Report to Congress on Medicaid and CHIP

MARCH 2020

MACPAC | Medicaid and CHIP Payment and Access Commission

MACPAC

About MACPAC

The Medicaid and CHIP Payment and Access Commission (MACPAC) is a non-partisan legislative branch agency that provides policy and data analysis and makes recommendations to Congress, the Secretary of the U.S. Department of Health and Human Services, and the states on a wide array of issues affecting Medicaid and the State Children's Health Insurance Program (CHIP). The U.S. Comptroller General appoints MACPAC's 17 commissioners, who come from diverse regions across the United States and bring broad expertise and a wide range of perspectives on Medicaid and CHIP.

MACPAC serves as an independent source of information on Medicaid and CHIP, publishing issue briefs and data reports throughout the year to support policy analysis and program accountability. The Commission's authorizing statute, Section 1900 of the Social Security Act, outlines a number of areas for analysis, including:

- payment;
- eligibility;
- enrollment and retention;
- coverage;
- access to care;
- quality of care; and
- the programs' interaction with Medicare and the health care system generally.

MACPAC's authorizing statute also requires the Commission to submit reports to Congress by March 15 and June 15 of each year. In carrying out its work, the Commission holds public meetings and regularly consults with state officials, congressional and executive branch staff, beneficiaries, health care providers, researchers, and policy experts.

Report to Congress on Medicaid and CHIP

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March 13, 2020

The Honorable Mike Pence
President of the Senate
The Capitol
Washington, DC 20510

The Honorable Nancy Pelosi
Speaker of the House
The Capitol
Washington, DC 20515

Dear Mr. Vice President and Madam Speaker:

On behalf of the Medicaid and CHIP Payment and Access Commission (MACPAC), I am pleased to submit the March 2020 *Report to Congress on Medicaid and CHIP*.

This report presents the Commission's analysis of three policy issues of interest to Congress:

- Medicaid disproportionate share hospital (DSH) payments that support the nation's safety-net hospitals;
- state reporting on the quality of care provided to individuals with either Medicaid or the State Children's Health Insurance Program (CHIP), as required under the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act of 2018 (P.L. 115-271) and the Bipartisan Budget Act of 2018 (P.L. 115-123); and
- the timeliness and quality of evaluations of Medicaid demonstrations.

In Chapter 1, MACPAC fulfills its annual, statutorily mandated obligation to report on DSH allotments to states. As in previous years, the Commission continues to find little meaningful relationship between states' DSH allotments and 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. Whereas in previous years we saw declines in the number of uninsured individuals and in the amount of hospital uncompensated care, the latest data show an increase in both of these indicators. At the same time hospitals are facing reductions in DSH allotments originally authorized under the Patient Protection and Affordable Care Act (ACA, P. L. 111-148, as amended) and now scheduled to go into effect in May.

This year, the analysis also takes a deeper look at the extent to which DSH hospitals provide obstetric services, which is one of the ten types of hospital services included in our definition of essential community services. We find that 70 percent of the rural hospitals that received DSH payments in state plan rate year 2015 reported having an obstetric unit, compared to 85 percent of urban

DSH hospitals. In addition, only 28 percent of rural DSH hospitals were equipped to provide obstetric services for complicated births, compared to 81 percent of urban DSH hospitals.

Chapter 2 examines state readiness to meet the requirement mandated by Congress to report, starting in fiscal year 2024, on the core set of quality measures for children enrolled in Medicaid and CHIP and the core set of behavioral health measures for adults enrolled in Medicaid. States and CMS have begun to prepare for mandatory reporting, but more needs to be done to ensure that states will be able to meet the deadline for all measures. We include findings from interviews with states, CMS, and other stakeholders that highlighted a number of challenges for states related to administrative capacity and the availability and timeliness of performance data.

In particular, we note that states are awaiting guidance from CMS that will define how they must comply with the reporting requirements. In addition, many states would welcome additional technical assistance and other resources, particularly to address activities that historically have been challenging, such as accessing data from medical records or maintained by other state agencies, obtaining data for certain populations to ensure complete reporting, and having sufficient administrative capacity to collect and analyze data.

Chapter 3 discusses state-led evaluations of demonstration programs under Section 1115 of the Social Security Act and their capacity to support decision making. Among other issues, the chapter addresses challenges states face in conducting methodologically rigorous evaluations, and the extent to which evaluation findings are used to inform policy decisions. The chapter relies heavily on perspectives shared at a November 2019 MACPAC roundtable of state and federal Medicaid officials, evaluators of state demonstration programs, researchers, and other stakeholders.

The Commission is encouraged by action that CMS has taken so far, including evaluation guidance and evaluation-related state terms and conditions that have been in place since 2017 to help states conduct better evaluations. We did not identify a need for action at this time, although we will continue to monitor how states and CMS carry out evaluations and how they are used in decision making.

MACPAC is committed to providing in-depth, non-partisan analyses of Medicaid and CHIP policy, and we hope this report will prove useful to Congress as it considers future policy development affecting these programs. This document fulfills our statutory mandate to report each year by March 15.

Sincerely,

Melanie Bella, MBA
Chair

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Table of Contents

List of Boxes

List of Figures

List of Tables

Executive Summary: March 2020 Report to Congress on Medicaid and CHIP

In the March 2020 *Report to Congress on Medicaid and CHIP*, MACPAC addresses three issues of interest to Congress: (1) Medicaid disproportionate share hospital (DSH) payments that support the nation's safety-net hospitals; (2) state reporting on the quality of care provided to the approximately one in five individuals who receive health care coverage through either Medicaid or the State Children's Health Insurance Program (CHIP); and (3) the timeliness and quality of evaluations of Medicaid demonstrations.

In Chapter 1, MACPAC fulfills its statutorily mandated obligation to submit an annual report on DSH allotments to states. As in previous years, the Commission continues to find little meaningful relationship between states' DSH allotments and any of the following: 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. Whereas in previous years we saw declines in the number of uninsured individuals and in the amount of hospital uncompensated care, the latest data show an increase in both of these indicators. At the same time, hospitals are facing—beginning in May of 2020—reductions in DSH allotments that were originally authorized under the Patient Protection and Affordable Care Act (ACA, P. L. 111-148, as amended).

Chapter 2 examines state readiness to meet, starting in fiscal year (FY) 2024, the mandatory requirement to report on the core set of quality measures for children enrolled in Medicaid and CHIP and the core set of behavioral health measures for adults enrolled in Medicaid. The Commission finds that although states and the Centers for Medicare & Medicaid Services (CMS) have begun to prepare for mandatory reporting, more needs to be done to ensure that states will be able to report on all measures. In particular, states are awaiting guidance from CMS that will define how they must comply with the reporting requirements, a step that will be critical for states to meet this deadline.

Chapter 3 discusses state-led evaluations of demonstration programs under Section 1115 of the Social Security Act and their capacity to support decision making. Among other issues, the discussion addresses challenges states face in conducting methodologically rigorous evaluations and the extent to which evaluation findings are used to inform policy decisions. The chapter relies heavily on perspectives shared at a November 2019 MACPAC roundtable of state and federal Medicaid officials, evaluators of state demonstration programs, researchers, and other stakeholders. Although the Commission did not identify a need for legislative or regulatory action at this time, we will continue to monitor how states and CMS carry out evaluations and how they are used in decision making.

A brief summary of each chapter follows.

CHAPTER 1: Annual Analysis of Disproportionate Share Hospital Allotments to States

Chapter 1 contains MACPAC's statutorily required annual analysis of DSH allotments to states for payments to hospitals that serve a high proportion of Medicaid beneficiaries and other low-income patients. The amounts of DSH allotments vary widely by state and are largely based on DSH spending in 1992, when state allotments were established in the law.

Congress asked the Commission to study three potential indicators of the need for DSH funds:

- 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 previous years, we continue to find little meaningful relationship between states' DSH allotments and these three factors. DSH allotments are scheduled to be reduced by $4 billion in May of 2020. 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 unreduced DSH allotments. The allotments will return to their unreduced DSH amounts in FY 2026.

