Chapter 3:

Annual Analysis of Disproportionate Share Hospital Allotments to States

Annual Analysis of Disproportionate Share Hospital Allotments to States

Key Points

- MACPAC continues to find no meaningful relationship between states' disproportionate share hospital (DSH) allotments and the three factors that Congress has asked the Commission to study:
  - the number of uninsured individuals;
  - the amounts and sources of hospitals' uncompensated care costs; and
  - the number of hospitals with high levels of uncompensated care that also provide essential community services for low-income, uninsured, and vulnerable populations.
- In the years since implementation of the coverage expansions under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended):
  - Total hospital charity care and bad debt fell by $8.6 billion (23 percent) between 2013 and 2015, with the largest declines occurring in states that expanded Medicaid.
  - Medicaid shortfall increased by about $3.0 billion (23 percent) because of increased Medicaid enrollment.
- The ACA included reductions to DSH allotments, but these reductions have been delayed several times. Under current law, federal DSH allotments are scheduled to be reduced in fiscal year (FY) 2020 by $4 billion, which is 31 percent of states' unreduced DSH allotment amounts. DSH allotment reductions are scheduled to increase to $8 billion a year in FYs 2021–2025.
- Although as this report went to print the Centers for Medicare & Medicaid Services (CMS) had not yet finalized the methodology for distributing DSH allotment reductions, under CMS's proposed approach, FY 2020 DSH allotment reductions for 22 states and the District of Columbia are projected to exceed the amount that hospital charity care and bad debt declined in these states between 2013 and 2015.
- The Commission plans to continue to monitor the potential effects of DSH allotment reductions on states and hospitals before these reductions take effect.
- The Commission is also undertaking a broader analysis of Medicaid hospital payment policy that considers all types of Medicaid payments to hospitals.

CHAPTER 3: Annual Analysis of Disproportionate Share Hospital Allotments to States

State Medicaid programs are statutorily required to make disproportionate share hospital (DSH) payments to hospitals that serve a high proportion of Medicaid beneficiaries and other low-income patients. The total amount of such payments are limited by annual federal DSH allotments, which vary widely by state and are largely based on state DSH spending in 1992. States can distribute DSH payments to virtually any hospital in their state, but total DSH payments to a hospital cannot exceed the total amount of uncompensated care that hospitals provide. DSH payments help to offset two types of uncompensated care: Medicaid shortfall (the difference between a hospital's Medicaid payments and its costs of providing services to Medicaid-enrolled patients) and unpaid costs of care for uninsured individuals. More generally, DSH payments also help to support the financial viability of safety-net hospitals.

MACPAC is statutorily required to report annually on the relationship between allotments and several potential indicators of the need for DSH funds:

- changes in the number of uninsured individuals;
- the amounts and sources of hospitals' uncompensated care costs; and
- the number of hospitals with high levels of uncompensated care that also provide essential community services for low-income, uninsured, and vulnerable populations.

As in our two previous DSH reports, we find little meaningful relationship between DSH allotments and the factors that Congress asked the Commission to study. This is because DSH allotments are largely based on states' historical DSH spending before federal limits were established in 1992 and also because the effects of the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) on the number of uninsured people and levels of hospital uncompensated care differ between states that expanded Medicaid and states that did not.[1]

In this report, we update findings from previous reports about changes in the number of uninsured individuals and levels of hospital uncompensated care (Table 3-1). We also provide updated information on deemed DSH hospitals, which are statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Specifically, we find the following:

- The national uninsured rate declined by 0.3 percentage points between 2015 and 2016, resulting in a total decrease of about 4.6 percentage points from 2013 through 2016.
- Between 2013 and 2015, total hospital charity care and bad debt fell by $8.6 billion (23 percent), with the largest declines occurring in states that expanded Medicaid.
- During this period, Medicaid shortfall increased by about $3.0 billion (23 percent) because of increased Medicaid enrollment.[2]
- In 2015, deemed DSH hospitals continued to report lower aggregate operating margins than other hospitals (negative 0.3 percent for deemed DSH hospitals versus 1.6 percent for all hospitals). Total margins (which include revenue not directly related to patient care) were similar between deemed DSH hospitals (5.7 percent) and all hospitals (6.0 percent). Aggregate operating and total margins for deemed DSH hospitals would have been about 4 percentage points lower without DSH payments.

TABLE 3-1. National Number of Uninsured Persons and Levels of Uncompensated Care, 2013–2016

Year	Number of uninsured persons (millions)	Total charity care and bad debt (billions)	Total Medicaid shortfall (billions)	Total hospital uncompensated care (billions)
2013	41.8	$37.3	$13.2	$50.5
2014	33.0	31.6	14.1	45.7
2015	29.0	28.7	16.2	44.9
2016	28.1	–	–	–
Percent change, 2013 to 2015	-31%	-23%	23%	-11%

Notes: National estimates of the number of uninsured individuals come from the Current Population Survey, a monthly survey of households by the U.S. Census Bureau, which is the preferred source for national analyses. Medicaid shortfall is the difference between Medicaid payments and a hospital's costs of providing services to Medicaid-enrolled patients.

– Dash indicates that data are not available.

Sources: MACPAC, 2018, analysis of AHA 2016a, 2016b, 2015; Barnett and Berchick 2017; and Medicare cost reports.

We also project fiscal year (FY) 2020 DSH allotments before and after implementation of federal DSH allotment reductions. DSH allotment reductions were included in the ACA under the assumption that increased health care coverage through Medicaid and the exchanges would lead to reductions in hospital uncompensated care and thereby lessen the need for DSH payments. DSH allotment reductions have been delayed several times, most recently in February 2018 by the Bipartisan Budget Act (P.L. 115-123). Under current law, the first round of reductions (amounting to $4 billion or 31 percent of unreduced amounts) is now scheduled to take effect in FY 2020. At this writing, the Centers for Medicare & Medicaid Services (CMS) have not yet finalized their methodology for distributing DSH allotment reductions, so our analyses in this chapter reflect the methodology that CMS proposed in July 2017 (CMS 2017a).

Although the reduction methodology proposed by CMS applies larger reductions to states with lower uninsured rates, it does not substantially change the pattern of allotments among states and does not result in DSH allotments that are well-aligned with the number of uninsured individuals in the state or the other factors that Congress asked MACPAC to consider. In addition, the reductions resulting from this methodology do not correspond with changes in hospital uncompensated care. In 27 states, FY 2020 DSH allotment reductions (including state and federal funds) are projected to be less than the amount by which hospital charity care and bad debt declined between 2013 and 2015, and in 22 states and the District of Columbia, reductions are projected to exceed the amount by which charity care and bad debt declined during these years.[3] The national total of available state and federal DSH funding for FY 2020 ($15.7 billion) is less than the total amount of hospital uncompensated care reported in 2015 ($44.9 billion, including charity care, bad debt, and Medicaid shortfall).

Little information is available to suggest how states and hospitals may respond to FY 2020 DSH allotment reductions. Given that many safety-net

hospitals continue to face financial challenges despite serving more patients with insurance, some of these hospitals may cut services or pursue other cost-cutting measures to maintain their financial viability. Hospitals in states that have not spent their full DSH allotment previously may not face cost-cutting decisions in FY 2020 because, even with the DSH allotment reductions, some of these states may be able to maintain their current level of DSH spending. However, as the size of DSH allotment reductions increases in FY 2021 through FY 2025, more states and hospitals will be affected.

The Commission has long held that DSH payments should be better targeted to hospitals serving a high share of Medicaid-enrolled and low-income uninsured patients and that have higher levels of uncompensated care, consistent with the original statutory intent of the law establishing DSH payments. Development of policy to achieve this goal, however, must be considered in terms of all Medicaid payments to hospitals including DSH payments, non-DSH supplemental payments, and base payments, as these sources may be fungible at the state and institutional levels. In the coming year, the Commission will undertake a broader discussion of Medicaid hospital payment policy and the statutory goals of efficiency, economy, quality, and access.

Background

Current DSH allotments vary widely among states, reflecting the evolution of DSH policy over time. States began making Medicaid DSH payments in 1981, when Medicaid hospital payments were delinked from Medicare payment levels. Initially, states were slow to make DSH payments, and in 1987, Congress required states to make payments to hospitals that serve a high share of Medicaid-

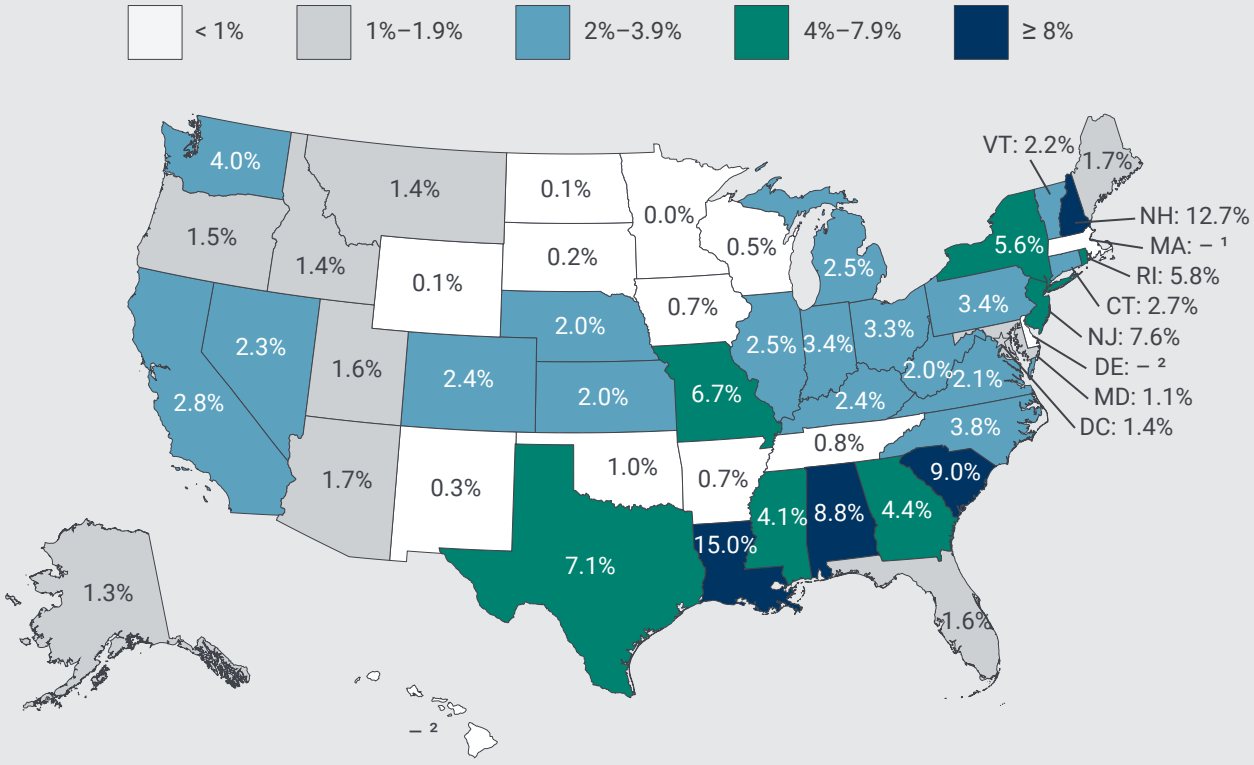
BOX 3-1. Glossary of Key Medicaid Disproportionate Share Hospital Terminology

- **DSH hospital.** A hospital that receives disproportionate share hospital (DSH) payments and meets the minimum statutory requirements to be eligible for DSH payments: a Medicaid inpatient utilization rate of at least 1 percent and at least two obstetricians with staff privileges that treat Medicaid enrollees (with certain exceptions).
- **Deemed DSH hospital.** A DSH hospital with a Medicaid inpatient utilization rate of at least one standard deviation above the mean for hospitals in the state that receive Medicaid payments, or a low-income utilization rate that exceeds 25 percent. Deemed DSH hospitals are required to receive Medicaid DSH payments (§ 1923(b) of the Social Security Act (the Act)).
- **State DSH allotment.** The total amount of federal funds available to a state for Medicaid DSH payments. To draw down federal DSH funding, states must provide state matching funds at the same matching rate as other Medicaid service expenditures. If a state does not spend the full amount of its allotment for a given year, the unspent portion is not paid to the state and does not carry over to future years. Allotments are determined annually and are generally equal to the prior year's allotment, adjusted for inflation (§ 1923(f) of the Act).
- **Hospital-specific DSH limit.** The total amount of uncompensated care for which a hospital may receive Medicaid DSH payments, equal to the sum of Medicaid shortfall and unpaid costs of care for uninsured patients for allowable inpatient and outpatient costs.

enrolled and low-income patients, referred to as deemed DSH hospitals. DSH spending grew rapidly in the early 1990s after Congress clarified that DSH payments were not subject to Medicaid's hospital payment limitations and CMS issued guidance permitting the use of provider taxes to finance the non-federal share of Medicaid payments.[4] The total amount of DSH payments increased from $1.3 billion in 1990 to $17.7 billion in 1992 (Holahan et al. 1998).

In 1991, Congress enacted state-specific caps on the amount of federal funds that could be used to make DSH payments, referred to as allotments (Box 3-1). Allotments were initially established for FY 1993 and were generally based on each state's 1992 DSH spending. Although Congress has made several incremental adjustments to these allotments, the states that spent the most in 1992 still have the largest allotments, and the states that spent the least in 1992 still have the smallest allotments.[5]

FIGURE 3-1. DSH Spending as a Share of Total Medicaid Benefit Spending, by State, FY 2016



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

[1] Massachusetts does not make DSH payments because its Section 1115 demonstration allows the state to use all of its DSH funding for the state's safety-net care pool instead.
[2] Delaware and Hawaii did not report DSH spending in FY 2016, but these states have reported DSH spending in prior years.

— Dash indicates zero. 0.0 indicates a non-zero amount less than 0.05 percent.

Source: MACPAC, 2017, analysis of CMS-64 Financial Management Report net expenditure data as of September 19, 2017.

In FY 2016, federal funds allotted to states for DSH payments totaled $11.9 billion, of which states spent $11.2 billion. (States spent $19.7 billion in state and federal funds combined.) DSH allotments that year ranged 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).

At the national level, DSH spending accounted for 3.6 percent of total Medicaid benefit spending in FY 2016, an amount that has been relatively consistent since FY 2011.[6] At the state level, state and federal DSH spending as a share of total state Medicaid benefit spending varied widely, from less than 1 percent in 10 states to 15 percent in Louisiana (Figure 3-1).

States have up to two years to spend their DSH allotment, and in FY 2015, $1.6 billion in federal DSH allotments went unspent. There are two primary reasons states do not spend their full DSH allotment: (1) they lack state funds to provide the non-federal share; and (2) the DSH allotment exceeds the total amount of hospital uncompensated care in the state. (As noted above, DSH payments to an individual hospital cannot exceed that hospital's level of uncompensated care.) In FY 2015, two-thirds of unspent DSH allotments were attributable to six states (Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, and Pennsylvania), all of which had FY 2015 DSH allotments (including state and federal funds combined) that were larger than the total amount of hospital uncompensated care in the state reported on 2015 Medicare cost reports.[7]

In state plan rate year (SPRY) 2013, 44 percent of U.S. hospitals received DSH payments (Table 3-2). (States report hospital-specific DSH data on a SPRY basis, which often corresponds to the state fiscal year and may not align with the federal fiscal year.) Public teaching hospitals in urban settings received the largest share of total DSH funding. Half of all rural hospitals also received DSH payments, including many critical access hospitals, which receive a special payment designation from Medicare because they are small and often the only provider in their geographic area. Many states also make DSH payments to institutions for mental diseases (IMDs), which are not eligible for Medicaid payment for services provided to individuals age 21–64 but are eligible for DSH funding.[8] In SPRY 2013, Maine made DSH payments exclusively to IMDs, and three states (Alaska, Louisiana, and North Dakota) spent more than half of their DSH allotments on DSH payments to IMDs.

