         1         1         1         1           California         415         43         10         40         10         35         8           Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illindian         164         16         10         16         10         16	Alaska	21	4	19	1	5	1	5
California         415         43         10         40         10         35         8           Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Ilidiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2	Arizona	102	41	40	40	39	32	31
Colorado         95         73         77         15         16         15         16           Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iousana         122         5         4         3         2         3         2 <th< td=""><td>Arkansas</td><td>100</td><td>2</td><td>2</td><td>1</td><td>1</td><td>1</td><td>1</td></th<>	Arkansas	100	2	2	1	1	1	1
Connecticut         42         34         81         4         10         3         7           Delaware         12         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentu	California	415	43	10	40	10	35	8
Delaware         12         1         8         1         8         1         8           District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Lou	Colorado	95	73	77	15	16	15	16
District of Columbia         13         8         62         8         62         6         46           Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13	Connecticut	42	34	81	4	10	3	7
Florida         242         71         29         36         15         28         12           Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0         0	Delaware	12	1	8	1	8	1	8
Georgia         174         137         79         23         13         14         8           Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts	District of Columbia	13	8	62	8	62	6	46
Hawaii         26         12         46         4         15         3         12           Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0           Michigan <td>Florida</td> <td>242</td> <td>71</td> <td>29</td> <td>36</td> <td>15</td> <td>28</td> <td>12</td>	Florida	242	71	29	36	15	28	12
Idaho         49         22         45         6         12         5         10           Illinois         208         48         23         41         20         36         17           Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesot	Georgia	174	137	79	23	13	14	8
Illinois   208   48   23   41   20   36   17     Indiana   164   16   10   10	Hawaii	26	12	46	4	15	3	12
Indiana         164         16         10         16         10         16         10           Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Missoisrispipi         112         49         44         9         8         9         8           M	Idaho	49	22	45	6	12	5	10
Iowa         122         5         4         3         2         3         2           Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississippi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Mo	Illinois	208	48	23	41	20	36	17
Kansas         153         54         35         13         8         13         8           Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississippi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Montana         62         52         84         10         16         10         16 </td <td>Indiana</td> <td>164</td> <td>16</td> <td>10</td> <td>16</td> <td>10</td> <td>16</td> <td>10</td>	Indiana	164	16	10	16	10	16	10
Kentucky         115         104         90         35         30         29         25           Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississippi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Montana         62         52         84         10         16         10         16           Nebraska         96         29         30         12         13         9         9	Iowa	122	5	4	3	2	3	2
Louisiana         220         91         41         38         17         29         13           Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississippi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Montana         62         52         84         10         16         10         16           Nebraska         96         29         30         12         13         9         9           New Hampshire         30         27         90         6         20         6         20	Kansas	153	54	35	13	8	13	8
Maine         41         1         2         0         0         0         0           Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississisppi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Montana         62         52         84         10         16         10         16           Nebraska         96         29         30         12         13         9         9           Nevada         52         21         40         5         10         5         10           New Hampshire         30         27         90         6         20         6         20	Kentucky	115	104	90	35	30	29	25
Maryland         61         21         34         14         23         11         18           Massachusetts¹         108         0         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississippi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Montana         62         52         84         10         16         10         16           Nebraska         96         29         30         12         13         9         9           Nevada         52         21         40         5         10         5         10           New Hampshire         30         27         90         6         20         6         20           New Jersey         98         79         81         24         24         24         24	Louisiana	220	91	41	38	17	29	13
Massachusetts¹         108         0         0         0         0         0         0           Michigan         169         118         70         11         7         10         6           Minnesota         143         94         66         13         9         12         8           Mississippi         112         49         44         9         8         9         8           Missouri         146         108         74         34         23         27         18           Montana         62         52         84         10         16         10         16           Nebraska         96         29         30         12         13         9         9           Nevada         52         21         40         5         10         5         10           New Hampshire         30         27         90         6         20         6         20           New Jersey         98         79         81         24         24         24         24	Maine	41	1	2	0	0	0	0
Michigan       169       118       70       11       7       10       6         Minnesota       143       94       66       13       9       12       8         Mississippi       112       49       44       9       8       9       8         Missouri       146       108       74       34       23       27       18         Montana       62       52       84       10       16       10       16         Nebraska       96       29       30       12       13       9       9         Nevada       52       21       40       5       10       5       10         New Hampshire       30       27       90       6       20       6       20         New Jersey       98       79       81       24       24       24       24       24	Maryland	61	21	34	14	23	11	18
Minnesota       143       94       66       13       9       12       8         Mississippi       112       49       44       9       8       9       8         Missouri       146       108       74       34       23       27       18         Montana       62       52       84       10       16       10       16         Nebraska       96       29       30       12       13       9       9         Nevada       52       21       40       5       10       5       10         New Hampshire       30       27       90       6       20       6       20         New Jersey       98       79       81       24       24       24       24       24	Massachusetts <sup>1</sup>	108	0	0	0	0	0	0
Mississippi       112       49       44       9       8       9       8         Missouri       146       108       74       34       23       27       18         Montana       62       52       84       10       16       10       16         Nebraska       96       29       30       12       13       9       9         Nevada       52       21       40       5       10       5       10         New Hampshire       30       27       90       6       20       6       20         New Jersey       98       79       81       24       24       24       24       24	Michigan	169	118	70	11	7	10	6
Missouri       146       108       74       34       23       27       18         Montana       62       52       84       10       16       10       16         Nebraska       96       29       30       12       13       9       9         Nevada       52       21       40       5       10       5       10         New Hampshire       30       27       90       6       20       6       20         New Jersey       98       79       81       24       24       24       24       24	Minnesota	143	94	66	13	9	12	8
Montana       62       52       84       10       16       10       16         Nebraska       96       29       30       12       13       9       9         Nevada       52       21       40       5       10       5       10         New Hampshire       30       27       90       6       20       6       20         New Jersey       98       79       81       24       24       24       24       24	Mississippi	112	49	44	9	8	9	8
Nebraska       96       29       30       12       13       9       9         Nevada       52       21       40       5       10       5       10         New Hampshire       30       27       90       6       20       6       20         New Jersey       98       79       81       24       24       24       24       24	Missouri	146	108	74	34	23	27	18
Nevada     52     21     40     5     10     5     10       New Hampshire     30     27     90     6     20     6     20       New Jersey     98     79     81     24     24     24     24	Montana	62	52	84	10	16	10	16
New Hampshire         30         27         90         6         20         6         20           New Jersey         98         79         81         24         24         24         24	Nebraska	96	29	30	12	13	9	9
New Jersey 98 79 81 24 24 24 24	Nevada	52	21	40	5	10	5	10
	New Hampshire	30	27	90	6	20	6	20
New Mexico         45         13         29         7         16         6         13	New Jersey	98	79	81	24	24	24	24
	New Mexico	45	13	29	7	16	6	13