Under the DSH allotment reduction methodology that CMS finalized in September 2019, MACPAC projects that the initial $4 billion in DSH allotment reductions will affect states differently, with estimated reductions ranging from 3.5 percent to 56.9 percent of unreduced allotment amounts. Meanwhile, MACPAC finds that the number of uninsured individuals is increasing nationally. In 2018, 28.5 million people were uninsured, an increase from 2017 of 1.9 million people (7.4 percent) and the first statistically significant increase since 2009.

Uncompensated care costs are also showing an upward trend, but the data should be interpreted with caution. Hospitals reported $39.9 billion in hospital charity care and bad debt costs on Medicare cost reports in FY 2017—an increase from FY 2016 of $2.7 billion (7.3 percent). However, due to a recent change in Medicare cost report definitions, the uncompensated care component of these costs cannot be directly compared with the amount reported prior to the implementation of ACA coverage expansions. Likewise, according to the American Hospital Association survey, Medicaid shortfall for all U.S. hospitals in 2017 was $22.9 billion, an increase from the previous year of $2.9 billion (14.5 percent). But hospital-level shortfall data are difficult to examine, because many states changed how they reported Medicaid shortfall on their DSH audits in state plan rate year (SPRY) 2015 as a result of ongoing litigation on the DSH definition of Medicaid shortfall.

This year, our analysis also takes a deeper look at the extent to which DSH hospitals provide obstetric services, which is one of the 10 types of hospital services included in our definition of essential community services. We find that 70 percent of the rural hospitals that received DSH payments in SPRY 2015 reported having an obstetric unit, compared to 85 percent of urban DSH hospitals. In addition, only 28 percent of rural DSH hospitals were equipped to provide obstetric services for complicated births, compared to 81 percent of urban DSH hospitals.

The chapter concludes with an update on California's Global Payment Program. This Section 1115 demonstration tests the premise that distributing DSH funding as a global payment and paying for non-hospital services that would not normally count for DSH purposes will reduce avoidable hospital use for patients who are uninsured. The final evaluation of this demonstration, published in June 2019, showed positive outcomes across a number of dimensions, including health system improvements and reductions in the use of inpatient and emergency department care.

CHAPTER 2: State Readiness to Report Mandatory Core Set Measures

Beginning in FY 2024, states will be required to report on the core set of quality measures for children enrolled in Medicaid and CHIP and the core set of behavioral health measures for adults enrolled in Medicaid.

Chapter 2 begins with an overview of the Child and Adult Core Sets. CMS established the Child and Adult Core Sets in response to congressional directives and consulted states, quality measurement experts, and stakeholders in the development process. CMS and the Agency for Healthcare Research and Quality compiled the core sets primarily from existing quality care measures, such as those of the National Committee for Quality Assurance's Healthcare Effectiveness Data and Information Set. The Child and Adult Core Sets are reviewed and updated annually for reporting feasibility and clinical relevance.

The chapter continues with a look at the current state of Child and Adult Core Set reporting, including annual timelines, changes in state reporting capacity, and how states use the core measures to inform quality improvement efforts. States have been voluntarily reporting measures on the Child Core Set since 2010 and on the Adult Core Set since 2014. All 50 states and the District of Columbia reported at least one Child Core Set measure in the FY 2018 reporting year, but the total number of measures reported by states varies widely. States and CMS incorporate the core sets into a variety of initiatives, such as value-based purchasing initiatives and monitoring of Section 1115 substance use disorder demonstration waivers and Section 1945 health homes. The core sets are also used in the Medicaid and CHIP Scorecard.

The chapter concludes with findings from interviews with states, CMS, and other stakeholders that highlight a number of challenges for states in reporting related to administrative capacity and the availability and timeliness of performance data. States and CMS have begun to prepare for mandatory reporting, but more needs to be done to ensure that states will be able to meet the deadline for all measures. In particular, states are awaiting guidance from CMS that will define how they must comply with the reporting requirements.

Although some states already have the capacity to report many of the core set measures and are optimistic about their readiness for mandatory reporting, others are further behind. Many states would welcome additional technical assistance and other resources, particularly to address activities that historically have been challenging, such as accessing data from medical records or from other state agencies, obtaining data for certain populations to ensure complete reporting, and having sufficient administrative capacity to collect and analyze data. These challenges are more pressing now that reporting will be mandatory.

CHAPTER 3: Improving the Quality and Timeliness of Section 1115 Demonstration Evaluations

Chapter 3 discusses challenges states face in conducting timely, methodologically rigorous evaluations to inform policy decisions; the appropriate balance of state flexibility and federal oversight; and potential steps states and the federal government could take to improve evaluation processes under Section 1115 of the Social Security Act.

Section 1115 provides the federal government with broad authority to waive certain Medicaid requirements to allow states to test policies likely to promote the objectives of the program. Under statute and federal regulation, Section 1115 demonstrations must be evaluated. However, historically, states and federal administrators have often focused on the flexibility offered under Section 1115 and placed limited emphasis on evaluation. The U.S. Government Accountability Office, MACPAC, and others have expressed concern regarding evaluation quality and how findings are used.

The chapter provides background information on the use of Section 1115 in Medicaid and limitations in evaluation processes. It continues by describing CMS's recent steps to improve the quality of state-led evaluation, which culminated with the 2019 release of new tools and guidance to help states. Even so, states continue to struggle with methodological challenges, such as designation of comparison groups and availability of data. They also experience administrative challenges, such as constrained implementation timelines and budgets.

Relying heavily on perspectives shared at an expert roundtable that MACPAC convened in November 2019, the chapter discusses the challenges states face in planning and conducting evaluations, and the difficulty of establishing appropriate standards of rigor and quality given those constraints. It also

discusses the need for robust evaluations to inform decision making at the state and federal levels.

Nevertheless, the Commission is encouraged by action that CMS has taken so far, including issuing evaluation guidance and including certain evaluation requirements in waiver terms and conditions. Achieving meaningful improvements in evaluation quality and usefulness will take time, however, and requires the agency to remain vigilant in ensuring that states adhere to new expectations. At this time, MACPAC has not identified a need for further legislative or regulatory steps on this issue, but we will continue to monitor how states and CMS carry out evaluations and how they are used in decision making.

Chapter 1:

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 disproportionate share hospital (DSH) allotments to states 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.
- We find that the number of uninsured individuals and amount of uncompensated care are increasing nationally.
  - In 2018, 28.5 million people were uninsured. This was an increase of 1.9 million people (7.4 percent) from 2017 and the first statistically significant increase since 2009.
  - Hospitals reported $39.9 billion in hospital charity care and bad debt costs on Medicare cost reports in fiscal year (FY) 2017. This was an increase of $2.7 billion (7.3 percent) from FY 2016. Although these data show an upward trend, because of a recent change in Medicare cost report definitions, uncompensated care data from these years cannot be directly compared with the amount of uncompensated care reported prior to the implementation of coverage expansions under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended).
  - According to the American Hospital Association annual survey, Medicaid shortfall for all U.S. hospitals was $22.9 billion in 2017. This was an increase of $2.9 billion (14.5 percent) from 2016. As a result of ongoing litigation about the DSH definition of Medicaid shortfall, many states changed how they reported Medicaid shortfall on their DSH audits in state plan rate year 2015, which makes it difficult to examine hospital-level shortfall data.
- At this writing, FY 2020 DSH allotments are scheduled to be reduced by $4 billion beginning on May 23, 2020.
  - DSH allotment reductions are scheduled to increase to $8 billion in FY 2021, with cuts continuing through FY 2025.
  - Under the ACA, Congress established a schedule for reducing federal DSH allotments to account for an anticipated decrease in uncompensated care. DSH allotment reductions were originally scheduled to go into effect in FY 2014, but these reductions have been delayed multiple times.
  - State DSH allotments are based on state DSH spending in FY 1992 and vary widely by state. The DSH allotment reduction methodology in statute is projected to preserve much of this variation.

CHAPTER 1: 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 is limited by annual federal DSH allotments, which vary widely by state. 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 the hospital provides. 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 state 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 (§ 1900 of the Social Security Act).

As in our 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. Moreover, the variation is projected to continue after federal DSH allotment reductions take effect.