The share of hospitals that receive DSH payments varies widely by state. States are allowed to make DSH payments to any hospital that has a Medicaid inpatient utilization rate of at least 1 percent, which is true of almost all U.S. hospitals.[9] In SPRY 2013, five states made DSH payments to fewer than 10 percent of the hospitals in their state (Arkansas, Iowa, Maine, North Dakota, and Washington) and three states made DSH payments to more than 90 percent of hospitals in their state (New York, Oregon, and Rhode Island).

As noted above, states are statutorily required to make DSH payments to deemed DSH hospitals, which serve a high share of Medicaid-enrolled and low-income patients. In SPRY 2013, 44 percent of all U.S. hospitals received DSH payments, and about 14 percent of all U.S. hospitals met the deemed DSH standards. These deemed DSH hospitals constituted just under one-third (31 percent) of DSH hospitals but accounted for more than two-thirds (69 percent) of all DSH payments, receiving $12 billion in DSH payments. States vary in how they distribute DSH payments to deemed DSH hospitals, from fewer than 10 percent of payments in four states (Alabama, New Hampshire, Utah, and Vermont) to 100 percent in five states (Arkansas, Arizona, Delaware, Illinois, and Maine) and the District of Columbia.

State DSH targeting policies are difficult to categorize. States that concentrate DSH payments among a small number of hospitals do not necessarily make the largest share of payments to deemed DSH hospitals (e.g., North Dakota); conversely, some states that distribute DSH

TABLE 3-2. Distribution of DSH Spending by Hospital Characteristics, SPRY 2013

Hospital characteristics	Number and share of hospitals			Total DSH spending (millions)
	All hospitals	DSH hospitals	DSH hospitals as percentage of all hospitals in category	
Total	**5,983**	**2,651**	**44%**	**$17,354**
Hospital type				
Short-term acute care hospitals	3,341	1,843	55	**14,190**
Critical access hospitals	1,337	570	43	**359**
Psychiatric hospitals	533	139	26	**2,501**
Long-term hospitals	430	22	5	**40**
Rehabilitation hospitals	257	29	11	**9**
Children's hospitals	85	48	56	**254**
Urban/Rural				
Urban	3,512	1,425	41	**15,555**
Rural	2,471	1,226	50	**1,799**
Hospital ownership				
For-profit	1,797	440	24	**1,249**
Non-profit	2,928	1,492	51	**5,121**
Public	1,258	719	57	**10,984**
Teaching status				
Non-teaching	4,821	1,870	39	**4,684**
Low-teaching hospital	707	431	61	**2,593**
High-teaching hospital	455	350	77	**10,077**
Deemed DSH status				
Deemed	814	814	100	**11,965**
Not deemed	5,169	1,837	36	**5,389**

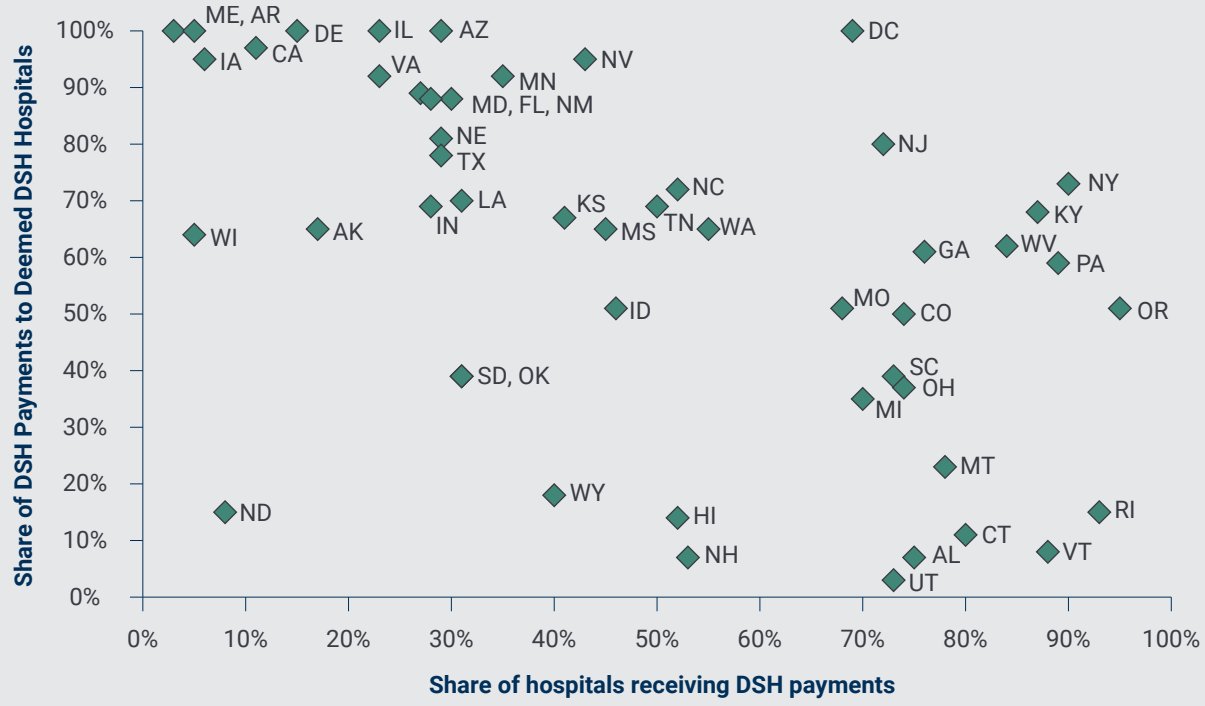
Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. Low-teaching hospitals have an intern-and-resident-to-bed ratio (IRB) of less than 0.25 and high-teaching hospitals have an IRB equal to or greater than 0.25. Deemed DSH hospitals are statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Total DSH spending includes state and federal funds.

Source: MACPAC, 2017, analysis of 2015 Medicare cost reports and 2013 as-filed Medicaid DSH audits.

payments across most hospitals still target the largest share of DSH payments to those that are deemed DSH hospitals (e.g., District of Columbia, New Jersey, New York) (Figure 3-2). States' criteria for identifying eligible DSH hospitals and how much funding they receive vary, but are often related to hospital ownership, hospital type, and geographic factors. The approaches that states use to finance the non-federal share of DSH payments may also affect their DSH targeting policies. More information about state DSH targeting policies is included in Chapter 3 of MACPAC's March 2017 report to Congress (MACPAC 2017b).

State DSH policy changes frequently, often as a function of state budgets; the amounts paid to hospitals are more likely to change than the types of hospitals receiving the payments. About 9 in 10 (87 percent) of the hospitals that received DSH payments in SPRY 2013 also received DSH payments in SPRYs 2011 and 2012. But about one in five hospitals receiving DSH payments in both SPRY 2012 and SPRY 2013 reported that the amount they received in SPRY 2013 differed (either increased or decreased) from the amount they received in SPRY 2012 by more than 50 percent.

FIGURE 3-2. Share of Hospitals Receiving DSH Payments and Share of DSH Payments to Deemed DSH Hospitals, by State, SPRY 2013



Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. The share of DSH payments to deemed DSH hospitals shown does not account for provider contributions to the non-federal share; these contributions may reduce net payments. Analysis excludes Massachusetts, which does not make DSH payments because its Section 1115 demonstration allows the state to use all of its DSH funding for the state's safety-net care pool instead.

Source: MACPAC, 2017, analysis of 2015 Medicare cost reports and 2013 as-filed Medicaid DSH audits.

Changes in the Number of Uninsured Individuals

According to the Current Population Survey (CPS), the number of uninsured individuals in the United States declined by 13.7 million from 2013 through 2016, a 33 percent decrease.[10] The national uninsured rate decreased by about 4.6 percentage points in this period, which includes a 0.3 percentage point decline between 2015 and 2016 (Barnett and Berchick 2017).[11]

These figures reflect increases in both private and publicly funded health insurance coverage. From 2014 to 2016, the share of the U.S. population with private coverage at some point in the year (including individual insurance purchased through a health insurance exchange) increased 1.5 percentage points to 67.5 percent, and the share of the population covered at some point in the year by publicly funded coverage (including Medicaid) increased 0.8 percentage points to 37.3 percent (Barnett and Berchick 2017).

The uninsured rate declined in all states between 2013 and 2016, and states that expanded Medicaid to the new adult group had larger declines (5.8 percentage points) than those that did not (4.6 percentage points), according to the American Community Survey. Montana, which expanded its Medicaid program in January 2016, had a 3.5 percentage point decrease in its uninsured rate between 2015 and 2016, the largest state decline in that period (Barnett and Berchick 2017).

Looking ahead, the number of uninsured individuals is expected to increase as the population grows and as the year-over-year effects of the ACA coverage expansions diminish. The National Health Interview Survey reported a small but not statistically significant increase in the number of uninsured individuals in the first half of 2017 (0.2 million), and the Gallup-Sharecare Well-Being Index, which tracks the national uninsured rate quarterly, reported that the uninsured rate was 1.6 percentage points higher in the third quarter of 2017 than it was at the end of 2016 (Auter 2017, Zammitti et al. 2017). Further, in September 2017, the Congressional Budget Office (CBO) estimated that between 2017 and 2018 the number of uninsured individuals will increase by 2 million, a 1 percentage point increase in the uninsured rate (CBO 2017a). In November 2017, the CBO projected that the repeal of the individual mandate to purchase health insurance included in the Tax Cuts and Jobs Act (P.L. 115-97) would increase the number of uninsured individuals beginning in 2019 (CBO 2017b).

Changes in the Amount of Hospital Uncompensated Care

In considering changes in the amount of uncompensated care, it is important to note that DSH payments cover not only unpaid costs of care for uninsured individuals but also Medicaid shortfall. Since the implementation of the ACA coverage expansions in 2014, unpaid costs of care for uninsured individuals have declined substantially, particularly in states that have expanded Medicaid. However, as the number of Medicaid enrollees has increased, Medicaid shortfall has also increased.

Below we review the change in uncompensated care between 2013 and 2015 for both types of uncompensated care, and we also provide information about how changes in hospital uncompensated care are affecting hospital margins. It is important to note that definitions of uncompensated care vary among data sources, complicating comparisons and our ability to fully understand effects at the hospital level (Box 3-2).

Our estimates of state-level unpaid costs of care for uninsured individuals are based on charity care and bad debt data reported on Medicare cost reports. One limitation of Medicare cost report data is that they do not report charity care and bad debt for uninsured patients separately from charity

care and bad debt for patients with insurance. In addition, there are concerns about the accuracy and consistency of Medicare cost report data because these data are not audited for all hospitals (CMS 2015).[12]

BOX 3-2. Definitions and Data Sources for Uncompensated Care Costs

Data Sources

- **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. The audit ensures 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 uninsured individuals for allowable inpatient and outpatient costs. Forty-four percent of U.S. hospitals were included on DSH audits in 2013, 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 for the services 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 services 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

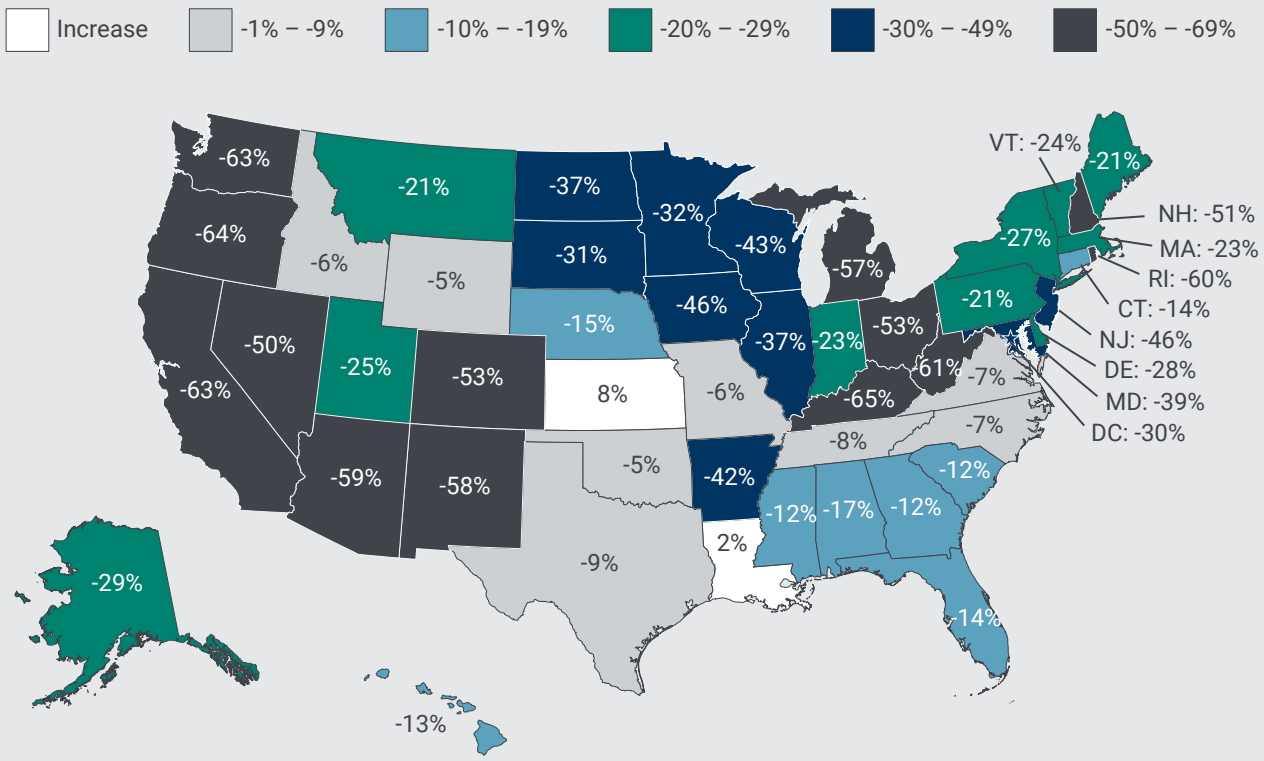
- **Unpaid costs of care for uninsured individuals.** The difference between a hospital's costs of providing services to individuals without health coverage and the total amount of payment received for those services. This includes charity care and bad debt for individuals without health coverage and generally excludes charity care and bad debt for individuals with health coverage.
- **Medicaid shortfall.** The difference between a hospital's costs of providing services to Medicaid-enrolled patients and the total amount of Medicaid payment received for those services (under both fee-for-service and managed care, excluding DSH payments but including other types of supplemental payments). Costs for patients dually eligible for Medicaid and other coverage (such as Medicare) are included, and costs for physician services and other care that does not meet the definition of inpatient and outpatient hospital services are excluded.

Because state-level data on Medicaid shortfall available on Medicare cost reports are not reliable, our estimates of Medicaid shortfall are based on national data from the American Hospital Association (AHA) annual survey. One limitation of the AHA annual survey is that it includes hospital costs for provider taxes and other contributions toward the non-federal share of Medicaid payments, which are not part of the DSH definition of Medicaid shortfall (Nelb et al. 2016). In MACPAC's 2016 DSH report, the Commission commented extensively on the limitations of available data on Medicaid shortfall and recommended that the U.S. Department of Health and Human Services collect additional data to improve transparency and accountability (MACPAC 2016).

Unpaid costs of care for uninsured individuals

Between 2013 and 2015, total hospital charity care and bad debt fell by $8.6 billion nationwide. As a share of hospital operating expenses, charity care and bad debt fell about 30 percent nationally (from 4.4 percent in 2013 to 3.1 percent in 2015). However, the decline in uncompensated care was not evenly distributed among states: hospitals in 2 states reported increases in charity care and bad

FIGURE 3-3. Percent Change in Uncompensated Care as a Share of Hospital Operating Costs, 2013–2015



Note: Medicare cost reports define uncompensated care as charity care and bad debt.