#### TABLE 2A-6. (continued)

	Number of hospitals	DSH ho	ospitals	Deemed DS	:H hospitals	that pro least one	H hospitals ovide at essential ty service
State	(all)	Number	Percent	Number	Percent	Number	Percent
New York	217	191	88%	36	17%	34	16%
North Carolina	131	51	39	15	11	15	11
North Dakota	49	4	8	1	2	1	2
Ohio	223	183	82	17	8	13	6
Oklahoma	145	61	42	13	9	13	9
Oregon	63	8	13	5	8	5	8
Pennsylvania	234	205	88	62	26	55	24
Rhode Island	15	14	93	2	13	1	7
South Carolina	82	64	78	13	16	11	13
South Dakota	60	17	28	11	18	11	18
Tennessee	144	79	55	23	16	20	14
Texas	563	172	31	74	13	74	13
Utah	54	40	74	4	7	4	7
Vermont	15	13	87	3	20	3	20
Virginia	112	31	28	9	8	7	6
Washington	98	63	64	14	14	13	13
West Virginia	61	53	87	9	15	9	15
Wisconsin	143	10	7	6	4	5	3
Wyoming	30	12	40	2	7	2	7

**Notes:** DSH is disproportionate share hospital. Excludes DSH hospitals that did not submit a Medicare cost report (n = 90). Deemed DSH status was estimated based on available Medicaid and low-income utilization data. Our working definition of essential community services includes the following services: burn services, dental services, graduate medical education, HIV/AIDS care, inpatient psychiatric services (through psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, substance use disorder services, and trauma services. For further discussion of the methodology and limitations, see Appendix 3A.

**Source:** MACPAC 2015 analysis of 2011 as-filed Medicaid DSH audits, 2011 and 2013 Medicare cost report data, and the American Hospital Association annual survey.

<sup>&</sup>lt;sup>1</sup> Massachusetts does not make DSH payments because its Section 1115 demonstration allows the state to use DSH funding for the state's safety-net care pool instead.