In this report, we update our previous findings to reflect new information on changes in the number of uninsured individuals and levels of hospital uncompensated care. 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:

- According to the Current Population Survey, 2.75 million people, or 8.5 percent of the U.S. population, were uninsured in 2018, an increase of 1.9 million people since 2017. The increase in the number of uninsured individuals between 2017 and 2018 was the first statistically significant increase since 2009.
- Hospitals reported $39.9 billion in hospital charity care and bad debt costs on Medicare cost reports in fiscal year (FY) 2017. This represented a $2.7 billion increase from FY 2016, and a 0.2 percentage point increase in uncompensated care as a share of hospital operating expenses. Because of a recent change in Medicare cost report definitions, uncompensated care data from these years cannot be directly compared with the amount of uncompensated care reported in 2013. However, we are no longer observing the large declines in uncompensated care that we observed immediately after the implementation of coverage expansions under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended).
- Hospitals reported $22.9 billion in Medicaid shortfall on the American Hospital Association (AHA) annual survey for 2017, a 14.5 percent increase from the amount reported in 2016. Since 2013, the amount of Medicaid shortfall

for all hospitals has increased by $9.7 billion (AHA 2019, 2017, 2015). As a result of ongoing litigation about the DSH definition of Medicaid shortfall, many states have changed how they report Medicaid shortfall on their DSH audits, which makes it difficult to examine hospital-level shortfall data.

- In FY 2017, deemed DSH hospitals, which serve a high proportion of Medicaid enrollees and low-income patients, continued to report lower aggregate operating margins than other hospitals (-1.8 percent for deemed DSH hospitals versus 0.2 percent for all hospitals). Total margins (which include government appropriations and revenue not directly related to patient care) were similar between deemed DSH hospitals (6.2 percent) and all hospitals (6.8 percent). Aggregate operating and total margins for deemed DSH hospitals would have been about 4 percentage points lower without DSH payments.

In this report, we also project 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 insurance coverage through Medicaid and the health insurance 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 and, most recently, the Further Consolidated Appropriations Act, 2020 (P.L. 116-94) delayed the implementation of the reductions until May 23, 2020. Under current law, a reduction of $4 billion will take effect in FY 2020 (amounting to 31 percent of unreduced allotments), and the reduction amount will increase to $8 billion in FY 2021 (or 61 percent of unreduced allotments). Allotment reductions total $8 billion for each of FYs 2022–2025, representing more than half of states' unreduced allotment amounts.

In 2019, MACPAC made several legislative recommendations to improve the Medicaid DSH program—including a recommendation for a statutory clarification to the definition of Medicaid shortfall and a package of three recommendations affecting how pending DSH allotment reductions should be structured—none of which have been enacted (Box 1-1) (MACPAC 2019a, 2019b). Although the Commission expressed concern that the magnitude of DSH cuts under current law could affect the financial viability of some safety-net hospitals, our analyses focused on budget-neutral ways to restructure available funding.

In MACPAC's first DSH report, we recommended that the Secretary of the U.S. Department of Health and Human Services (the Secretary) collect additional hospital-specific data on Medicaid payments to hospitals to inform future analyses of DSH policy and broader oversight of Medicaid payments to hospitals (MACPAC 2016). On November 18, 2019, the Centers for Medicare & Medicaid Services (CMS) issued a proposed rule to require states to collect and report many of the data elements that MACPAC recommended, including the amounts of supplemental payments to hospitals and the sources of non-federal financing for these payments. The rule also proposes to strengthen the requirement for states to recover federal funding associated with DSH overpayments identified in annual DSH audits (CMS 2019a). MACPAC provided comments on this proposed rule in January 2020, expressing support for the measures to improve transparency while raising concerns about other provisions of the rule that could jeopardize enrollees' access to care (MACPAC 2020a).

BOX 1-1. Prior MACPAC Recommendations Related to Disproportionate Share Hospital Policy

February 2016

Improving data as the first step to a more targeted disproportionate share hospital policy

- The Secretary of the U.S. Department of Health and Human Services should collect and report hospital-specific data on all types of Medicaid payments for all hospitals that receive them. In addition, the Secretary should collect and report data on the sources of non-federal share necessary to determine net Medicaid payment at the provider level.

March 2019

Improving the structure of disproportionate share hospital allotment reductions

- If Congress chooses to proceed with disproportionate share hospital (DSH) allotment reductions in current law, it should revise Section 1923 of the Social Security Act to change the schedule of DSH allotment reductions to $2 billion in fiscal year (FY) 2020, $4 billion in FY 2021, $6 billion in FY 2022, and $8 billion a year in FYs 2023–2029, in order to phase in DSH allotment reductions more gradually without increasing federal spending.
- In order to minimize the effects of disproportionate share hospital (DSH) allotment reductions on hospitals that currently receive DSH payments, Congress should revise Section 1923 of the Social Security Act to require the Secretary of the U.S. Department of Health and Human Services to apply reductions to states with DSH allotments that are projected to be unspent before applying reductions to other states.
- In order to reduce the wide variation in state disproportionate share hospital (DSH) allotments based on historical DSH spending, Congress should revise Section 1923 of the Social Security Act to require the Secretary of the U.S. Department of Health and Human Services to develop a methodology to distribute reductions in a way that gradually improves the relationship between DSH allotments and the number of non-elderly low-income individuals in a state, after adjusting for differences in hospital costs in different geographic areas.

June 2019

Treatment of third-party payments in the definition of Medicaid shortfall

- To avoid Medicaid making disproportionate share hospital payments to cover costs that are paid by other payers, Congress should change the definition of Medicaid shortfall in Section 1923 of the Social Security Act to exclude costs and payments for all Medicaid-eligible patients for whom Medicaid is not the primary payer.

The Commission also has long held that DSH payments should be better targeted to hospitals that serve a high share of Medicaid-enrolled and low-income uninsured patients and have higher levels of uncompensated care, consistent with the original statutory intent of the law establishing DSH payments. However, development of policy to achieve this goal must be considered in terms of all Medicaid payments that hospitals receive, and complete data on these payments are not yet available.[1]

Background

Current DSH allotments vary widely among states, reflecting the evolution of federal policy over time. States began making Medicaid DSH payments in 1981, when Medicaid hospital payments were delinked from Medicare payment levels.[2] Initially, states were slow to make these payments, and in 1987, Congress required states to make payments to hospitals that serve a high share of Medicaid-enrolled and low-income patients, referred to as deemed DSH hospitals. DSH spending grew rapidly in the early 1990s—from $1.3 billion in 1990 to $17.7 billion in 1992—after Congress clarified that DSH payments were not subject to Medicaid's hospital payment limitations (Matherlee 2002, Holahan et al. 1998).[3]

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 1-2). Allotments were initially established for FY 1993 and were generally based on each state's FY 1992 DSH spending. Although Congress has made several incremental adjustments to these allotments, the states that spent the most in FY 1992 still have the largest allotments, and the states that spent the least in FY 1992 still have the smallest allotments.[4]

BOX 1-2. 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; that is, 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 for rural and children's hospitals and those that did not provide obstetric services to the general population in 1987).

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).