Source: MACPAC, 2017, analysis of Medicare cost reports.

debt as a share of hospital operating expenses, while hospitals in 13 states reported declines that were greater than 50 percent (Figure 3-3).

In general, hospitals in states that did not expand Medicaid reported smaller declines in charity care and bad debt.[13] Between 2013 and 2015, charity care and bad debt as a share of hospital operating expenses fell by 11 percent in states that did not expand Medicaid and by 47 percent in states that did expand Medicaid.

The decline in uncompensated care was greater between 2013 and 2014, the first year of the ACA coverage expansions, than it was between 2014 and 2015: charity care and bad debt as a share of hospital operating expenses fell 18 percent between 2013 and 2014, compared to a 14 percent decline between 2014 and 2015. Similar to the trends in the uninsured rate discussed earlier, the year-over-year effects of the ACA coverage expansions appear to be diminishing for hospital uncompensated care.

Our findings on the decline in hospital bad debt are consistent with recent trends in consumer medical debt. A 2017 study by the Urban Institute found that the share of U.S. adults under age 65 reporting past-due medical debt fell 5.8 percentage points from 2012 to 2015, from 29.6 percent to 23.8 percent (Karpman and Caswell 2017). Another recent study, from the National Bureau of Economic Research, found a $3.4 billion decline in medical bills sent to collections between 2013 and 2015 in states that expanded Medicaid (Brevoort et al. 2017). These studies did not examine the share of medical debt attributable to hospital expenses, but prior studies have found that hospital expenses are the largest out-of-pocket expense for about half of patients experiencing medical bankruptcy (Himmelstein et al. 2009).

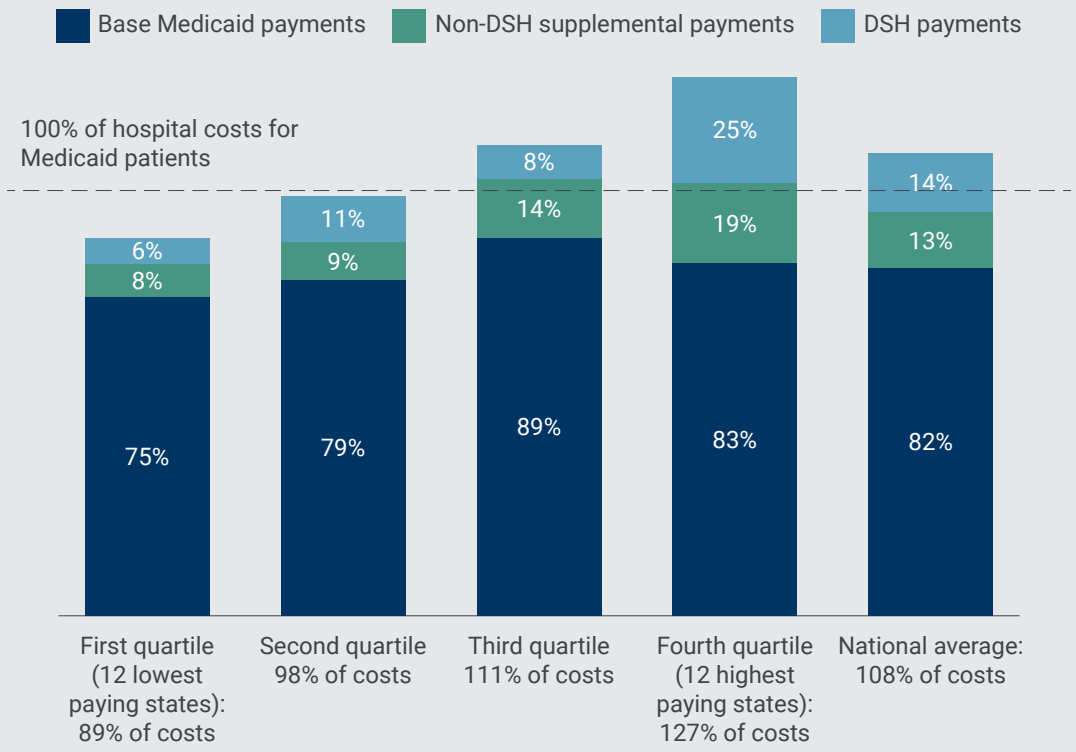
Medicaid shortfall

According to the AHA annual survey, Medicaid shortfall for all hospitals increased by $3.0 billion between 2013 and 2015, from $13.2 billion to $16.2 billion. The increase in Medicaid shortfall between 2014 and 2015 ($2.1 billion) was twice as large as the increase in Medicaid shortfall between 2013 and 2014 ($0.9 billion) (AHA 2016a, 2016b, 2015).

The increase in Medicaid shortfall seems to be due to increases in Medicaid patient volume in states that expanded Medicaid, because the AHA survey reports that the overall Medicaid payment-to-cost ratio increased slightly during this period, from 89.8 percent in 2013 to 90.0 percent in 2015. The overall Medicaid payment-to-cost ratio was unchanged between 2014 and 2015, which may explain why there was a larger increase in Medicaid shortfall between 2014 and 2015 than between 2013 and 2014 (AHA 2016a, 2016b, 2015).

Although reliable state- and hospital-specific data on Medicaid shortfall in 2014 and 2015 are not yet available, DSH audits show that there was a wide variation in Medicaid shortfall among states before the implementation of the ACA coverage expansions.[14] In SPRY 2013, DSH hospitals in the 12 states with the lowest Medicaid payment-to-cost ratios received total Medicaid payments (after DSH payments) that covered 89 percent of their costs of care for Medicaid-enrolled patients, and DSH hospitals in the 12 states with the highest Medicaid payment-to-cost ratios received total Medicaid payments that covered 127 percent of their Medicaid costs (Figure 3-4).[15] Nationally, base Medicaid payments were 82 percent of Medicaid costs for all DSH hospitals, but after accounting for DSH payments and non-DSH supplemental payments, total Medicaid payments to DSH hospitals were 108 percent of Medicaid costs. Non-DSH supplemental payments include upper payment limit (UPL) payments in fee-for-service Medicaid, graduate medical education (GME) payments, and supplemental payments authorized under Section 1115 demonstrations.[16] Similar to DSH payments, non-DSH supplemental payments are intended to support a variety of goals and may not be intended to offset Medicaid shortfall. Complete state-by-state data on Medicaid payments to DSH hospitals as a share of costs for Medicaid and uninsured patients is provided in Appendix 3A.

FIGURE 3-4. Medicaid Payments to DSH Hospitals as a Percentage of Medicaid Costs, by National Average and State Quartiles, SPRY 2013



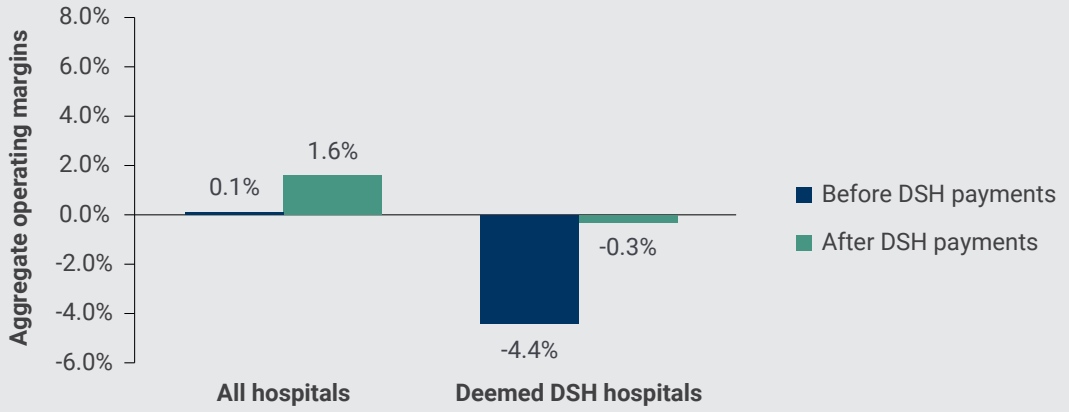
Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. Institutions for mental diseases were excluded from this analysis. Base Medicaid payments include fee-for-service as well as managed care payments for services. Non-DSH supplemental payments include upper payment limit payments in fee-for-service Medicaid, graduate medical education payments, and supplemental payments authorized under Section 1115 demonstrations (except for delivery system reform incentive payments, which are not reported on DSH audits). DSH payments and non-DSH supplemental payments may also be used to offset non-Medicaid costs, such as unpaid costs of care for uninsured patients. This analysis included 47 states and the District of Columbia and excluded Massachusetts, Maine, and South Dakota. Payment levels shown do not account for provider contributions to the non-federal share; these contributions may reduce net payments. Numbers do not sum due to rounding.

Source: MACPAC, 2017, analysis of 2013 as-filed Medicaid DSH audits.

Effect on hospital margins

Declines in hospital uncompensated care costs have the potential to improve hospital margins. However, many other factors also affect a hospital's margin, such as changes in the prices that a hospital can negotiate because of its competitive position in its market and changes in the hospital's costs (Bai and Anderson 2016). Additionally, margins are an imperfect measure of a hospital's financial health and may not be reported reliably on Medicare cost reports. For example, about 10 percent of hospitals reported operating margins below negative 1 percent on Medicare cost reports for more than five years between 2000 and 2007, but most of these hospitals did not close and were not acquired by another hospital during these

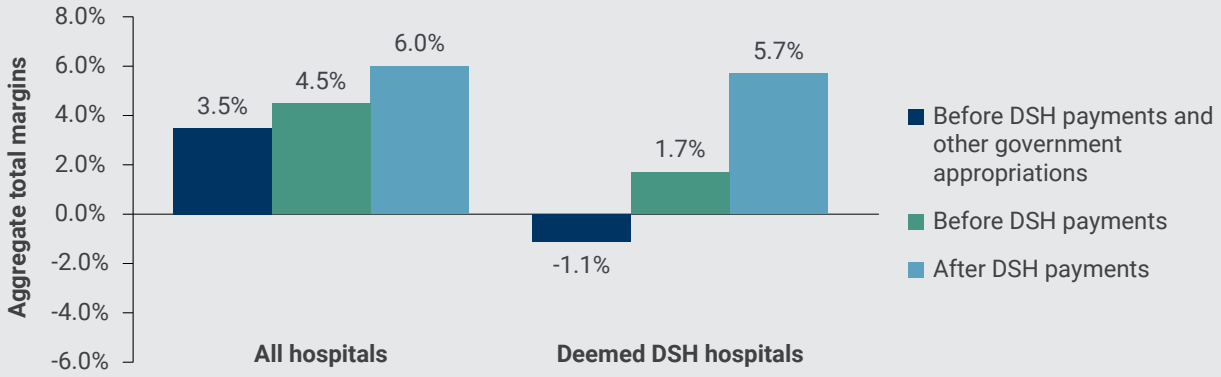
FIGURE 3-5. Aggregate Hospital Operating Margins Before and After DSH Payments, All Hospitals versus Deemed DSH Hospitals, 2015



Notes: DSH is disproportionate share hospital. Operating margins measure income from patient care divided by net patient revenue. Operating margins before DSH payments in 2015 were estimated using 2013 DSH audit data. Analysis excluded outlier hospitals reporting operating margins greater than 1.5 times the interquartile range from the first and third quartiles. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. For further discussion of this methodology and limitations, see Appendix 3B.

Source: MACPAC, 2017, analysis of 2015 Medicare cost reports and 2013 DSH audit data.

FIGURE 3-6. Aggregate Hospital Total Margins Before and After DSH Payments, All Hospitals versus Deemed DSH Hospitals, 2015



Notes: DSH is disproportionate share hospital. Total margins include revenue not directly related to patient care, such as investment income, parking receipts, and non-DSH state and local subsidies to hospitals. Total margins before DSH payments in 2015 were estimated using 2013 DSH audit data. Other government appropriations include state or local subsidies to hospitals that are not Medicaid payments. Analysis excluded outlier hospitals reporting total margins greater than 1.5 times the interquartile range from the first and third quartiles. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. For further discussion of this methodology and limitations, see Appendix 3B.

Source: MACPAC, 2017, analysis of 2015 Medicare cost reports and 2013 DSH audit data.

years (Hayford et al. 2016). Moreover, hospitals that are struggling financially might decide to cut unprofitable services, which would increase their margins in the short term, and hospitals that are doing well financially might make additional investments, which could decrease their margins in the short term.

Aggregate hospital operating margins increased by 1.8 percentage points between 2013 and 2014, but they decreased by 0.4 percentage points between 2014 and 2015. Aggregate total margins, which include revenue not directly related to patient care, decreased by 0.1 percentage points between 2013 and 2014 and decreased further, by 0.7 percentage points, between 2014 and 2015.

Compared to all hospitals, deemed DSH hospitals reported lower aggregate operating and total margins in 2015 (Figure 3-5 and Figure 3-6). Before DSH payments, deemed DSH hospitals reported negative operating margins of -4.4 percent in the aggregate in 2015. Deemed DSH hospitals also reported negative total margins before DSH payments and other government appropriations in the aggregate in 2015 (-1.1 percent).

BOX 3-3. 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. Based on the types of services suggested in the statute and the limits of available data, we included the following services in our working definition of essential community services in this report:

- 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;
- primary care services;
- substance use disorder services; and
- trauma services.

We also included deemed DSH hospitals that were designated as critical access hospitals because they are often the only hospital in the geographic area. See Appendix 3B for further discussion of our methodology and its limitations.

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

MACPAC is required to provide data identifying hospitals with high levels of uncompensated care that also provide access to essential community services. In this report, we consider deemed DSH hospitals to be hospitals with high levels of uncompensated care.[17] Given that the concept of essential community services is not defined elsewhere in Medicaid statute or regulation, MACPAC has developed a working definition based on the types of services suggested in the statutory provision calling for MACPAC's study and the limits of available data (Box 3-3).

Using data from 2015 Medicare cost reports and the 2015 AHA annual survey (the most recent comprehensive data available), we found that among hospitals that met the deemed DSH criteria in SPRY 2013, 95 percent provided at least one of the services included in MACPAC's working definition of essential community services, 79 percent provided two of these services, and 65 percent provided three or more of these services. By contrast, among non-deemed hospitals, 57 percent provided three or more of these services.

Many hospitals provide services through facilities in the larger health system to which they belong rather than through the hospital directly. For example, of the 2,485 hospitals that reported providing primary care services in the 2015 AHA annual survey (42 percent of all hospitals), one-third provided access to primary care outside of the hospital setting, either through clinics that were owned by the larger system or through clinics that contracted directly with the hospital.

DSH Allotment Reductions

Under current law, DSH allotments are scheduled to be reduced by the following annual amounts:

- $4.0 billion in FY 2020;
- $8.0 billion in FY 2021;
- $8.0 billion in FY 2022;
- $8.0 billion in FY 2023;
- $8.0 billion in FY 2024; and
- $8.0 billion in FY 2025.

DSH allotment reductions are applied against unreduced DSH allotments, that is, the amount that states would have received without DSH allotment reductions. In FY 2020, DSH allotment reductions amount to 31 percent of states' unreduced DSH allotment amounts; by FY 2025, DSH allotment reductions will be equal to 55 percent of states' unreduced DSH allotments. In FY 2026 and beyond, there are no DSH allotments reductions scheduled. Thus, under current law, state DSH allotments would return to their higher, unreduced DSH allotment amounts in those years. Unreduced allotments increase each year based on inflation, and these inflation-based increases continue to apply even when DSH allotment reductions take effect.