TABLE 2A-7. Other Characteristics of Deemed DSH Hospitals, 2011

		Number	er of hospital beds	l beds			Number of M	edicaid day	Number of Medicaid days (thousands)	
	Ψ	DSH hos	spitals	Deemed DSH hospitals	H hospitals	¥	DSH ho	DSH hospitals	Deemed DS	Deemed DSH hospitals
State	hospitals	Number	Percent	Number	Percent	hospitals	Number	Percent	Number	Percent
Total	676,877	386,211	21%	120,815	<b>18</b> %	24,287	15,316	%89	8,044	33%
Alabama	13,808	12,032	87	1,256	6	639	615	96	177	28
Alaska	1,092	202	46	80	7	79	38	48	2	က
Arizona	12,469	6,695	54	6,501	52	631	480	92	469	74
Arkansas	8,131	543	7	313	4	240	28	12	23	10
California	60,353	7,003	12	5,994	10	2,952	724	25	642	22
Colorado	8,160	6,575	81	2,053	25	342	329	96	182	53
Connecticut	7,380	6,787	92	910	12	304	232	92	62	20
Delaware	2,021	115	9	115	9	85	I	I	ı	I
District of Columbia	2,614	1,185	45	1,185	45	178	115	65	115	65
Florida	46,346	18,903	41	9,044	20	1,864	1,198	64	200	41
Georgia	18,668	16,048	98	3,336	18	220	553	97	213	37
Hawaii	2,075	1,615	78	451	22	40	33	82	11	28
Idaho	2,574	1,672	65	702	27	108	83	77	44	40
Illinois	27,161	8,735	32	6,777	25	1,551	731	47	591	38
Indiana	14,925	799	2	799	5	369	45	12	45	12
lowa	7,242	1,093	15	617	6	277	109	39	80	29
Kansas	7,543	3,592	48	2,018	27	178	140	62	115	65
Kentucky	12,389	11,872	96	3,805	31	358	348	26	150	42
Louisiana	15,649	7,975	51	3,122	20	899	383	22	188	28
Maine	3,022	92	က	0	0	145	_	0	0	0
Maryland	11,876	3,766	32	3,105	26	405	155	38	135	33
Massachusetts <sup>1</sup>	17,205	0	0	0	0	852	0	0	0	0
Michigan	21,465	17,925	84	1,658	8	429	366	85	92	22
Minnesota	9,817	8,563	87	1,285	13	363	330	91	135	37
Mississippi	10,033	5,478	22	1,183	12	432	252	28	114	26
Missouri	15,815	12,264	78	3,442	22	559	433	78	194	35
Montana	2,427	2,090	98	440	18	74	74	100	23	31
Nebraska	4,835	2,809	28	1,472	30	155	135	87	26	63



TABLE 2A-7. (continued)

		Numb	Number of hospital beds	ıl beds			lumber of M	edicaid days	Number of Medicaid days (thousands)	
	All	DSH ho	DSH hospitals	Deemed DSH hospitals	Hospitals	All	DSH ho	DSH hospitals	Deemed DSH hospitals	l hospitals
State	hospitals	Number	Percent	Number	Percent	hospitals	Number	Percent	Number	Percent
Nevada	5,106	2,982	28%	899	18%	173	145	84%	77	45%
New Hampshire	2,352	2,286	26	444	19	29	29	66	19	32
New Jersey	20,082	18,614	93	5,302	26	373	335	06	137	37
New Mexico	3,595	1,647	46	742	21	89	45	65	29	42
New York	43,941	40,557	92	7,442	17	1,892	1,645	87	501	26
North Carolina	18,776	10,653	22	3,967	21	1,023	637	62	311	30
North Dakota	2,164	446	21	24	_	73	11	14	0	0
Ohio	27,035	24,938	92	2,571	10	260	519	93	144	26
Oklahoma	9,933	6,343	64	1,744	18	545	410	75	213	39
Oregon	5,399	901	17	395	7	205	51	25	22	-
Pennsylvania	33,395	31,954	96	9,371	28	9/9	673	66	335	20
Rhode Island	2,615	2,533	97	642	25	28	22	100	24	42
South Carolina	10,342	9,346	06	2,355	23	246	244	66	114	46
South Dakota	2,586	1,152	45	473	18	06	54	09	25	28
Tennessee	16,205	11,878	73	3,299	20	458	390	85	226	49
Texas	57,584	27,331	47	12,671	22	1,244	922	77	726	28
Utah	4,251	3,661	98	217	2	199	193	97	26	13
Vermont	891	787	88	06	10	39	39	100	5	12
Virginia	14,851	6,789	46	2,320	16	483	320	99	205	43
Washington	9,880	7,254	73	1,782	18	478	360	75	117	24
West Virginia	5,803	5,444	94	1,582	27	175	175	100	85	48
Wisconsin	11,689	1,269	11	741	9	292	53	18	41	14
Wyoming	1,307	713	55	62	9	32	16	20	2	9

Notes: DSH is disproportionate share hospital. Excludes DSH hospitals that did not submit a Medicare cost report (n = 90). Deemed DSH status was estimated based on available Medicaid and low-income utilization data. For further discussion of the methodology and limitations, see Appendix 3A.

Source: MACPAC 2015 analysis of 2011 as-filed Medicaid DSH audits, 2011 and 2013 Medicare cost report data, and the American Hospital Association annual survey.

Massachusetts does not make DSH payments because its Section 1115 demonstration allows the state to use DSH funding for the state's safety-net care pool instead.

<sup>-</sup> Dash means data were not available.