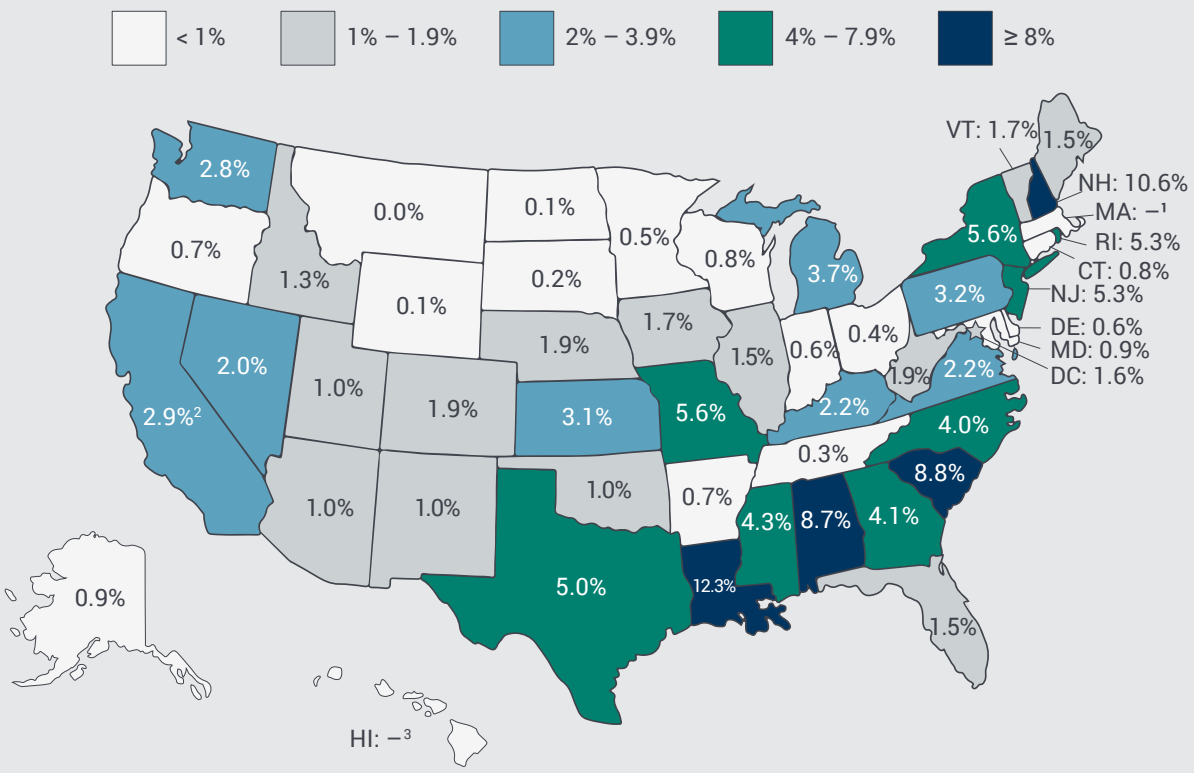
Hospital-specific DSH limit. The annual limit on DSH payments to individual hospitals, equal to the sum of Medicaid shortfall and unpaid costs of care for uninsured patients for allowable inpatient and outpatient costs.

In FY 2018, federal funds allotted to states for DSH payments totaled $12.3 billion. State-specific 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).

Total federal and state DSH payments were $18.2 billion in FY 2018 and accounted for 3.1 percent of total Medicaid benefit spending.[5] DSH spending as a share of total Medicaid benefit spending varied widely by state, from less than 1.0 percent in 17 states to 12.3 percent in Louisiana (Figure 1-1).

States typically have up to two years to spend their DSH allotments after the end of the fiscal year; $1.4 billion in federal DSH allotments for FY 2017 went unspent as of the end of FY 2019.[6,7] 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

FIGURE 1-1. DSH Spending as a Share of Total Medicaid Benefit Spending, by State, FY 2018



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

— Dash indicates zero; 0.0 percent indicates an amount less than 0.05 percent that rounds to zero.

[1] Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Social Security Act allows it to use all of its DSH funding for the state's safety-net care pool instead.

[2] DSH spending for California includes DSH-financed spending under the state's Global Payment Program, which is authorized under the state's Section 1115 demonstration waiver.

[3] Hawaii did not report DSH spending in FY 2018, but this state has reported DSH spending in prior years.

Source: MACPAC, 2020, analysis of CMS-64 Financial Management Report net expenditure data as of June 17, 2019.

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 2017, half of unspent DSH allotments were attributable to four states (Connecticut, Maine, New Jersey, and Pennsylvania). Each of these states, excluding Maine, had FY 2017 DSH allotments (including both state and federal funds) that were larger than the total amount of hospital uncompensated care in the state reported on FY 2017 Medicare cost reports.[8]

In state plan rate year (SPRY) 2015, 45 percent of U.S. hospitals received DSH payments (Table 1-1).[9] 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.[10] Public teaching hospitals in urban settings received more than half 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 historically have not been eligible for Medicaid payment for services provided to individuals age 21–64.[11] In SPRY 2015, Maine made DSH payments exclusively to IMDs, and DSH payments to IMDs amounted to more than half of DSH spending in three states (Alaska, Connecticut, and Maryland).[12] (Additional information about Medicaid policies affecting IMDs can be found in MACPAC's December 2019 report to Congress, *Oversight of Institutions for Mental Diseases* (MACPAC 2019d).

The proportion of hospitals receiving DSH payments varies widely by state. In SPRY 2015, three states made DSH payments to fewer than 10 percent of the hospitals in their state (Arkansas, Iowa, and Maine) 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 2015, about 14 percent of U.S. hospitals met this standard. These deemed DSH hospitals constituted just under one-third (30 percent) of DSH hospitals but accounted for nearly two-thirds (66 percent) of all DSH payments, receiving $12.1 billion in DSH payments. States vary in how they distribute DSH payments to deemed DSH hospitals, from less than 10 percent of DSH payments to deemed DSH hospitals in five states (Alabama, Arkansas, Hawaii, Utah, and Wyoming) to 100 percent in three states (Arizona, Delaware, 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., New Mexico); conversely, some states that distribute DSH payments across most hospitals still target the largest share of DSH payments to deemed DSH hospitals (e.g., New Jersey) (Figure 1-2). State 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 methods states use to finance the non-federal share of DSH payments may also affect their DSH targeting policies.[13] More information about state DSH targeting policies is included in Chapter 3 of MACPAC's March 2017 report to Congress (MACPAC 2017).

State DSH policies change frequently, often as a function of state budgets; the amounts paid to hospitals are more likely to change than the types of hospitals receiving payments. Over 90 percent of the hospitals that received DSH payments in SPRY 2015 also received DSH payments in SPRY 2014. But about 25 percent of hospitals receiving DSH payments in both SPRY 2014 and SPRY 2015 reported that the amount they received in SPRY 2015 differed from the amount they received in SPRY 2014 by more than 50 percent, although the changes included both increases and decreases.

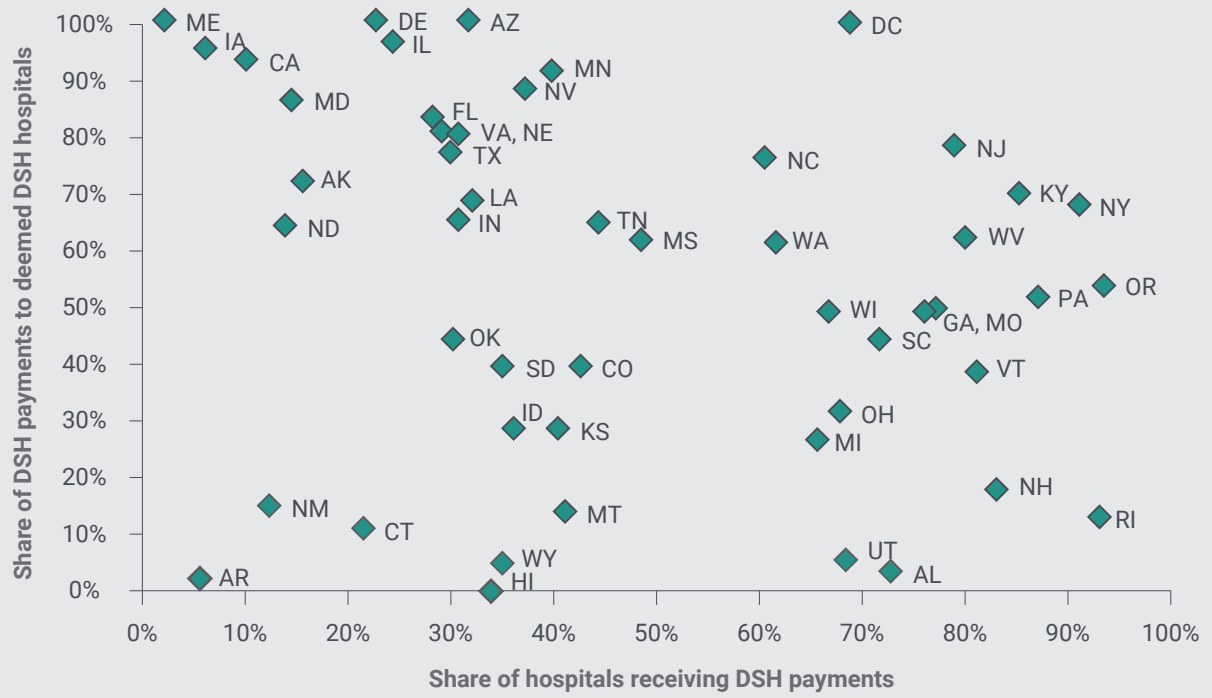
TABLE 1-1. Distribution of DSH Spending by Hospital Characteristics, SPRY 2015