Current law requires CMS to develop a methodology for distributing DSH allotment reductions among states, referred to as the DSH Health Reform Reduction Methodology (DHRM), and directs CMS to use specific criteria, such as applying greater DSH reductions to states with lower uninsured rates and states that do not target their DSH payments to high-need hospitals (Box 3-4). In anticipation of allotment reductions set to take place in FY 2018 that were subsequently delayed, CMS proposed changes to the DHRM for FY 2018 and subsequent years in July 2017 (CMS 2017a).

MACPAC provided comments on CMS's proposed DSH allotment reduction formula in August 2017 (MACPAC 2017b). Specifically, the Commission

BOX 3-4. Factors Used in Disproportionate Share Hospital Health Reform Reduction Methodology

The Disproportionate Share Hospital (DSH) Health Reform Reduction Methodology (DHRM) provides a model for calculating how DSH allotment reductions will be distributed across states. In July 2017, the Centers for Medicare & Medicaid Services (CMS) proposed changes to the DHRM, but as of this writing, the DHRM has not been finalized by CMS. The proposed DHRM applies five factors when calculating state DSH allotment reductions:

- **Low-DSH factor.** Allocates a smaller proportion of the total DSH allotment reductions to low-DSH states based on the size of these states' DSH allotments relative to their total Medicaid expenditures. Low-DSH states are defined in statute as states with FY 2000 DSH expenditures that were less than 3 percent of total state Medicaid medical assistance expenditures for FY 2000. There are 17 low-DSH states, a number that includes Hawaii, whose eligibility is based on a special statutory exception (§§ 1923(f)(5) and 1923(f)(6) of the Social Security Act).
- **Uninsured percentage factor.** Imposes larger DSH allotment reductions on states with lower uninsured rates relative to other states. One-half of DSH reductions are based on this factor.
- **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 a state's DSH payments made to hospitals with Medicaid inpatient utilization that is one standard deviation above the mean (the same criteria used to determine deemed DSH hospitals) is compared among states. One-quarter of DSH reductions are based on this factor.
- **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 a state's DSH payments made to hospitals with above-average uncompensated care as a proportion of total hospital costs 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 uninsured individuals. One-quarter of DSH reductions are based on this factor.
- **Budget neutrality factor.** 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. (Four states—Indiana, Maine, Massachusetts, and Wisconsin—and the District of Columbia meet the statutory criteria for the budget neutrality factor.) 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.

encouraged CMS to apply DSH allotment reductions to unspent DSH funding first to minimize the effects of DSH allotment reductions on hospitals that are currently receiving DSH payments.[18] MACPAC also analyzed the state-by-state effects of CMS's proposal to increase the relative weight of the uninsured percentage factor and provided technical comments on ways to improve the calculation of various factors in CMS's proposed methodology.

Although CMS may revise its methodology before making allotment reductions in FY 2020, below we use the preliminary FY 2018 DSH allotments calculated by CMS to estimate FY 2020 DSH allotment reductions and to compare FY 2020 allotments to unreduced DSH allotments. In FY 2021 through FY 2025, the size of DSH allotment reductions will double from $4 billion to $8 billion, but the distribution of DSH allotment reductions among states is expected to be largely the same if states do not make changes to their DSH targeting policies and if there are no changes in states' uninsured rates relative to other states.

We also compare FY 2018 DSH allotments to other factors, such as the change in hospital uncompensated care. Complete state-by-state information on current DSH allotments and their relationship to the state-by-state data that Congress requested are provided in Appendix 3A.

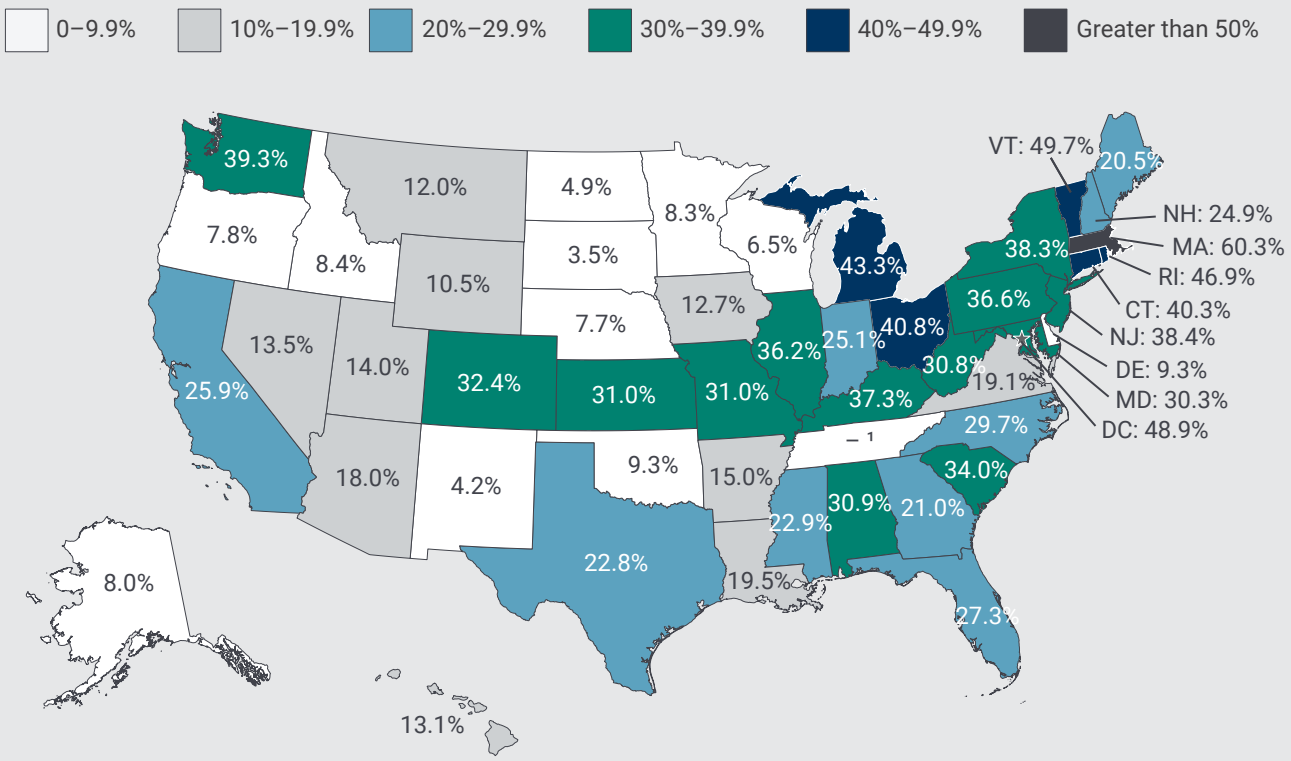
Reduced allotments compared to unreduced DSH allotments

The $4 billion in DSH allotment reductions that are scheduled to take effect in FY 2020 are projected to affect states differently, with estimated state allotment reductions ranging from 3.5 percent to 60.3 percent of states' unreduced allotment amounts (Figure 3-7). Because of the low-DSH factor, the projected percentage reduction in DSH allotments for the 17 states that meet the low-DSH criteria (9.0 percent in the aggregate) is less than one-third that of the other states (32.0 percent in the aggregate). Among states that do not meet the low-DSH criteria, the projected percentage reduction in DSH allotments is larger for states that expanded Medicaid (36.2 percent in the aggregate) than for states that did not expand Medicaid (25.1 percent in the aggregate). The larger reductions projected for states that expanded Medicaid is likely due to the uninsured percentage factor, because Medicaid expansion states generally have lower uninsured rates than states that did not expand Medicaid. However, differences in state policies for targeting DSH funding to hospitals in SPRY 2013 also contribute to the variation in DSH allotment reductions among states because of the DSH targeting factors (the high volume Medicaid inpatients factor and the high level of uncompensated care factor).

DSH allotment reductions might not result in a corresponding decline in spending in states that do not currently spend their full DSH allotment. For example, 19 states are projected to have FY 2020 DSH allotment reductions that are smaller than the state's unspent DSH funding in FY 2015, which means that these states could continue to make the same amount of DSH payments in FY 2020 that they made in FY 2015.[19]

We do not know how states may distribute reduced DSH funding among DSH hospitals. As noted above, some states distribute DSH funding proportionally among eligible hospitals, while other states target DSH payments to particular hospitals. Thus some states may apply reductions to all DSH hospitals in their state, while others may only reduce DSH payments to specific hospitals only. Because the DHRM proposed by CMS applies larger reductions to states that do not target DSH funds to hospitals with high Medicaid volume or high levels of uncompensated care, states might change their DSH targeting policies to minimize their DSH allotment reductions in future years.[20]

FIGURE 3-7. Decrease in State DSH Allotments as a Percentage of Unreduced Allotments by State, FY 2020



Notes: DSH is disproportionate share hospital. FY is fiscal year.
[1] Tennessee is not subject to DSH allotment reductions because its DSH allotment is specified in statute (§ 1923(f)(6)(A) of the Social Security Act).

Source: MACPAC, 2018, analysis of CBO 2017c and the CMS Medicaid Budget Expenditure System.

Comparison of DSH allotment reductions to changes in levels of hospital uncompensated care

Congress approved DSH allotment reductions on the assumption that increased health coverage would lead to reductions in uncompensated care, thus reducing the need for DSH payments to assist hospitals in covering those costs. However, the amount of DSH allotment reductions in statute is not directly tied to the amount of hospital uncompensated care in each state.

At the national level, the net decline in uncompensated care between 2013 and 2015 ($5.6 billion) exceeds the amount by which federal DSH allotments will be reduced in FY 2020 ($4 billion in federal funds) but is less than the amount by which all state and federal funds will be reduced ($7.2 billion in state and federal funds combined). Although Medicaid shortfall increased by $3.0 billion between 2013 and 2015, charity care and bad debt declined by $8.6 billion during this period, resulting in a net decline of $5.6 billion in total hospital uncompensated care. That said, the total amount of hospital uncompensated care reported in

TABLE 3-3. FY 2020 Allotment Reductions and Changes in Hospital Charity Care and Bad Debt between 2013 and 2015, by State

Is FY 2018 DSH allotment reduction smaller or larger than decline in hospital charity care and bad debt?	Number of states	States
DSH allotment reduction is smaller than decline in charity care and bad debt	27	Alaska, Arizona, Arkansas, California, Colorado, Delaware, Illinois, Indiana, Iowa, Kentucky, Maryland, Michigan, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, North Dakota, Ohio, Oregon, Rhode Island, South Dakota, Utah, Washington, West Virginia, and Wisconsin
DSH allotment reduction is larger than decline in charity care and bad debt	13	Alabama, District of Columbia, Florida, Georgia, Hawaii, Maine, Massachusetts, Mississippi, New Hampshire, New York, Pennsylvania, South Carolina, and Vermont
DSH allotment reduction is larger, because no decline in charity care and bad debt	10	Connecticut, Idaho, Kansas, Louisiana, Missouri, North Carolina, Oklahoma, Texas, Virginia, and Wyoming

Notes: FY is fiscal year. DSH is disproportionate share hospital. Medicare cost reports define uncompensated care as charity care and bad debt. Analysis excludes Tennessee, which is not subject to DSH allotment reductions because its DSH allotment is specified in statute (§ 1923(f)(6)(A) of the Social Security Act). DSH allotment reductions include state and federal funds.

Source: MACPAC, 2018, analysis of CBO 2017c, Medicare cost reports, and the CMS Medicaid Budget Expenditure System.

2015 ($44.9 billion, including charity care, bad debt, and Medicaid shortfall) exceeds the total amount of available state and federal DSH funding projected to be available in FY 2020 ($15.7 billion).

Numbers at the state level do not mirror those at the national level in all states. Twelve states and the District of Columbia are faced with projected FY 2020 DSH allotment reductions that exceed the amount by which hospital charity care and bad debt declined in the state between 2013 and 2015, and 10 states face FY 2018 DSH allotment reductions even though the total amount of charity care and bad debt in the state increased between 2013 and 2015 (Table 3-3). Of these 22 states and the District of Columbia, 7 states and the District of Columbia expanded Medicaid and 15 states did not. We do not have state-specific data on changes in Medicaid shortfall, which would be necessary to compare state DSH allotment reductions with changes in all types of uncompensated care that Medicaid DSH allotments pay for.

Relationship of DSH allotments to the statutorily required factors

There is little meaningful relationship between current DSH allotments and the factors that Congress asked MACPAC to consider.

- **Changes in number of uninsured individuals.** FY 2018 DSH allotments range from less than $100 per uninsured individual in 5 states to more than $1,000 per uninsured individual in 10 states. Nationally, the average FY 2018 DSH allotment per uninsured individual is $452.
- **Amount and sources of hospital uncompensated care costs.** As a share of hospital charity care and bad debt costs reported on 2015 Medicare cost reports, FY 2018 federal DSH allotments range from

less than 10 percent in six states to more than 80 percent in nine states. Nationally, FY 2018 federal DSH allotments are 43 percent of hospital charity care and bad debt costs. At the state level, total FY 2018 DSH funding (including state and federal funds combined) exceeds reported hospital charity care and bad debt costs in 16 states. Because DSH payments to hospitals may not exceed total uncompensated care costs, states with DSH allotments larger than the amount of uncompensated care in their state may not be able to spend their full DSH allotment.[21]

- **Number of hospitals with high levels of uncompensated care that also provide essential community services for low-income, uninsured, and vulnerable populations.** Finally, there continues to be no meaningful relationship between state DSH allotments and the number of deemed DSH hospitals in the state that provided at least one of the services included in MACPAC's working definition of essential community services.

Next Steps

The analyses in this chapter reinforce MACPAC's prior findings that DSH allotments have little meaningful relationship to measures meant to identify those hospitals most in need. Although much of the variation in state DSH allotment amounts reflects the basis of these allotments in historic patterns of spending, we also find new variations among states that stem from the effects of ACA coverage expansions on hospital uncompensated care and from the effects of CMS DSH allotment reduction methodology on state DSH allotment amounts.

The Commission continues to hold that Medicaid DSH payments should be better targeted to the states and hospitals that serve a disproportionate share of Medicaid-enrolled and low-income patients and that have higher levels of uncompensated care, consistent with the original statutory intent. However, because DSH hospitals vary so much in terms of patient mix, mission, and market characteristics, it is difficult to identify a single utilization-based standard applicable to all hospitals that represents a clear improvement over current law. CMS could incentivize states to better target DSH payments to providers through its methodology for distributing allotment reductions, but it is unclear whether and to what extent states will change their DSH targeting policies in response.

The Commission provided comments to CMS on its proposed DSH allotment reduction formula in August 2017 (MACPAC 2017c). Most notably, the Commission encouraged CMS to apply DSH allotment reductions to unspent DSH funding first to minimize the effects of DSH allotment reductions on hospitals that are currently receiving DSH payments. The Commission proposed approaches for revising the calculation of some of the existing factors in the methodology to account for unspent DSH funding, but Congress could also address this issue by requiring CMS to add a new factor to its methodology related to unspent DSH funding. When the rule is finalized, we will examine how CMS responded to the Commission's comments and will consider whether CMS or Congress should take further action to better distribute DSH allotments to states.

The delay of DSH allotment reductions to FY 2020 also provides the Commission with an opportunity to further examine alternatives to DSH allotment reductions before these policies take effect. The Commission will continue to report annually on DSH allotment and their relationship to the factors identified by Congress, and as part of these analyses, the Commission will consider the potential effects of DSH allotment reductions on states and providers.

Over the next year, the Commission also plans to conduct a broader analysis of Medicaid hospital payment that includes not only DSH funding but also other types of Medicaid payments to hospitals. One of the challenges in better targeting DSH payments is that DSH payments represent just one

of several Medicaid funding streams to hospitals; others include UPL supplemental payments and Section 1115 supplemental payments. States often use DSH payments and non-DSH supplemental payments interchangeably, suggesting that DSH policy should be evaluated alongside other Medicaid payments to hospitals.

Endnotes

[1] The ACA gives states the option of expanding Medicaid to adults under age 65 with incomes at or below 138 percent of the federal poverty level (FPL).

[2] For Medicaid DSH purposes, the statute defines Medicaid shortfall as the difference between payments and costs for Medicaid-eligible patients, including patients dually eligible for Medicaid and other sources of coverage, such as Medicare (§ 1923(g)(1)(A) of the Social Security Act (the Act)). In this report, we use the term Medicaid-enrolled to refer to patients for whom hospitals report Medicaid shortfall.

[3] This comparison of DSH allotment reductions to changes in hospital uncompensated care is based on data from Medicare cost reports, which define uncompensated care as charity care and bad debt and do not include Medicaid shortfall, another type of uncompensated care that Medicaid DSH pays for. The analysis excludes Tennessee, which is not subject to DSH allotment reductions because its DSH allotment is specified in statute (§ 1923(f)(6)(A) of the Social Security Act (the Act)).

[4] Medicaid fee-for-service payments for hospitals cannot exceed a reasonable estimate of what Medicare would have paid, in the aggregate. DSH payments are not subject to this upper payment limit (UPL).

[5] Additional background information about the history of DSH payment policy is included in Chapter 1, Appendix 1A, and Chapter 3, Appendix 3A, of MACPAC's first DSH report (MACPAC 2016).

[6] The American Recovery and Reinvestment Act of 2009 (P.L. 111-5) increased FY 2009 and FY 2010 DSH allotments to 102.5 percent of what they would have been without the law. Since FY 2011, DSH allotments have accounted for 3 percent to 4 percent of total Medicaid benefit spending.

[7] Medicare cost reports define uncompensated care as charity care and bad debt, including uncompensated care for individuals with insurance, which is not part of the Medicaid DSH definition of uncompensated care. Medicare cost reports do not include reliable information on Medicaid shortfall, which is part of the DSH definition of uncompensated care.

[8] Under Medicaid managed care and Section 1115 waivers, states can make payments for some services provided by an IMD to Medicaid enrollees age 21–64 (42 CFR 438.6(e)).

[9] DSH hospitals are also required to have at least two obstetricians with staff privileges who will treat Medicaid enrollees (with certain exceptions).

[10] The national estimates of the number of uninsured individuals cited in this chapter do not match the state-level estimates of the number of uninsured cited in Appendix 3A because of different data sources used. National estimates of the number of uninsured individuals come from the CPS, a monthly survey of households by the U.S. Census Bureau for the U.S. Bureau of Labor Statistics, which is the preferred source for national analyses. State-level data come from the American Community Survey, which has a larger sample size and is the preferred source for subnational analyses (Census 2017). There are a variety of ways to count the number of uninsured individuals. Estimates in this chapter reflect the number of people without health insurance for the entire calendar year.

[11] In the CPS, estimates of health insurance coverage are not mutually exclusive. People can be covered by more than one type of health insurance during the year.

[12] In September 2017, CMS revised its instructions for hospitals reporting charity care and bad debt on Medicare cost reports to include uninsured discounts that hospitals provide and to make changes in the way that cost-to-charge ratios are applied when calculating uncompensated care costs (CMS 2017b). These changes do not affect the analyses in this report because we used data from Medicare cost reports available as of March 31, 2017, before CMS announced its policy change.

[13] For our analyses of 2015 Medicare cost report data, Medicaid expansion states are those that expanded

Medicaid to low-income adults with family incomes at or below 138 percent of the FPL before December 31, 2015. States that expanded Medicaid after 2015 are considered non-expansion states in these analyses.

[14] Medicare cost reports include data on Medicaid shortfall, but we have found these data to be unreliable because they do not include all Medicaid payments and costs (MACPAC 2016). Medicaid DSH audit data provide more complete information on Medicaid shortfall for DSH hospitals, but SPRY 2013 DSH audits are the latest available at this time. Complete SPRY 2013 state-by-state data on Medicaid payments to DSH hospitals as a share of costs for Medicaid and uninsured patients is provided in Table 3A-10 of Appendix 3A of this report.

[15] Analysis of Medicaid payment-to-cost ratios is limited to DSH hospitals with complete DSH audit data and excludes IMDs.

[16] Delivery system reform incentive payments authorized under Section 1115 demonstrations are not reported on DSH audits.

[17] In Chapter 3 of MACPAC's March 2017 report, the Commission analyzed other criteria that could be used to identify hospitals that should receive DSH payments (MACPAC 2017c).

[18] The Commission's comments on unspent DSH funding assumed that if unspent DSH funding is reduced, states will not be required to reduce their DSH spending. The statute notes that the Secretary of the U.S. Department of Health and Human Services has the ability to apply DSH allotment reductions through a quarterly disallowance of DSH payments (§ 1923(f)(7)(A)(i)(II) of the Act). However, in previous rulemaking, CMS clarified that it will not recoup DSH payments through this process because DSH allotment reductions are prospective (CMS 2013).

[19] The 19 states with FY 2020 DSH allotment reductions that are smaller than their unspent FY 2015 DSH allotment amount include 11 low-DSH states, which have lower DSH allotment reductions under CMS's proposed methodology (Alaska, Arkansas, Delaware, Hawaii, Iowa, Minnesota, Nebraska, New Mexico, North Dakota, Oklahoma, and South Dakota), three states that have DSH allotments that are larger than the total amount of uncompensated care in their state in FY 2015 (Connecticut, New Hampshire, and Maine), and five states that left more than one-third of their FY 2015 DSH allotment unspent (Maryland, Massachusetts, Virginia, West Virginia, and Wisconsin). For states to spend the same amount of DSH funding in FY 2020 as they spent in FY 2015, DSH payments to individual hospitals may not exceed those hospitals' uncompensated care costs.

[20] Additional analyses of potential strategic state responses to the DSH allotment reduction methodology proposed by CMS is provided in Chapter 2 of MACPAC's 2016 DSH report (MACPAC 2016).

[21] For Medicaid DSH purposes, uncompensated care includes Medicaid shortfall, which is not included in the Medicare cost report definition of uncompensated care. As a result, the total amount of uncompensated care reported on Medicare cost reports may differ from the amount of uncompensated care costs that states may be able to pay for with Medicaid DSH funds.

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APPENDIX 3A: State-Level Data

TABLE 3A-1. State DSH Allotments, FY 2018 and FY 2019 (millions)

State	FY 2018		FY 2019	
	Total (state and federal)	Federal	Total (state and federal)	Federal
Total	**$21,850.9**	**$12,332.9**	**$22,355.7**	**$12,617.6**
Alabama	**483.8**	345.6	**495.0**	353.6
Alaska	**45.8**	22.9	**46.9**	23.4
Arizona	**162.8**	113.8	**166.6**	116.4
Arkansas	**68.4**	48.5	**70.0**	49.6
California	**2,464.3**	1,232.2	**2,521.5**	1,260.7
Colorado	**207.9**	104.0	**212.8**	106.4
Connecticut	**449.6**	224.8	**460.0**	230.0
Delaware	**18.0**	10.2	**18.5**	10.4
District of Columbia	**98.3**	68.8	**100.6**	70.4
Florida	**363.8**	224.8	**372.2**	230.0
Georgia	**441.0**	302.1	**451.2**	309.1
Hawaii	**20.0**	11.0	**20.5**	11.2
Idaho	**26.0**	18.5	**26.6**	18.9
Illinois	**476.3**	241.7	**487.3**	247.3
Indiana	**366.3**	240.3	**374.8**	245.8
Iowa	**75.7**	44.3	**77.4**	45.3
Kansas	**84.7**	46.4	**86.7**	47.4
Kentucky	**229.0**	163.0	**234.3**	166.8
Louisiana	**1,210.0**	770.7	**1,238.1**	788.6
Maine	**183.4**	118.0	**187.7**	120.8
Maryland	**171.4**	85.7	**175.4**	87.7
Massachusetts	**685.6**	342.8	**701.5**	350.8
Michigan	**459.8**	297.9	**470.5**	304.8
Minnesota	**167.9**	83.9	**171.8**	85.9
Mississippi	**226.6**	171.4	**231.8**	175.4
Missouri	**824.2**	532.5	**843.3**	544.8
Montana	**19.5**	12.8	**20.0**	13.1

TABLE 3A-1. (continued)

State	FY 2018		FY 2019	
	Total (state and federal)	Federal	Total (state and federal)	Federal
Nebraska	**$60.5**	$31.8	**$61.9**	$32.5
Nevada	**79.1**	52.0	**80.9**	53.2
New Hampshire	**359.9**	179.9	**368.2**	184.1
New Jersey	**1,447.1**	723.6	**1,480.7**	740.3
New Mexico	**31.7**	22.9	**32.5**	23.4
New York	**3,610.8**	1,805.4	**3,694.6**	1,847.3
North Carolina	**490.4**	331.6	**501.8**	339.3
North Dakota	**21.5**	10.7	**22.0**	11.0
Ohio	**727.3**	456.6	**744.2**	467.2
Oklahoma	**69.5**	40.7	**71.1**	41.6
Oregon	**80.0**	50.9	**81.8**	52.1
Pennsylvania	**1,217.4**	630.8	**1,245.6**	645.5
Rhode Island	**142.0**	73.1	**145.3**	74.8
South Carolina	**514.3**	368.1	**526.2**	376.6
South Dakota	**22.4**	12.4	**23.0**	12.7
Tennessee	**80.7**	53.1	**80.7**	53.1
Texas	**1,889.6**	1,074.8	**1,933.4**	1,099.7
Utah	**31.4**	22.1	**32.1**	22.6
Vermont	**47.3**	25.3	**48.4**	25.9
Virginia	**196.9**	98.5	**201.5**	100.8
Washington	**415.9**	207.9	**425.5**	212.8
West Virginia	**103.6**	75.9	**106.0**	77.6
Wisconsin	**180.8**	106.3	**185.0**	108.7
Wyoming	**0.5**	0.3	**0.5**	0.3

Notes: DSH is disproportionate share hospital. FY is fiscal year. Under current law, federal DSH allotments will be reduced by $4 billion in FY 2020.

Source: MACPAC, 2018, analysis of CBO 2017c and the CMS Medicaid Budget Expenditure System.

TABLE 3A-2. FY 2020 DSH Allotment Reductions (millions)

State	Unreduced allotment		Allotment Reduction		
	Total (state and federal)	Federal	Total (state and federal)	Federal	Percent reduction in federal DSH allotments
Total	**$22,883.7**	**$12,915.4**	**$7,189.9**	**$4,000.0**	**31.0%**
Alabama	**506.8**	362.0	**156.6**	111.9	30.9
Alaska	**48.0**	24.0	**3.9**	1.9	8.0
Arizona	**170.6**	119.2	**30.6**	21.4	18.0
Arkansas	**71.7**	50.8	**10.7**	7.6	15.0
California	**2,581.3**	1,290.6	**667.7**	333.9	25.9
Colorado	**217.8**	108.9	**70.6**	35.3	32.4
Connecticut	**470.9**	235.5	**190.0**	95.0	40.3
Delaware	**18.9**	10.7	**1.8**	1.0	9.3
District of Columbia	**103.0**	72.1	**50.4**	35.3	48.9
Florida	**381.1**	235.5	**104.0**	64.3	27.3
Georgia	**461.9**	316.4	**96.9**	66.4	21.0
Hawaii	**20.9**	11.5	**2.7**	1.5	13.1
Idaho	**27.2**	19.4	**2.3**	1.6	8.4
Illinois	**498.9**	253.1	**180.6**	91.6	36.2
Indiana	**383.7**	251.7	**96.4**	63.2	25.1
Iowa	**79.3**	46.4	**10.1**	5.9	12.7
Kansas	**88.7**	48.6	**27.5**	15.1	31.0
Kentucky	**239.9**	170.7	**89.4**	63.6	37.3
Louisiana	**1,267.5**	807.2	**247.0**	157.3	19.5
Maine	**192.1**	123.6	**39.4**	25.3	20.5
Maryland	**179.5**	89.8	**54.4**	27.2	30.3
Massachusetts	**718.2**	359.1	**433.1**	216.6	60.3
Michigan	**481.6**	312.0	**208.7**	135.2	43.3
Minnesota	**175.9**	87.9	**14.7**	7.3	8.3
Mississippi	**237.3**	179.5	**54.4**	41.2	22.9
Missouri	**863.3**	557.8	**267.6**	172.9	31.0
Montana	**20.4**	13.4	**2.4**	1.6	12.0
Nebraska	**63.4**	33.3	**4.9**	2.6	7.7

TABLE 3A-2. (continued)

State	Unreduced allotment		Allotment Reduction		
	Total (state and federal)	Federal	Total (state and federal)	Federal	Percent reduction in federal DSH allotments
Nevada	**$82.8**	$54.5	**$11.1**	$7.3	13.5%
New Hampshire	**377.0**	188.5	**93.9**	46.9	24.9
New Jersey	**1,515.8**	757.9	**581.8**	290.9	38.4
New Mexico	**33.2**	24.0	**1.4**	1.0	4.2
New York	**3,782.1**	1,891.1	**1,448.0**	724.0	38.3
North Carolina	**513.7**	347.3	**152.4**	103.0	29.7
North Dakota	**22.5**	11.2	**1.1**	0.6	4.9
Ohio	**761.8**	478.3	**310.8**	195.1	40.8
Oklahoma	**72.8**	42.6	**6.8**	4.0	9.3
Oregon	**83.8**	53.3	**6.5**	4.2	7.8
Pennsylvania	**1,275.1**	660.8	**467.2**	242.1	36.6
Rhode Island	**148.7**	76.5	**69.8**	35.9	46.9
South Carolina	**538.7**	385.6	**183.4**	131.2	34.0
South Dakota	**23.5**	13.0	**0.8**	0.5	3.5
Tennessee[1]	**80.7**	53.1	**0.0**	0.0	0.0
Texas	**1,979.3**	1,125.8	**450.4**	256.2	22.8
Utah	**32.9**	23.1	**4.6**	3.2	14.0
Vermont	**49.5**	26.5	**24.6**	13.2	49.7
Virginia	**206.3**	103.1	**39.4**	19.7	19.1
Washington	**435.6**	217.8	**171.0**	85.5	39.3
West Virginia	**108.5**	79.5	**33.5**	24.5	30.8
Wisconsin	**189.4**	111.3	**12.4**	7.3	6.5
Wyoming	**0.5**	0.3	**0.1**	0.0	10.5

Notes: DSH is disproportionate share hospital. FY is fiscal year. DSH allotment reductions are based on the DSH allotment reduction methodology that CMS proposed in July 2017 and may change if CMS changes this methodology when it finalizes this DSH allotment reduction rule.

— Dash indicates zero; 0.0 indicates a non-zero amount less than $0.05 million.

[1] Tennessee is not subject to DSH allotment reductions because its DSH allotment is specified in statute (§ 1923(f)(6)(A) of the Social Security Act).

Source: MACPAC, 2018, analysis of CBO 2017c and the CMS Medicaid Budget Expenditure System.