Hospital characteristics	Number of hospitals			Total DSH spending (millions)
	DSH hospitals	All hospitals	DSH hospitals as percentage of all hospitals in category	
Total	**2,720**	**6,041**	**45%**	**$18,137**
Hospital type				
Short-term acute care hospitals	1,880	3,312	57	**14,568**
Critical access hospitals	584	1,349	43	**374**
Psychiatric hospitals	152	583	26	**2,874**
Long-term hospitals	21	421	5	**38**
Rehabilitation hospitals	29	278	10	**8**
Children's hospitals	54	98	55	**275**
Urban or rural				
Urban	1,480	3,574	41	**16,334**
Rural	1,240	2,467	50	**1,802**
Hospital ownership				
For-profit	436	1,832	24	**1,232**
Non-profit	1,582	2,958	53	**5,580**
Public	702	1,251	56	**11,325**
Teaching status				
Non-teaching	1,890	4,815	39	**4,830**
Low-teaching hospital	482	767	63	**3,128**
High-teaching hospital	348	459	76	**10,179**
Deemed DSH status				
Deemed	822	822	100	**12,051**
Not deemed	1,898	5,219	36	**6,085**

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 70 DSH hospitals that did not submit a fiscal year 2017 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, 2020, analysis of FY 2017 Medicare cost reports and SPRY 2015 as-filed Medicaid DSH audits.

FIGURE 1-2. Share of Hospitals Receiving DSH Payments and Share of DSH Payments to Deemed DSH Hospitals, by State, SPRY 2015



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. 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. 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 to hospitals because its demonstration waiver under Section 1115 of the Social Security Act allows it to use all of its DSH funding for the state's safety-net care pool instead.

Source: MACPAC, 2020, analysis of 2017 Medicare cost reports and SPRY 2015 as-filed Medicaid DSH audits.

Changes in the Number of Uninsured Individuals

According to the Current Population Survey Annual Social and Economic Supplement, 27.5 million people were uninsured in 2018 (8.5 percent of the U.S. population), a statistically significant increase from the number and share in 2017 (25.6 million or 7.9 percent) (Table 1-2).[14] This number does not include individuals who were uninsured for part of the year.[15] Statistically significant increases were observed for children, adults below age 65, individuals of Hispanic origin, and individuals with incomes above 300 percent of the federal poverty level.

The uninsured rate in states that did not expand Medicaid under the ACA to adults under age 65 with incomes at or below 138 percent of the federal poverty level was nearly twice as high as the uninsured rate in states that expanded Medicaid. In 2018, Utah, Nebraska, and Idaho passed ballot initiatives authorizing the expansion of Medicaid, but these coverage expansions had not taken effect and are thus not represented in the 2018 uninsured data. Additionally, Virginia and Maine expanded Medicaid beginning in 2019; these expansions are expected to reduce the number of uninsured individuals in these states.

TABLE 1-2. Uninsured Rates by Selected Characteristics, United States, 2017 and 2018

Characteristic	2017	2018	Percentage point change (2018 less 2017)	
All uninsured	**7.9%**	**8.5%**	**0.5%**	*
Age group				
Under age 19	5.0	5.5	0.6	*
Age 19–64	11.0	11.7	0.8	*
Over age 64	1.0	0.9	0.0	
Race and ethnicity				
White non-Hispanic	5.2	5.4	0.2	
Black non-Hispanic	9.3	9.7	0.4	
Asian non-Hispanic	6.4	6.8	0.5	
Hispanic (any race)	16.2	17.8	1.6	*
Income-to-poverty ratio				
Below 100 percent	15.9	16.3	0.4	
100–199 percent	13.0	13.6	0.6	
200–299 percent	10.7	10.8	0.1	
300–399 percent	7.1	8.1	1.0	*
At or above 400 percent	2.7	3.4	0.8	*
Medicaid expansion status in state of residence				
Non-expansion	12.0	12.2	0.2	
Expansion	6.5	6.5	0.1	

Notes: Uninsured rates by Medicaid expansion status are based on the American Community Survey. Uninsured rates for other groups are based on the Current Population Survey. Medicaid expansion status reflects state expansion decisions as of January 1, 2018. Numbers do not add due to rounding.

* Indicates change is statistically different from zero at the 90 percent confidence level.

Source: MACPAC, 2020, analysis of Berchick, et al. 2019.

The 1.9 million increase in the number of uninsured individuals in 2018 mirrored the 2.0 million decline in individuals enrolled in Medicaid and the State Children's Health Insurance Program that year. The decline in Medicaid enrollment was statistically significant, but there was no statistically significant change in the percentage of individuals with other forms of public or private coverage between 2017 and 2018 (Berchick et al. 2019).[16]

Looking ahead, the number of uninsured individuals is expected to increase as the population grows, policies change, and the year-over-year effects of the ACA coverage expansions diminish. For example, in May 2019, the Congressional Budget Office (CBO) projected that the number of uninsured individuals would increase to 30 million in 2019 and to 32 million in 2020. CBO's projections incorporate estimates of the effects of the repeal of the ACA's individual mandate tax penalty that took effect in 2019. CBO estimates that by 2021, 7 million more individuals will be uninsured than would have been if the individual mandate penalty had not been repealed (CBO 2019).

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 both unpaid costs of care for uninsured individuals and 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.

Definitions of uncompensated care vary among data sources, complicating comparisons and our ability to fully understand effects at the hospital level (Box 1-3). The most recently available data on hospital uncompensated care for all hospitals comes from Medicare cost reports, which define uncompensated care as charity care and bad debt. However, Medicare cost reports do not include reliable information on Medicaid shortfall, which is the difference between a hospital's costs of care for Medicaid-enrolled patients and the total payments it receives for those services. Medicaid DSH audits include data on both Medicaid shortfall and unpaid costs of care for uninsured individuals for DSH hospitals, but these data are not published by CMS until about five years after DSH payments are made.[17]

Below, we review the most recent uncompensated care data available for all hospitals in 2017 as well as additional information about Medicaid shortfall reported for DSH hospitals in SPRY 2015.

Unpaid costs of care for uninsured individuals

According to Medicare cost reports, hospitals reported a total of $39.9 billion in charity care and bad debt in FY 2017, 4.3 percent of hospital operating expenses. This is a $2.7 billion (7 percent) increase from FY 2016, and a 0.2 percentage point increase as a share of hospital operating expenses.

Due to recent changes in Medicare cost report instructions, uncompensated care reported on FY 2017 Medicare cost reports cannot be compared to data before the implementation of the ACA. The changes to the cost report instructions became effective in FY 2017, and may have had a particularly marked effect on uncompensated care costs reported that year.[18] Moreover, we are no longer observing the large declines in uncompensated care that we observed immediately after the implementation of the ACA coverage expansions. For example, charity care and bad debt reported on Medicare costs reports declined by $8.6 billion (23 percent) between 2013 and 2015 (MACPAC 2018a).[19]

As a share of hospital operating expenses, charity care and bad debt varied widely by state in FY 2017 (Figure 1-3). In the aggregate, hospitals in states that expanded Medicaid under the ACA before October 1, 2017, reported uncompensated care that was less than half of what was reported in non-expansion states (2.8 percent of hospital operating expenses in Medicaid expansion states versus 7.2 percent in states that did not expand Medicaid).