TABLE 3A-3. Number of Uninsured Individuals and Uninsured Rate, by State, 2013 and 2016

State	2013		2016		Difference (2016 less 2013)	
	Number (thousands)	Percent of state population	Number (thousands)	Percent of state population	Number (thousands)	Percent of state population (percentage point change)
Total	**45,181**	**14.5%**	**27,304**	**8.6%**	**-17,877**	**-5.9%**
Alabama	645	13.6	435	9.1	-210	-4.5
Alaska	132	18.5	101	14.0	-31	-4.5
Arizona	1,118	17.1	681	10.0	-437	-7.1
Arkansas	465	16.0	232	7.9	-233	-8.1
California	6,500	17.2	2,844	7.3	-3,656	-9.9
Colorado	729	14.1	410	7.5	-319	-6.6
Connecticut	333	9.4	172	4.9	-161	-4.5
Delaware	83	9.1	53	5.7	-30	-3.4
District of Columbia	42	6.7	26	3.9	-16	-2.8
Florida	3,853	20.0	2,544	12.5	-1,309	-7.5
Georgia	1,846	18.8	1,310	12.9	-536	-5.9
Hawaii	91	6.7	49	3.5	-42	-3.2
Idaho	257	16.2	168	10.1	-89	-6.1
Illinois	1,618	12.7	817	6.5	-801	-6.2
Indiana	903	14.0	530	8.1	-373	-5.9
Iowa	248	8.1	132	4.3	-116	-3.8
Kansas	348	12.3	249	8.7	-99	-3.6
Kentucky	616	14.3	223	5.1	-393	-9.2
Louisiana	751	16.6	470	10.3	-281	-6.3
Maine	147	11.2	106	8.0	-41	-3.2
Maryland	593	10.2	363	6.1	-230	-4.1
Massachusetts	247	3.7	171	2.5	-76	-1.2
Michigan	1,072	11.0	527	5.4	-545	-5.6
Minnesota	440	8.2	225	4.1	-215	-4.1
Mississippi	500	17.1	346	11.8	-154	-5.3
Missouri	773	13.0	532	8.9	-241	-4.1
Montana	165	16.5	83	8.1	-82	-8.4

TABLE 3A-3. (continued)

State	2013		2016		Difference (2016 less 2013)	
	Number (thousands)	Percent of state population	Number (thousands)	Percent of state population	Number (thousands)	Percent of state population (percentage point change)
Nebraska	209	11.3%	161	8.6%	-48	-2.7%
Nevada	570	20.7	330	11.4	-240	-9.3
New Hampshire	140	10.7	78	5.9	-62	-4.8
New Jersey	1,160	13.2	705	8.0	-455	-5.2
New Mexico	382	18.6	188	9.2	-194	-9.4
New York	2,070	10.7	1,183	6.1	-887	-4.6
North Carolina	1,509	15.6	1,038	10.4	-471	-5.2
North Dakota	73	10.4	52	7.0	-21	-3.4
Ohio	1,258	11.0	644	5.6	-614	-5.4
Oklahoma	666	17.7	530	13.8	-136	-3.9
Oregon	571	14.7	253	6.2	-318	-8.5
Pennsylvania	1,222	9.7	708	5.6	-514	-4.1
Rhode Island	120	11.6	45	4.3	-75	-7.3
South Carolina	739	15.8	486	10	-253	-5.8
South Dakota	93	11.3	74	8.7	-19	-2.6
Tennessee	887	13.9	592	9.0	-295	-4.9
Texas	5,748	22.1	4,545	16.6	-1,203	-5.5
Utah	402	14.0	265	8.8	-137	-5.2
Vermont	45	7.2	23	3.7	-22	-3.5
Virginia	991	12.3	715	8.7	-276	-3.6
Washington	960	14.0	428	6.0	-532	-8.0
West Virginia	255	14.0	96	5.3	-159	-8.7
Wisconsin	518	9.1	300	5.3	-218	-3.8
Wyoming	77	13.4	67	11.5	-10	-1.9

Source: Barnett, J.C., and E.R. Berchick, 2017, Health insurance coverage in the United States: 2016, Current Population Reports, P60-260, Washington, DC: U.S. Census Bureau, https://www.census.gov/library/publications/2017/demo/p60-260.html.

TABLE 3A-4. State Levels of Uncompensated Care, 2013–2015

State	Total hospital uncompensated care costs						Difference in total hospital uncompensated care costs	
	2013		2014		2015		2015 less 2013	
	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses (percentage point change)
Total	**$37,257**	**4.4%**	**$31,555**	**3.6%**	**$28,651**	**3.1%**	**-$8,607**	**-1.3%**
Alabama	**598**	5.6	**574**	5.2	**513**	4.6	**-85**	-0.9
Alaska	**102**	4.2	**96**	3.8	**78**	3.0	**-24**	-1.2
Arizona	**754**	4.8	**514**	3.3	**327**	2.0	**-426**	-2.9
Arkansas	**310**	4.7	**238**	3.6	**188**	2.7	**-122**	-2.0
California	**3,801**	3.9	**1,735**	1.7	**1,558**	1.4	**-2,243**	-2.4
Colorado	**431**	3.4	**287**	2.2	**212**	1.6	**-218**	-1.8
Connecticut	**158**	1.8	**214**	1.9	**179**	1.6	**21**	-0.3
Delaware	**76**	2.4	**82**	2.5	**57**	1.7	**-19**	-0.7
District of Columbia	**67**	1.8	**67**	1.8	**60**	1.3	**-7**	-0.6
Florida	**2,811**	6.6	**2,775**	6.1	**2,741**	5.7	**-70**	-0.9
Georgia	**1,487**	7.0	**1,478**	6.6	**1,465**	6.2	**-21**	-0.8
Hawaii	**38**	1.2	**45**	1.3	**37**	1.0	**-1**	-0.2
Idaho	**143**	3.7	**125**	3.0	**153**	3.5	**10**	-0.2
Illinois	**1,688**	4.9	**1,131**	3.1	**1,163**	3.1	**-525**	-1.8
Indiana	**1,006**	5.0	**955**	4.6	**695**	3.8	**-311**	-1.2
Iowa	**298**	3.8	**168**	2.1	**175**	2.1	**-123**	-1.8
Kansas	**196**	2.7	**259**	3.3	**238**	2.9	**42**	0.2
Kentucky	**561**	4.6	**256**	2.1	**215**	1.6	**-346**	-3.0
Louisiana	**755**	5.9	**814**	6.2	**809**	6.0	**55**	0.1

TABLE 3A-4. (continued)

State	Total hospital uncompensated care costs						Difference in total hospital uncompensated care costs	
	2013		2014		2015		2015 less 2013	
	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses (percentage point change)
Maine	**$181**	3.7%	**$166**	3.3%	**$158**	2.9%	**$-23**	-0.8%
Maryland	**767**	5.1	**526**	3.4	**497**	3.1	**-269**	-2.0
Massachusetts	**611**	2.4	**519**	2.0	**504**	1.8	**-107**	-0.5
Michigan	**970**	3.4	**664**	2.3	**451**	1.5	**-519**	-1.9
Minnesota	**273**	1.7	**251**	1.5	**203**	1.1	**-70**	-0.5
Mississippi	**462**	5.9	**423**	5.0	**418**	5.2	**-45**	-0.7
Missouri	**850**	4.4	**942**	4.7	**873**	4.2	**23**	-0.2
Montana	**160**	4.6	**148**	4.1	**143**	3.6	**-16**	-1.0
Nebraska	**227**	4.0	**212**	3.7	**221**	3.4	**-6**	-0.6
Nevada	**272**	4.9	**172**	3.1	**144**	2.5	**-128**	-2.5
New Hampshire	**187**	4.6	**151**	3.5	**102**	2.2	**-86**	-2.3
New Jersey	**1,392**	6.3	**958**	4.2	**799**	3.4	**-593**	-2.9
New Mexico	**304**	6.1	**179**	3.4	**140**	2.5	**-164**	-3.5
New York	**2,067**	3.2	**1,912**	2.8	**1,641**	2.3	**-426**	-0.9
North Carolina	**1,403**	6.0	**1,464**	6.1	**1,427**	5.6	**24**	-0.4
North Dakota	**110**	3.2	**88**	2.5	**77**	2.0	**-32**	-1.2
Ohio	**1,390**	3.5	**926**	2.3	**714**	1.7	**-676**	-1.9
Oklahoma	**490**	5.2	**490**	4.8	**515**	4.9	**25**	-0.3
Oregon	**420**	4.3	**233**	2.2	**180**	1.6	**-240**	-2.7
Pennsylvania	**800**	2.0	**722**	1.7	**671**	1.5	**-128**	-0.4

TABLE 3A-4. (continued)

State	Total hospital uncompensated care costs						Difference in total hospital uncompensated care costs	
	2013		2014		2015		2015 less 2013	
	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses (percentage point change)
Rhode Island	**$166**	4.8%	**$115**	3.3%	**$68**	1.9%	**$-98**	-2.9%
South Carolina	**744**	6.7	**746**	6.4	**723**	5.9	**-22**	-0.8
South Dakota	**111**	3.2	**93**	2.5	**88**	2.2	**-23**	-1.0
Tennessee	**621**	3.6	**582**	3.2	**566**	3.3	**-56**	-0.3
Texas	**4,302**	7.4	**4,986**	8.0	**4,472**	6.7	**171**	-0.7
Utah	**295**	5.1	**277**	4.6	**256**	3.8	**-39**	-1.3
Vermont	**46**	2.1	**42**	1.9	**38**	1.6	**-9**	-0.5
Virginia	**923**	5.2	**850**	4.6	**935**	4.8	**12**	-0.4
Washington	**589**	3.3	**323**	1.7	**259**	1.2	**-330**	-2.1
West Virginia	**281**	5.0	**172**	2.9	**120**	2.0	**-161**	-3.0
Wisconsin	**473**	2.5	**324**	1.7	**289**	1.4	**-184**	-1.1
Wyoming	**90**	6.0	**89**	5.5	**96**	5.7	**7**	-0.3

Note: Uncompensated care is calculated using Medicare cost reports, which define uncompensated care as charity care and bad debt.

Source: MACPAC, 2017, analysis of Medicare cost reports.

TABLE 3A-5. Number and Share of Hospitals Receiving DSH Payments and Meeting Other Criteria, by State, 2013

State	Number of hospitals (all)	DSH hospitals		Deemed DSH hospitals		Deemed DSH hospitals that provide at least one essential community service	
		Number	Percent	Number	Percent	Number	Percent
Total	**5,983**	**2,651**	**44%**	**814**	**14%**	**769**	**13%**
Alabama	112	84	75	9	8	9	8
Alaska	24	4	17	1	4	1	4
Arizona	109	32	29	30	28	30	28
Arkansas	97	5	5	3	3	3	3
California	401	45	11	40	10	35	9
Colorado	97	72	74	19	20	18	19
Connecticut	40	32	80	4	10	4	10
Delaware	13	2	15	2	15	2	15
District of Columbia	13	9	69	6	46	6	46
Florida	254	71	28	41	16	39	15
Georgia	168	128	76	34	20	30	18
Hawaii	25	13	52	2	8	2	8
Idaho	48	22	46	7	15	7	15
Illinois	205	47	23	43	21	40	20
Indiana	167	47	28	15	9	14	8
Iowa	121	7	6	5	4	5	4
Kansas	153	63	41	15	10	14	9
Kentucky	116	101	87	24	21	22	19
Louisiana	210	65	31	33	16	27	13
Maine	37	1	3	1	3	1	3
Maryland	60	16	27	10	17	10	17
Massachusetts[1]	99	0	0	0	0	0	0
Michigan	164	115	70	14	9	14	9
Minnesota	144	50	35	15	10	15	10
Mississippi	112	50	45	14	13	12	11
Missouri	148	100	68	25	17	23	16
Montana	64	50	78	6	9	6	9

TABLE 3A-5. (continued)

State	Number of hospitals (all)	DSH hospitals		Deemed DSH hospitals		Deemed DSH hospitals that provide at least one essential community service	
		Number	Percent	Number	Percent	Number	Percent
Nebraska	97	28	29%	15	15%	12	12%
Nevada	51	22	43	6	12	6	12
New Hampshire	30	16	53	3	10	3	10
New Jersey	97	70	72	23	24	23	24
New Mexico	53	16	30	7	13	7	13
New York	198	178	90	35	18	35	18
North Carolina	132	68	52	24	18	24	18
North Dakota	49	4	8	1	2	1	2
Ohio	224	166	74	19	8	19	8
Oklahoma	152	47	31	14	9	13	9
Oregon	62	59	95	11	18	11	18
Pennsylvania	228	203	89	45	20	43	19
Rhode Island	15	14	93	2	13	1	7
South Carolina	84	61	73	15	18	15	18
South Dakota	62	19	31	12	19	12	19
Tennessee	143	71	50	27	19	21	15
Texas	592	172	29	95	16	94	16
Utah	59	43	73	4	7	4	7
Vermont	16	14	88	2	13	2	13
Virginia	109	25	23	7	6	7	6
Washington	99	54	55	12	12	11	11
West Virginia	61	51	84	9	15	9	15
Wisconsin	139	7	5	6	4	6	4
Wyoming	30	12	40	2	7	1	3

TABLE 3A-5. (continued)

Notes: DSH is disproportionate share hospital. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. Deemed DSH hospitals are statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. 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, primary care services, substance use disorder services, and trauma services. For further discussion of the methodology and limitations, see Appendix 3B.

[1] Massachusetts does not make DSH payments to hospitals because its Section 1115 demonstration allows the state to use all of its DSH funding for the state's safety-net care pool instead; for this reason, no hospitals in the state can be characterized as DSH or deemed DSH hospitals.

Source: MACPAC, 2017, analysis of 2013 DSH audits, 2013 and 2015 Medicare cost reports, and the 2015 American Hospital Association annual survey.

TABLE 3A-6. Number and Share of Hospital Beds and Medicaid Days Provided by Deemed DSH Hospitals, by State, 2013

State	Number of hospital beds					Number of Medicaid days (thousands)				
	All hospitals	DSH hospitals		Deemed DSH hospitals		All hospitals	DSH hospitals		Deemed DSH hospitals	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
Total	**662,469**	**375,979**	**57%**	**140,851**	**21%**	**38,238**	**25,864**	**68%**	**14,424**	**38%**
Alabama	12,519	11,171	89	1,145	9	660	640	97	178	27
Alaska	1,145	486	42	80	7	87	52	60	2	3
Arizona	12,896	5,767	45	5,721	44	778	512	66	512	66
Arkansas	8,086	911	11	861	11	315	69	22	69	22
California	61,167	7,038	12	5,909	10	4,202	1,025	24	902	21
Colorado	8,278	6,577	79	1,656	20	422	391	93	173	41
Connecticut	7,237	6,655	92	384	5	419	348	83	59	14
Delaware	2,249	269	12	269	12	127	7	5	7	5
District of Columbia	2,470	2,058	83	931	38	234	219	93	117	50
Florida	46,340	18,564	40	11,631	25	2,726	1,693	62	1,323	49
Georgia	18,170	14,833	82	4,927	27	1,108	1,055	95	527	48
Hawaii	2,214	1,760	79	150	7	160	133	83	44	27
Idaho	2,649	1,891	71	900	34	128	110	86	61	48
Illinois	26,591	7,753	29	6,911	26	1,669	682	41	605	36
Indiana	13,681	4,034	29	1,713	13	626	246	39	149	24
Iowa	6,725	1,252	19	840	12	304	129	42	101	33
Kansas	7,392	4,140	56	1,952	26	220	166	75	109	49
Kentucky	12,288	11,607	94	4,253	35	658	644	98	377	57
Louisiana	15,007	6,876	46	3,014	20	721	455	63	287	40
Maine	2,693	51	2	51	2	140	481	0	0	0
Maryland	11,061	2,642	24	2,191	20	710	172	24	148	21
Massachusetts[1]	16,861	—	—	—	—	1,257	—	—	—	—

TABLE 3A-6. (continued)

State	Number of hospital beds					Number of Medicaid days (thousands)				
	All hospitals	DSH hospitals		Deemed DSH hospitals		All hospitals	DSH hospitals		Deemed DSH hospitals	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
Michigan	20,545	17,005	83%	3,625	18%	1,117	954	85%	403	36%
Minnesota	9,485	5,520	58	1,971	21	565	466	83	257	46
Mississippi	9,869	5,283	54	1,802	18	465	267	57	138	30
Missouri	15,205	11,175	73	1,655	11	855	524	61	117	14
Montana	2,578	2,176	84	246	10	74	73	99	15	20
Nebraska	4,794	3,189	67	1,760	37	163	156	95	112	69
Nevada	5,241	3,091	59	1,448	28	288	250	87	178	62
New Hampshire	2,353	796	34	373	16	78	35	45	26	33
New Jersey	18,892	16,719	88	5,203	28	887	826	93	359	40
New Mexico	3,781	1,843	49	741	20	254	170	67	100	39
New York	39,088	37,557	96	9,118	23	3,720	3,593	97	1,428	38
North Carolina	18,456	13,199	72	6,973	38	1,136	935	82	599	53
North Dakota	2,314	628	27	344	15	70	32	46	23	33
Ohio	26,906	23,579	88	5,484	20	1,456	1,361	93	673	46
Oklahoma	10,092	5,110	51	1,713	17	561	364	65	195	35
Oregon	5,476	5,212	95	1,328	24	318	318	100	138	43
Pennsylvania	31,797	30,030	94	7,174	23	1,596	1,552	97	690	43
Rhode Island	2,567	2,485	97	662	26	127	127	100	39	31
South Carolina	10,479	9,158	87	3,071	29	556	553	99	315	57
South Dakota	2,572	1,546	60	1,221	47	89	81	91	75	85
Tennessee	15,629	11,604	74	4,518	29	844	748	89	440	52
Texas	59,464	29,326	49	19,288	32	2,948	2,246	76	1,809	61
Utah	4,595	3,757	82	196	4	224	220	98	29	13

TABLE 3A-6. (continued)

State	Number of hospital beds					Number of Medicaid days (thousands)				
	All hospitals	DSH hospitals		Deemed DSH hospitals		All hospitals	DSH hospitals		Deemed DSH hospitals	
		Number	Percent	Number	Percent		Number	Percent	Number	Percent
Vermont	975	828	85%	67	7%	46	46	100%	4	8%
Virginia	14,276	6,014	42	1,654	12	682	422	62	192	28
Washington	10,201	6,232	61	1,835	18	682	424	62	127	19
West Virginia	5,504	5,108	93	951	17	260	258	99	92	35
Wisconsin	10,370	939	9	806	8	480	104	22	99	21
Wyoming	1,246	535	43	135	11	23	10	43	1	6

Notes: DSH is disproportionate share hospital. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. For further discussion of the methodology and limitations, see Appendix 3B.