Uncompensated care reported on Medicare cost reports includes the costs of care provided to both uninsured individuals and patients with insurance who cannot pay deductibles, co-payments, or coinsurance. In FY 2017, about 44 percent of uncompensated care reported was for charity care for uninsured individuals ($17.6 billion), 18 percent was charity care for insured individuals ($7.4 billion), and 37 percent was for bad debt expenses for both insured and uninsured individuals ($14.9 billion).[20] Uncompensated care for uninsured individuals is affected by the uninsured rate, while uncompensated care for patients with insurance is affected by specific features of their health insurance, such as deductibles and other forms of cost sharing. When patients cannot pay cost sharing, these costs often become bad debt expenses for hospitals. In 2016, the share of

BOX 1-3. Data Sources and Definitions for Uncompensated Care Costs

Data Sources

American Hospital Association (AHA) annual survey. An annual survey of hospitals 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 except with the exception of some freestanding children'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-five percent of U.S. hospitals were included on DSH audits in 2015, the latest year for which data are available.

Definitions

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, based on its charity care policy, 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. Charity care costs cannot exceed a hospital's cost of delivering the care. Medicare cost reports include costs of care provided to both uninsured individuals and patients with insurance who cannot pay deductibles, co-payments, or coinsurance.

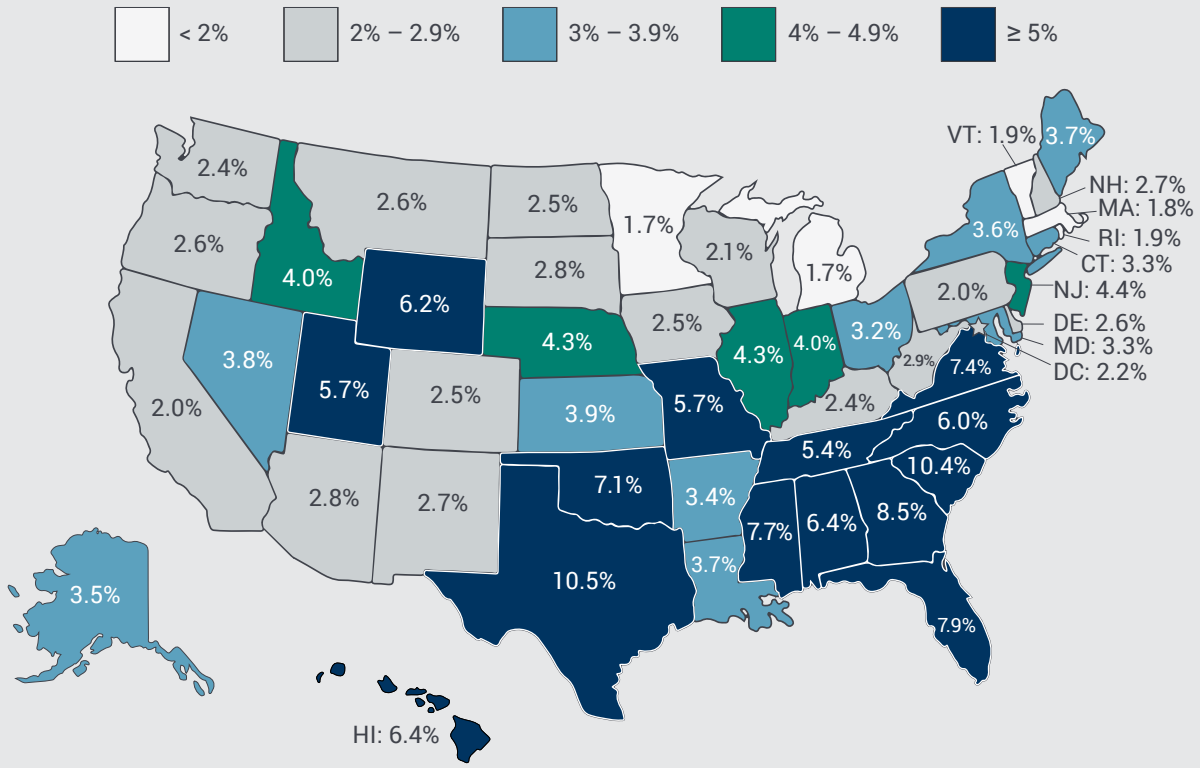
Bad debt. Expected payment amounts that a hospital is not able to collect from patients who are determined to have the financial capacity to pay according to the hospital's charity care policy.

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 most 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. Ongoing litigation has challenged how third-party payments should be counted for Medicaid-eligible patients with third-party coverage.

FIGURE 1-3. Charity Care and Bad Debt as a Share of Hospital Operating Expenses, FY 2017



Note: FY is fiscal year.

Source: MACPAC, 2020, analysis of FY 2017 Medicare cost reports.

private-sector enrollees in high-deductible health plans was 46.5 percent, up from 11.4 percent in 2006 (Miller et al. 2018).

Medicaid shortfall

Medicaid shortfall is 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.[21] According to the American Hospital Association (AHA) annual survey, Medicaid shortfall in 2017 for all U.S. hospitals totaled $22.9 billion, an increase of $2.9 billion from 2016. The aggregate Medicaid payment-to-cost ratio reported on the AHA survey was 87 percent in 2017, a modest decline from the 88 percent payment-to-cost ratio reported in 2016 (AHA 2019, 2017).

Previously, MACPAC found wide variation in the amount of Medicaid shortfall for DSH hospitals reported on DSH audits.[22] For example, in SPRY 2014, 15 states reported no Medicaid shortfall for DSH hospitals and 12 states reported shortfall that exceeded 50 percent of total DSH hospital uncompensated care. Although Medicaid base payments for hospital services are typically below hospital costs, many states make large non-DSH supplemental payments that reduce or eliminate the amount of Medicaid shortfall reported on DSH audits (MACPAC 2019a).

As a result of ongoing litigation about the DSH definition of Medicaid shortfall, many states have changed how they report Medicaid shortfall on their DSH audits, which makes it difficult to examine hospital-level shortfall data. At issue in

these lawsuits is how Medicaid shortfall should be counted for Medicaid-eligible patients with third-party coverage.

Since at least 2010, CMS has held that third-party payments should be counted when calculating Medicaid shortfall, but several hospitals argued that CMS did not have the statutory authority to consider third-party payments in the calculation of Medicaid shortfall and filed lawsuits against CMS to clarify the definition. In March 2018, the U.S. District Court for the District of Columbia ruled that third-party payments should not be counted. In August 2019, the U.S. Court of Appeals for the District of Columbia reversed the district court decision, allowing CMS to enforce its prior policy with respect to all hospital services furnished on or after June 2, 2017. However, there is still some legal uncertainty, because the plaintiffs in this case have requested a rehearing. There is another pending lawsuit on this matter in the U.S. Court of Appeals for the Fifth Circuit, where CMS has appealed a district court order enjoining enforcement of the 2017 rule in Mississippi (Eyman 2019). MACPAC's June 2019 report to Congress discussed the history of the DSH definition of Medicaid shortfall, examined the potential effects of this litigation, and recommended a statutory change (MACPAC 2019a).

Overall, 21 states reported SPRY 2015 DSH uncompensated care costs with and without third-party payments, which allows us to quantify the effects that each policy would have on different types of hospitals. For DSH hospitals in these 21 states, not counting third-party payments more than doubled the amount of uncompensated care reported. Total uncompensated care was $33.6 billion (14 percent of DSH hospital costs) before subtracting third-party payments, and $15.0 billion (6 percent of DSH hospital costs) when those payments were taken into account (Table 1-3).

TABLE 1-3. DSH Hospital Uncompensated Care Costs Under Different Calculation Methods, by Hospital Type, SPRY 2015

Hospital characteristics	Number of hospitals in analysis	Total uncompensated care costs (billions)		Increase in uncompensated care costs (billions)	
		After counting third-party payments	Without counting third-party payments	Dollar increase	Percent increase
		A	B	C = B – A	D = (B – A) / A
Total	**1,467**	**$15.0**	**$33.6**	**$18.6**	**124%**
Hospital type					
Children's hospitals	30	0.3	0.9	0.7	232
Critical access hospitals	335	0.3	0.7	0.4	172
Short-term acute care hospitals	999	12.7	30.1	17.4	137
Deemed DSH status					
Deemed	447	8.1	16.0	8.0	99
Not deemed	1,020	6.9	17.6	10.7	155

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. Deemed DSH hospitals are statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Analysis is limited to DSH hospitals in the 21 states that reported uncompensated care costs with and without third-party payments on their SPRY 2015 DSH audits. Uncompensated care costs reported on DSH audits include Medicaid shortfall and hospital unpaid costs of care for uninsured individuals. Numbers do not add due to rounding.