[1] Massachusetts does not make DSH payments to hospitals because its Section 1115 demonstration allows the state to use all of its DSH funding for the state's safety-net care pool instead; for this reason, no hospitals in the state can be characterized as DSH or deemed DSH hospitals.

— Dash indicates zero; 0% indicates an amount less than 0.5% that rounds to zero.

Source: MACPAC, 2017, analysis of 2013 and 2015 Medicare cost reports and 2013 DSH audits.

TABLE 3A-7. FY 2018 DSH Allotment per Uninsured Individual, by State

State	FY 2018 DSH allotment (millions)		FY 2018 DSH allotment per uninsured individual		FY 2018 DSH allotment per uninsured individual and Medicaid enrollee	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Total	**$21,850.9**	**$12,332.9**	**$800.3**	**$451.7**	**$284.5**	**$160.6**
Alabama	**483.8**	345.6	**1,112.2**	794.5	**436.8**	312.0
Alaska	**45.8**	22.9	**453.4**	226.7	**232.6**	116.3
Arizona	**162.8**	113.8	**239.1**	167.1	**84.2**	58.9
Arkansas	**68.4**	48.5	**294.9**	209.0	**83.5**	59.2
California	**2,464.3**	1,232.2	**866.5**	433.3	**222.4**	111.2
Colorado	**207.9**	104.0	**507.2**	253.6	**168.7**	84.3
Connecticut	**449.6**	224.8	**2,613.9**	1,307.0	**621.9**	311.0
Delaware	**18.0**	10.2	**340.2**	192.0	**90.8**	51.2
District of Columbia	**98.3**	68.8	**3,782.7**	2,647.9	**577.3**	404.1
Florida	**363.8**	224.8	**143.0**	88.4	**69.3**	42.8
Georgia	**441.0**	302.1	**336.6**	230.6	**167.7**	114.9
Hawaii	**20.0**	11.0	**408.1**	223.6	**87.8**	48.1
Idaho	**26.0**	18.5	**154.5**	110.0	**70.1**	49.9
Illinois	**476.3**	241.7	**582.9**	295.8	**167.0**	84.8
Indiana	**366.3**	240.3	**691.1**	453.3	**259.1**	169.9
Iowa	**75.7**	44.3	**573.4**	335.3	**138.3**	80.8
Kansas	**84.7**	46.4	**340.2**	186.2	**163.4**	89.5
Kentucky	**229.0**	163.0	**1,026.9**	730.8	**205.4**	146.2
Louisiana	**1,210.0**	770.7	**2,574.6**	1,639.7	**902.0**	574.5
Maine	**183.4**	118.0	**1,730.5**	1,113.4	**708.2**	455.7
Maryland	**171.4**	85.7	**472.2**	236.1	**147.8**	73.9
Massachusetts	**685.6**	342.8	**4,009.6**	2,004.8	**527.0**	263.5

TABLE 3A-7. (continued)

State	FY 2018 DSH allotment (millions)		FY 2018 DSH allotment per uninsured individual		FY 2018 DSH allotment per uninsured individual and Medicaid enrollee	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Michigan	**$459.8**	$297.9	**$872.5**	$565.2	**$211.1**	$136.8
Minnesota	**167.9**	83.9	**746.2**	373.1	**173.9**	87.0
Mississippi	**226.6**	171.4	**654.9**	495.4	**261.7**	198.0
Missouri	**824.2**	532.5	**1,549.2**	1,000.9	**705.5**	455.8
Montana	**19.5**	12.8	**235.1**	153.7	**86.1**	56.3
Nebraska	**60.5**	31.8	**375.9**	197.6	**183.9**	96.7
Nevada	**79.1**	52.0	**239.6**	157.5	**103.4**	68.0
New Hampshire	**359.9**	179.9	**4,614.1**	2,307.0	**1,714.6**	857.3
New Jersey	**1,447.1**	723.6	**2,052.7**	1,026.3	**785.5**	392.7
New Mexico	**31.7**	22.9	**168.8**	121.8	**44.3**	32.0
New York	**3,610.8**	1,805.4	**3,052.3**	1,526.1	**729.3**	364.7
North Carolina	**490.4**	331.6	**472.5**	319.4	**204.2**	138.0
North Dakota	**21.5**	10.7	**412.9**	206.5	**199.7**	99.8
Ohio	**727.3**	456.6	**1,129.4**	709.0	**286.9**	180.1
Oklahoma	**69.5**	40.7	**131.1**	76.8	**66.1**	38.7
Oregon	**80.0**	50.9	**316.1**	201.1	**83.8**	53.3
Pennsylvania	**1,217.4**	630.8	**1,719.4**	891.0	**491.8**	254.8
Rhode Island	**142.0**	73.1	**3,155.6**	1,623.5	**707.5**	364.0
South Carolina	**514.3**	368.1	**1,058.1**	757.4	**436.0**	312.1
South Dakota	**22.4**	12.4	**303.1**	167.8	**138.5**	76.6
Tennessee	**80.7**	53.1	**136.3**	89.7	**50.1**	33.0
Texas	**1,889.6**	1,074.8	**415.8**	236.5	**228.5**	130.0
Utah	**31.4**	22.1	**118.4**	83.2	**63.0**	44.3

TABLE 3A-7. (continued)

State	FY 2018 DSH allotment (millions)		FY 2018 DSH allotment per uninsured individual		FY 2018 DSH allotment per uninsured individual and Medicaid enrollee	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Vermont	**$47.3**	$25.3	**$2,056.4**	$1,099.6	**$333.5**	$178.3
Virginia	**196.9**	98.5	**275.4**	137.7	**140.3**	70.1
Washington	**415.9**	207.9	**971.7**	485.8	**267.1**	133.6
West Virginia	**103.6**	75.9	**1,079.1**	790.3	**213.0**	156.0
Wisconsin	**180.8**	106.3	**602.7**	354.2	**182.8**	107.5
Wyoming	**0.5**	0.3	**7.6**	3.8	**4.6**	2.3

Notes: FY is fiscal year. DSH is disproportionate share hospital. Calculations of DSH allotments per uninsured individuals and Medicaid enrollees are based on the 2016 American Community Survey (ACS) from the U.S. Census Bureau. Estimates of Medicaid enrollment in the ACS include CHIP and other state-funded, means-tested programs; ACS estimates of Medicaid enrollment are typically lower than what is reported in administrative data. DSH allotment estimates are based on the DSH allotment reduction methodology that CMS proposed in July 2017 and may change if CMS changes this methodology when it finalizes this DSH allotment reduction rule.

Source: MACPAC, 2018, analysis of the U.S. Census Bureau 1-Year American Community Survey and the CMS Medicaid Budget Expenditure System.

TABLE 3A-8. FY 2018 DSH Allotments as a Percentage of Hospital Uncompensated Care, by State

State	FY 2018 federal DSH allotment (millions)	FY 2018 federal DSH allotment as a percentage of hospital uncompensated care in the state in 2015	FY 2018 total DSH allotment (state and federal, millions)	FY 2018 total DSH allotment (state and federal) as a percentage of hospital uncompensated care in the state in 2015
Total	**$12,332.9**	**43%**	**$21,850.9**	**76%**
Alabama	345.6	67	**483.8**	**94**
Alaska	22.9	29	**45.8**	**58**
Arizona	113.8	35	**162.8**	**50**
Arkansas	48.5	26	**68.4**	**36**
California	1,232.2	79	**2,464.3**	**158**
Colorado	104.0	49	**207.9**	**98**
Connecticut	224.8	126	**449.6**	**252**
Delaware	10.2	18	**18.0**	**31**
District of Columbia	68.8	116	**98.3**	**165**
Florida	224.8	8	**363.8**	**13**
Georgia	302.1	21	**441.0**	**30**
Hawaii	11.0	29	**20.0**	**54**
Idaho	18.5	12	**26.0**	**17**
Illinois	241.7	21	**476.3**	**41**
Indiana	240.3	35	**366.3**	**53**
Iowa	44.3	25	**75.7**	**43**
Kansas	46.4	19	**84.7**	**36**
Kentucky	163.0	76	**229.0**	**107**
Louisiana	770.7	95	**1,210.0**	**150**
Maine	118.0	75	**183.4**	**116**
Maryland	85.7	17	**171.4**	**34**
Massachusetts	342.8	68	**685.6**	**136**

TABLE 3A-8. (continued)

State	FY 2018 federal DSH allotment (millions)	FY 2018 federal DSH allotment as a percentage of hospital uncompensated care in the state in 2015	FY 2018 total DSH allotment (state and federal, millions)	FY 2018 total DSH allotment (state and federal) as a percentage of hospital uncompensated care in the state in 2015
Michigan	$297.9	66%	**$459.8**	**102%**
Minnesota	83.9	41	**167.9**	**83**
Mississippi	171.4	41	**226.6**	**54**
Missouri	532.5	61	**824.2**	**94**
Montana	12.8	9	**19.5**	**14**
Nebraska	31.8	14	**60.5**	**27**
Nevada	52.0	36	**79.1**	**55**
New Hampshire	179.9	177	**359.9**	**354**
New Jersey	723.6	91	**1,447.1**	**181**
New Mexico	22.9	16	**31.7**	**23**
New York	1,805.4	110	**3,610.8**	**220**
North Carolina	331.6	23	**490.4**	**34**
North Dakota	10.7	14	**21.5**	**28**
Ohio	456.6	64	**727.3**	**102**
Oklahoma	40.7	8	**69.5**	**14**
Oregon	50.9	28	**80.0**	**44**
Pennsylvania	630.8	94	**1,217.4**	**181**
Rhode Island	73.1	107	**142.0**	**208**
South Carolina	368.1	51	**514.3**	**71**
South Dakota	12.4	14	**22.4**	**26**
Tennessee	53.1	9	**80.7**	**14**
Texas	1,074.8	24	**1,889.6**	**42**
Utah	22.1	9	**31.4**	**12**
Vermont	25.3	67	**47.3**	**126**

TABLE 3A-8. (continued)

State	FY 2018 federal DSH allotment (millions)	FY 2018 federal DSH allotment as a percentage of hospital uncompensated care in the state in 2015	FY 2018 total DSH allotment (state and federal, millions)	FY 2018 total DSH allotment (state and federal) as a percentage of hospital uncompensated care in the state in 2015
Virginia	$98.5	11%	**$196.9**	**21%**
Washington	207.9	80	**415.9**	**161**
West Virginia	75.9	63	**103.6**	**86**
Wisconsin	106.3	37	**180.8**	**62**
Wyoming	0.3	0	**0.5**	**1**

Notes: FY is fiscal year. DSH is disproportionate share hospital. Medicare cost reports defined uncompensated care as charity care and bad debt. DSH allotment estimates are based on the DSH allotment reduction methodology that CMS proposed in July 2017 and may change if CMS changes this methodology when it finalizes this DSH allotment reduction rule.

0 indicates a non-zero amount less than 0.5 percent.

Source: MACPAC, 2018, analysis of the CMS Medicaid Budget Expenditure System and 2015 Medicare cost reports.

TABLE 3A-9. FY 2018 DSH Allotment per Deemed DSH Hospital Providing at Least One Essential Community Service, by State

State	FY 2018 DSH allotment (millions)		FY 2018 federal DSH allotment per deemed DSH hospital (millions)		FY 2018 DSH allotment per deemed DSH hospital providing at least one essential community service (millions)	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Total	**$21,850.9**	**$12,332.9**	**$26.8**	**$15.2**	**$28.4**	**$16.0**
Alabama	**483.8**	345.6	**53.8**	38.4	**53.8**	38.4
Alaska	**45.8**	22.9	**45.8**	22.9	**45.8**	22.9
Arizona	**162.8**	113.8	**5.4**	3.8	**5.4**	3.8
Arkansas	**68.4**	48.5	**22.8**	16.2	**22.8**	16.2
California	**2,464.3**	1,232.2	**61.6**	30.8	**70.4**	35.2
Colorado	**207.9**	104.0	**10.9**	5.5	**11.6**	5.8
Connecticut	**449.6**	224.8	**112.4**	56.2	**112.4**	56.2
Delaware	**18.0**	10.2	**9.0**	5.1	**9.0**	5.1
District of Columbia	**98.3**	68.8	**16.4**	11.5	**16.4**	11.5
Florida	**363.8**	224.8	**8.9**	5.5	**9.3**	5.8
Georgia	**441.0**	302.1	**13.0**	8.9	**14.7**	10.1
Hawaii	**20.0**	11.0	**10.0**	5.5	**10.0**	5.5
Idaho	**26.0**	18.5	**3.7**	2.6	**3.7**	2.6
Illinois	**476.3**	241.7	**11.1**	5.6	**11.9**	6.0
Indiana	**366.3**	240.3	**24.4**	16.0	**26.2**	17.2
Iowa	**75.7**	44.3	**15.1**	8.9	**15.1**	8.9
Kansas	**84.7**	46.4	**5.6**	3.1	**6.0**	3.3
Kentucky	**229.0**	163.0	**9.5**	6.8	**10.4**	7.4
Louisiana	**1,210.0**	770.7	**36.7**	23.4	**44.8**	28.5
Maine	**183.4**	118.0	**183.4**	118.0	**183.4**	118.0
Maryland	**171.4**	85.7	**17.1**	8.6	**17.1**	8.6

TABLE 3A-9. (continued)

State	FY 2018 DSH allotment (millions)		FY 2018 federal DSH allotment per deemed DSH hospital (millions)		FY 2018 DSH allotment per deemed DSH hospital providing at least one essential community service (millions)	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Massachusetts[1]	**$685.6**	$342.8	**–**	–	**–**	–
Michigan	**459.8**	297.9	**$32.8**	$21.3	**$32.8**	$21.3
Minnesota	**167.9**	83.9	**11.2**	5.6	**11.2**	5.6
Mississippi	**226.6**	171.4	**16.2**	12.2	**18.9**	14.3
Missouri	**824.2**	532.5	**33.0**	21.3	**35.8**	23.2
Montana	**19.5**	12.8	**3.3**	2.1	**3.3**	2.1
Nebraska	**60.5**	31.8	**4.0**	2.1	**5.0**	2.7
Nevada	**79.1**	52.0	**13.2**	8.7	**13.2**	8.7
New Hampshire	**359.9**	179.9	**120.0**	60.0	**120.0**	60.0
New Jersey	**1,447.1**	723.6	**62.9**	31.5	**62.9**	31.5
New Mexico	**31.7**	22.9	**4.5**	3.3	**4.5**	3.3
New York	**3,610.8**	1,805.4	**103.2**	51.6	**103.2**	51.6
North Carolina	**490.4**	331.6	**20.4**	13.8	**20.4**	13.8
North Dakota	**21.5**	10.7	**21.5**	10.7	**21.5**	10.7
Ohio	**727.3**	456.6	**38.3**	24.0	**38.3**	24.0
Oklahoma	**69.5**	40.7	**5.0**	2.9	**5.3**	3.1
Oregon	**80.0**	50.9	**7.3**	4.6	**7.3**	4.6
Pennsylvania	**1,217.4**	630.8	**27.1**	14.0	**28.3**	14.7
Rhode Island	**142.0**	73.1	**71.0**	36.5	**142.0**	73.1
South Carolina	**514.3**	368.1	**34.3**	24.5	**34.3**	24.5
South Dakota	**22.4**	12.4	**1.9**	1.0	**1.9**	1.0
Tennessee	**80.7**	53.1	**3.0**	2.0	**3.8**	2.5
Texas	**1,889.6**	1,074.8	**19.9**	11.3	**20.1**	11.4

TABLE 3A-9. (continued)

State	FY 2018 DSH allotment (millions)		FY 2018 federal DSH allotment per deemed DSH hospital (millions)		FY 2018 DSH allotment per deemed DSH hospital providing at least one essential community service (millions)	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Utah	**$31.4**	$22.1	**$7.8**	$5.5	**$7.8**	$5.5
Vermont	**47.3**	25.3	**23.6**	12.6	**23.6**	12.6
Virginia	**196.9**	98.5	**28.1**	14.1	**28.1**	14.1
Washington	**415.9**	207.9	**34.7**	17.3	**37.8**	18.9
West Virginia	**103.6**	75.9	**11.5**	8.4	**11.5**	8.4
Wisconsin	**180.8**	106.3	**30.1**	17.7	**30.1**	17.7
Wyoming	**0.5**	0.3	**0.3**	0.1	**0.5**	0.3

Notes: FY is fiscal year. DSH is disproportionate share hospital. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. DSH allotment estimates are based on the DSH allotment reduction methodology that CMS proposed in July 2017 and may change if CMS changes this methodology when it finalizes this DSH allotment reduction rule. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. 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, primary care services, substance use disorder services, and trauma services. For further discussion of the methodology and limitations, see Appendix 3B.

N/A indicates that the category is not applicable.

[1] Massachusetts does not make DSH payments to hospitals because its Section 1115 demonstration allows the state to use all of its DSH funding for the state's safety-net care pool instead; for this reason, no hospitals in the state can be characterized as DSH or deemed DSH hospitals.

Source: MACPAC, 2018, analysis of CMS Medicaid Budget Expenditure System, 2013 DSH audits, 2013 and 2015 Medicare cost reports, and the 2015 American Hospital Association annual survey.

TABLE 3A-10. Medicaid Payments to DSH Hospitals as a Share of Costs, by State, SPRY 2013

State	Share of hospitals in the state included in analysis	Medicaid payments as a share of costs for Medicaid-enrolled patients				Medicaid payments as a share of costs for Medicaid-enrolled and uninsured patients			
		Base payments	Non-DSH supplemental payments	DSH payments	Total Medicaid payments	Base payments	Non-DSH supplemental payments	DSH payments	Total Medicaid payments
Total	**43%**	**82%**	**13%**	**14%**	**108%**	**68%**	**10%**	**11%**	**90%**
Alabama	83	83	17	23	**123**	65	13	18	**97**
Alaska	13	105	0	4	**109**	84	0	3	**88**
Arizona	28	55	26	8	**89**	47	22	6	**76**
Arkansas	4	74	14	34	**122**	59	11	27	**97**
California[1]	11	90	10	40	**141**	73	8	33	**113**
Colorado	75	70	38	9	**116**	55	30	7	**93**
Connecticut	75	75	5	6	**86**	73	5	5	**83**
Delaware	8	101	0	18	**119**	85	0	15	**100**
District of Columbia	31	77	2	17	**96**	75	2	16	**93**
Florida	27	90	14	4	**109**	73	12	3	**89**
Georgia	80	91	4	11	**105**	70	3	8	**81**
Hawaii	52	80	13	2	**95**	79	13	2	**93**
Idaho	48	98	2	5	**105**	82	2	4	**88**
Illinois	25	79	29	12	**121**	66	24	10	**100**
Indiana	29	97	0	17	**114**	80	0	14	**95**
Iowa	6	84	6	10	**100**	79	5	10	**94**
Kansas	40	81	6	7	**95**	65	5	6	**76**
Kentucky	84	89	6	8	**103**	71	5	7	**83**
Louisiana	23	69	3	56	**127**	52	2	42	**96**
Maryland	20	107	2	4	**113**	89	2	3	**94**
Michigan	69	68	27	6	**100**	60	24	5	**90**

TABLE 3A-10. (continued)

State	Share of hospitals in the state included in analysis	Medicaid payments as a share of costs for Medicaid-enrolled patients				Medicaid payments as a share of costs for Medicaid-enrolled and uninsured patients			
		Base payments	Non-DSH supplemental payments	DSH payments	Total Medicaid payments	Base payments	Non-DSH supplemental payments	DSH payments	Total Medicaid payments
Minnesota	31%	83%	7%	1%	**91%**	78%	7%	1%	**86%**
Mississippi	47	82	20	18	**120**	66	16	14	**96**
Missouri	68	103	0	18	**122**	85	0	15	**100**
Montana	78	83	16	6	**105**	64	12	5	**81**
Nebraska	24	76	0	4	**81**	63	0	4	**67**
Nevada	43	71	13	12	**96**	50	9	8	**67**
New Hampshire	50	73	0	24	**97**	62	0	20	**82**
New Jersey	64	81	9	29	**119**	54	6	20	**79**
New Mexico	30	85	21	4	**110**	67	16	3	**86**
New York	89	79	4	15	**97**	73	3	14	**90**
North Carolina	48	73	33	10	**115**	58	26	8	**92**
North Dakota	4	87	0	3	**91**	84	0	3	**87**
Ohio	74	84	6	8	**99**	72	6	7	**84**
Oklahoma	30	79	26	4	**109**	65	22	3	**90**
Oregon	95	95	4	3	**102**	79	4	3	**85**
Pennsylvania	84	72	16	9	**97**	61	14	8	**83**
Rhode Island	80	87	1	15	**103**	75	1	13	**89**
South Carolina	57	90	3	18	**112**	72	3	14	**89**
Tennessee	45	87	26	2	**115**	73	21	2	**96**
Texas	29	80	29	19	**128**	58	21	14	**92**
Utah	71	83	34	4	**121**	65	27	3	**95**
Vermont	88	76	0	10	**87**	72	0	10	**82**

TABLE 3A-10. (continued)

State	Share of hospitals in the state included in analysis	Medicaid payments as a share of costs for Medicaid-enrolled patients				Medicaid payments as a share of costs for Medicaid-enrolled and uninsured patients			
		Base payments	Non-DSH supplemental payments	DSH payments	Total Medicaid payments	Base payments	Non-DSH supplemental payments	DSH payments	Total Medicaid payments
Virginia	23%	89%	14%	9%	**113%**	71%	11%	7%	**90%**
Washington	53	82	0	12	**93**	70	0	10	**80**
West Virginia	79	75	14	5	**93**	65	12	4	**81**
Wisconsin	4	73	1	0	**73**	69	1	0	**70**
Wyoming	43	84	6	1	**90**	60	4	0	**65**

Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. This analysis included 47 states and the District of Columbia and excluded Massachusetts, Maine, and South Dakota. Institutions for mental diseases were also excluded. Base Medicaid payments include fee-for-service as well as managed care payments for services. Non-DSH supplemental payments include upper payment limit payments in fee-for-service Medicaid, graduate medical education payments, and supplemental payments authorized under Section 1115 demonstrations (except for delivery system reform incentive payments, which are not reported on DSH audits). DSH payments and non-DSH supplemental payments may also be used to offset non-Medicaid costs, such as unpaid costs of care for uninsured patients. Costs for uninsured patients are uncompensated care costs for uninsured patients, net of payments received from them. Payment levels shown do not account for provider contributions to the non-federal share; these contributions may reduce net payments. Numbers do not sum due to rounding.

[1] California public hospitals are eligible to receive DSH payments up to 175 percent of the hospital's Medicaid and uninsured costs.

Source: MACPAC, 2017, analysis of 2013 as-filed Medicaid DSH audits.

APPENDIX 3B: Methodology and Data Limitations

MACPAC used data from several different sources to analyze and describe Medicaid disproportionate share hospital (DSH) payments and their relationship to factors such as uninsured rates, levels of uncompensated care, and the number of DSH hospitals with high levels of uncompensated care that provide access to essential services. We also modeled DSH allotment reductions and simulated DSH payments under a variety of scenarios. Below we describe the data sources used in this analysis and the limitations associated with each one, and we review the modeling assumptions we made for our projections of DSH allotments and payments.

Primary Data Sources

DSH audit data

We used state plan rate year 2013 DSH audit reports, the most recent data available, to examine historic DSH spending and the distribution of DSH spending among a variety of hospital types. These data were provided by the Centers for Medicare & Medicaid Services (CMS) on an as-filed basis and may be subject to change as CMS completes its internal review of state DSH audit reports.

Overall, 2,778 hospitals receiving DSH payments are represented in our analyses of DSH audit data. We did not include DSH audit data provided by states for hospitals that did not receive DSH payments (56 hospitals were excluded under this criterion). Some hospitals received DSH payments from multiple states; we combined the data for duplicate hospitals so that each hospital would only appear once in the dataset.

Medicare cost reports

We used Medicare cost report data to examine uncompensated care for all hospitals in each state. A hospital that receives Medicare payments must file an annual Medicare cost report, which includes a range of financial and non-financial data about hospital performance and services provided. We excluded hospitals in U.S. territories, religious non-medical health care institutions, and hospitals participating in special Medicare demonstration projects (92 hospitals were excluded under these criteria). These facilities submit Medicare cost reports but do not receive Medicare DSH payments.

We linked DSH audit data and Medicare cost report data to create descriptive analyses of DSH hospitals and to identify deemed DSH hospitals. Hospitals were matched based on their CMS certification number. A total of 2,651 DSH hospitals were included in these analyses. We excluded 127 DSH hospitals without matching 2015 Medicare cost reports.

When using Medicare cost reports to analyze hospital operating margins, we excluded hospitals with operating margins that were more than 1.5 times the interquartile range above the highest quartile or below the lowest quartile (482 hospitals were excluded under this criterion in the calculation of 2015 hospital margins). Operating margins are calculated by subtracting operating expenses (OE) from net patient revenue (NPR) and dividing the result by net patient revenue: (NPR–OE)/NPR. Total margins, in contrast, include additional types of hospital revenue, such as state or local subsidies and revenue from other facets of hospital operations (e.g., parking lot receipts).

Working Definition of Essential Community Services

The statute requires that MACPAC's analysis include 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 this report, we use the same working definition to identify such hospitals that was used in MACPAC's 2016 *Report to Congress on Medicaid Disproportionate Share Hospital Payments*. This working definition is based on a two-part test:

- Is the hospital a deemed DSH hospital?
- Does the hospital provide at least one essential service?

Deemed DSH hospital status

According to the Social Security Act (the Act), hospitals must meet one of two criteria to qualify as a deemed DSH hospital: (1) a Medicaid inpatient utilization rate greater than one standard deviation above the mean for hospitals in the state or (2) a low-income utilization rate greater than 25 percent (§ 1923(b)(1) of the Act). Because deemed DSH hospitals are statutorily required to receive DSH payments, we excluded from our analysis hospitals that did not receive DSH payments in 2013.

Calculation of the Medicaid inpatient utilization rate threshold for each state requires data from all hospitals in that state, and we relied on Medicare cost reports to make those calculations and to determine which hospitals exceeded this threshold. A major limitation of this approach is that Medicaid inpatient utilization reported on Medicare cost reports does not include services provided to Medicaid enrollees that were not paid for by Medicaid (e.g., Medicare-funded services for individuals who are dually eligible for Medicare and Medicaid). However, the Medicaid DSH definition of Medicaid inpatient utilization includes services provided to anyone who is eligible for Medicaid, even if Medicaid is not the primary payer. Thus, our identification of deemed DSH hospitals may omit some hospitals with high utilization by dually eligible beneficiaries and overstate the extent to which hospitals with low utilization by dually eligible beneficiaries (e.g., children's hospitals) exceed the threshold.

The low-income utilization rate threshold for deemed DSH hospitals is the same for all states (25 percent), so we were able to use Medicaid DSH audit data to determine whether hospitals met this criterion. However, about one-quarter of DSH hospitals did not provide data on the rate of low-income utilization on their DSH audits, and these omissions limited our ability to identify all deemed DSH hospitals.

Provision of essential community services

Because the term essential community services is not otherwise defined in statute or regulation, we identified a number of services that could be considered essential community services using available data from 2015 Medicare cost reports and the 2015 American Hospital Association (AHA) annual survey (Table 2B-1). Services were selected for inclusion if they were directly mentioned in the statute requiring this report or if they were related services mentioned in the cost reports or the AHA annual survey. This year, we added primary care services to our definition based on data from the AHA annual survey.

For the sake of inclusiveness, any deemed DSH hospital providing at least one essential community service was included in our analysis for this report. We also included critical access hospitals because they are often the only hospital within a 25-mile radius. In previous reports, we have included children's hospitals if they were the only hospital within a 15-mile radius (measured by driving distance), but we did not do so this year because of a lack of current data.

TABLE 3B-1. Essential Community Services, by Data Source

Service type	Data source
Burn services	American Hospital Association annual survey
Dental services	American Hospital Association annual survey
Graduate medical education	Medicare cost reports
HIV/AIDS care	American Hospital Association annual survey
Inpatient psychiatric services (through psychiatric subunit or stand-alone psychiatric hospital)	Medicare cost reports
Neonatal intensive care units	American Hospital Association annual survey
Obstetrics and gynecology services	American Hospital Association annual survey
Primary care services	American Hospital Association annual survey
Substance use disorder services	American Hospital Association annual survey
Trauma services	American Hospital Association annual survey

Projections of DSH Allotments and DSH Spending

DSH allotments for fiscal year (FY) 2018 and FY 2019 were calculated by increasing prior year allotments based on inflation. We used the projections of the Consumer Price Index for All Urban Consumers (CPI-U) in the Congressional Budget Office's August economic baseline (CBO 2017). Unreduced allotments increase each year based on the CPI-U for all states except Tennessee, whose DSH allotment is specified in statute (§ 1923(f)(6)(A)(vi) of the Act).

DSH allotment reductions for FY 2020 were projected using the initial calculations of FY 2018 DSH allotment reductions provided by CMS in the Medicaid Budget and Expenditure System (before FY 2018 DSH allotment reductions were ultimately delayed). CMS calculated DSH allotment reductions using the methodology for DSH allotment reductions that it proposed in July 2017 (CMS 2017). At this writing, CMS has not yet finalized this methodology.

References

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