Source: MACPAC, 2020, analysis of SPRY 2015 as-filed Medicaid DSH audits and FY 2017 Medicare cost reports.

The percent increase in uncompensated care due to not counting third-party payments was largest for children's hospitals, likely because they serve a high proportion of Medicaid-eligible individuals with private insurance, including many low-birthweight babies.[23] Critical access hospitals also reported a greater percent increase in uncompensated care than short-term acute care hospitals. This effect may be attributable to the fact that critical access hospitals serve a high share of patients dually eligible for Medicare and Medicaid because rural areas have a higher proportion of individuals age 65 and older than urban areas (Kirby and Muhuri 2018).

The results of these analyses should be interpreted with caution because most states did not break out third-party payments made to DSH hospitals on their SPRY 2015 DSH audits.[24] However, as shown above, if a state does not subtract third-party payments from Medicaid costs, its hospitals' reported uncompensated care will be substantially larger. Because many states distribute DSH payments to hospitals based on the amount of uncompensated care reported on DSH audits, changes to the DSH definition of uncompensated care could affect the distribution of DSH payments within states.[25] For example, based on our analysis showing that uncompensated care for deemed DSH hospitals does not increase as much as it does for hospitals that do not meet the deemed DSH criteria when third-party payments are not counted, not counting third-party payments would likely result in lower DSH payments to deemed DSH hospitals in many states.

Hospital margins

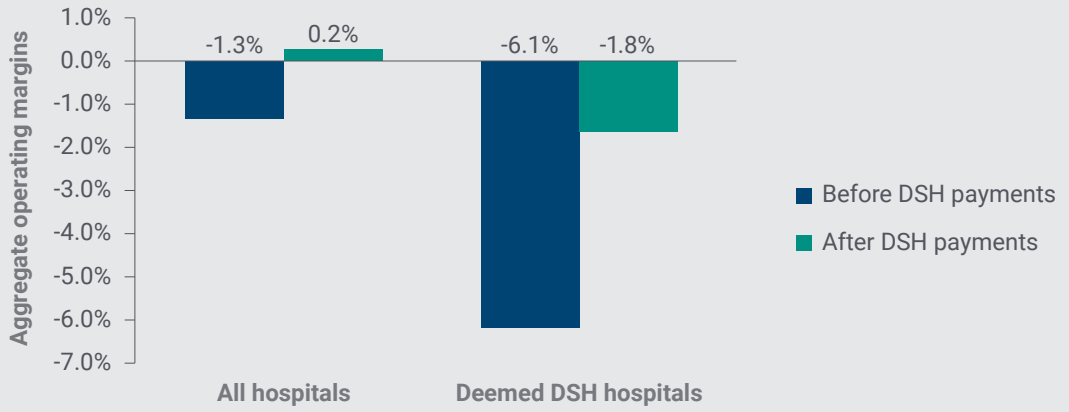
Changes in hospital uncompensated care costs have the potential to affect hospital margins. For example, deemed DSH hospitals report higher uncompensated care costs and lower operating and total margins on average. However, margins are an imperfect measure of a hospital's financial health and might not be reported reliably on Medicare cost reports.

In FY 2017, aggregate operating margins were positive across all hospitals after counting DSH payments (0.2 percent) and were 0.6 percentage points higher than in FY 2016. By contrast, deemed DSH hospitals reported negative aggregate operating margins both before and after counting DSH payments (-6.1 percent and -1.8 percent, respectively) (Figure 1-4).

Hospitals' total margins include revenue not directly related to patient care (Appendix 1B). The aggregate total margins for all hospitals after DSH payments was 6.8 percent in FY 2017, which was 0.8 percentage points lower than in FY 2016. Before counting DSH payments and other government appropriations, deemed DSH hospitals reported an aggregate total margin of 0 percent in FY 2017. However, after counting these payments and appropriations, deemed DSH hospitals reported positive aggregate total margins of 6.2 percent, comparable to the aggregate total margins reported for all hospitals (Figure 1-5).

Many factors 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 its costs (Bai and Anderson 2016). Moreover, hospitals that are struggling financially might decide to cut unprofitable services, which would increase their margins in the short term; hospitals that are doing well financially might make additional investments, which could decrease their margins in the short term.

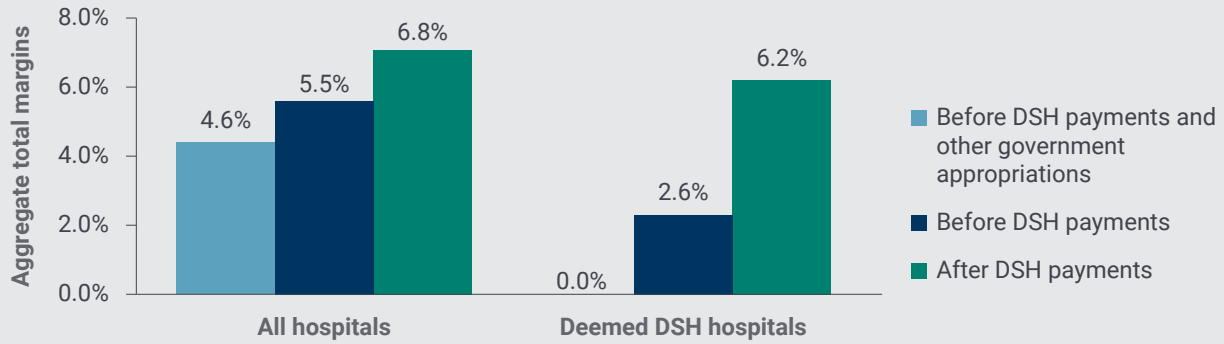
FIGURE 1-4. Aggregate Hospital Operating Margins Before and After DSH Payments, All Hospitals versus Deemed DSH Hospitals, FY 2017



Notes: DSH is disproportionate share hospital. FY is fiscal year. Operating margins measure income from patient care divided by net patient revenue. Operating margins before DSH payments in FY 2017 were estimated using state plan rate year (SPRY) 2015 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 1B.

Source: MACPAC, 2020, analysis of FY 2017 Medicare cost reports and SPRY 2015 DSH audit data.

FIGURE 1-5. Aggregate Hospital Total Margins Before and After DSH Payments, All Hospitals versus Deemed DSH Hospitals, FY 2017



Notes: DSH is disproportionate share hospital. FY is fiscal year. 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 FY 2017 were estimated using state plan rate year (SPRY) 2015 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 1B.

Source: MACPAC, 2020, analysis of FY 2017 Medicare cost reports and SPRY 2015 DSH audit data.

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. Given that the concept of essential community services is not defined elsewhere in Medicaid statute or regulation, MACPAC has developed a definition based on the types of services suggested in the statutory provision calling for MACPAC's study and the limits of available data (Box 1-4).[26]

Using data from FY 2017 Medicare cost reports and the 2017 AHA annual survey, we found that among hospitals that met the deemed DSH criteria in SPRY 2015, 91 percent provided at least one of the services included in MACPAC's definition of essential community services, 72 percent provided

BOX 1-4. Identifying Hospitals with High Levels of Uncompensated Care That Provide Essential Community Services for Low-Income, Uninsured, and Other Vulnerable Populations

MACPAC's authorizing 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 (§ 1900 of the Social Security Act). Based on the types of services suggested in the statute and the limits of available data, we included the following services in our 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 their geographic area. See Appendix 1B for further discussion of our methodology and its limitations.

two of these services, and 57 percent provided three or more of these services. By contrast, among non-deemed hospitals, 43 percent provided three or more of these services.

Because policymakers have been particularly concerned recently about maternal mortality and access to obstetric care in rural areas, we took a deeper look in this report on the extent to which DSH hospitals provide obstetric services. Medicaid has long played a key role in providing maternity-related services to pregnant women, financing 43 percent of births in 2018 (MACPAC 2020c). Nine percent of rural counties experienced a loss of all hospital obstetric services between 2004 and 2014 and 54 percent of all rural counties lacked access to hospital obstetric services in 2014 (Hung et al. 2017).[27] In addition, 120 rural hospitals have closed since 2010 (NCRHRP 2020).

To receive DSH payments, hospitals must have at least two obstetricians with staff privileges who provide services to Medicaid enrollees, but rural hospitals can satisfy this requirement by having non-obstetric physicians who can perform non-emergency obstetric procedures (§ 1923(d) of the Social Security Act). The DSH obstetric requirement does not apply to children's hospitals or hospitals that did not provide obstetric services to the general population as of 1987 (a category consisting primarily of IMDs). Although states can support rural hospitals in a number of ways, DSH payments are an important revenue source, accounting for $1.8 billion in payments to rural hospitals in SPRY 2015.[28]

Overall, we found that of the rural hospitals that received DSH payments in SPRY 2015, 70 percent reported on the AHA annual survey that they had an obstetric unit, which was lower than the share of urban DSH hospitals providing obstetric services (85 percent). In addition, only 28 percent of rural DSH hospitals were equipped to provide obstetric services for complicated births (level 2 and above), which was lower than the share of urban DSH hospitals that were able to provide higher level obstetric services for complicated births (81 percent).

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.

In December 2019, the Further Consolidated Appropriations Act, 2020, delayed the implementation of the DSH reductions until May 23, 2020, without changing the amount of the FY 2020 reductions. Under current law, states can make DSH payments based on their unreduced allotment amounts, but as discussed below, states would need to reconcile FY 2020 DSH payments to their lower, reduced allotment amount beginning May 23.

DSH allotment reductions are applied against unreduced DSH allotments; that is, the amounts 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 allotment reductions scheduled. Thus, under current law, state DSH allotments will return to their higher, unreduced DSH allotment amounts in FY 2026. Unreduced allotments increase each year based on the Consumer Price Index for All Urban Consumers, and these inflation-based increases will apply even in years 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). It also 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 1-5).

On September 25, 2019, CMS finalized the DHRM for distributing reductions among states, which is similar to the methodology proposed in 2017 (CMS 2019b, 2017b). Under CMS's methodology, the $4 billion in DSH allotment reductions for FY 2020 are projected to affect states differently, with estimated state allotment reductions ranging from 3.5 percent to 56.9 percent of states' unreduced allotment amounts. Smaller reductions are applied to states with historically low DSH allotments (referred

BOX 1-5. 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 September 2019, the Centers for Medicare & Medicaid Services (CMS) finalized the DHRM. As required by statute, 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 fiscal year (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 define 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 waivers under Section 1115 of the Social Security Act as of July 2009. Specifically, DSH funding used for coverage expansions is excluded from the calculation of whether DSH payments were targeted to hospitals with high volumes of Medicaid inpatients or high levels of uncompensated care.

to as low-DSH states) and larger reductions are applied to states with lower uninsured rates. However, the methodology does not meaningfully improve the relationship between DSH allotments and levels of hospital uncompensated care or any other factor that Congress asked MACPAC to consider. (Complete state-by-state information on DSH allotment reductions and other factors are included in Appendix 1A.)

For FY 2020, we used the DSH allotment reductions CMS has estimated for each state. In each of FYs 2021 through 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 change their DSH targeting policies and if there are no changes in uninsured rates across states.

We also compared FY 2020 DSH allotments to other factors, such as hospital uncompensated care costs. 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 1A.

Reduced DSH allotments compared to unreduced DSH allotments

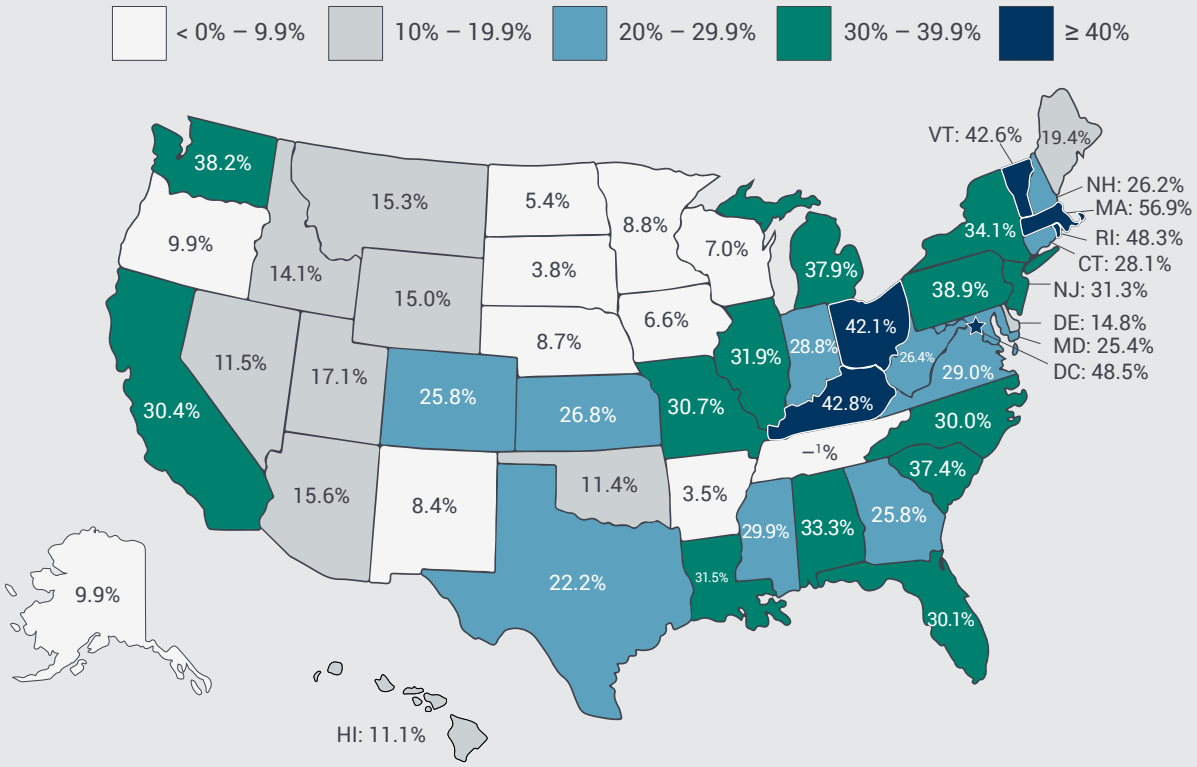
The $4 billion in DSH allotment reductions scheduled to take effect in FY 2020 are projected to affect states differently, with estimated reductions ranging from 3.5 percent to 56.9 percent of unreduced allotment amounts (Figure 1-6). Because of the low-DSH factor, the projected percentage reduction in DSH allotments for the 17 states that meet the low-DSH criteria (8.8 percent in the aggregate) is about one-quarter that of the other states (32.4 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 as of January 1, 2018 (34.3 percent in the aggregate) than for states that did not expand Medicaid (28.1 percent in the aggregate).

The Further Consolidated Appropriations Act, 2020, delays the DSH reductions until May 23, 2020, without reducing the size of the $4 billion allotment reduction required under current law. Although this provision has likely led most states to make interim DSH payments to hospitals under the assumption that the DSH reductions will not take effect, the provision does not eliminate the uncertainty around the availability of DSH funding. If the DSH reductions go into effect on May 23 as scheduled under current law, states will need to reconcile any interim DSH payments to the final, reduced DSH allotment amount. In some cases, states may need to recover DSH payments from hospitals in order to avoid exceeding their aggregate DSH allotments.

DSH allotment reductions will result in a corresponding decline in spending only in states that spend their full DSH allotment. For example, 18 states are projected to have FY 2020 DSH allotment reductions that are smaller than the state's unspent DSH funding in FY 2017, which means that these states could make DSH payments from their reduced FY 2020 allotment equal to the payments that they made from their FY 2017 allotment.[29]

We do not know how states will respond to these reductions. As noted above, some states distribute DSH funding proportionally among eligible hospitals while other states target DSH payments to particular hospitals. States may also take different approaches to reductions, with some states applying them to all DSH hospitals and others reducing DSH payments only to specific hospitals. Because the final CMS DHRM 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.[30] However, the DSH audit data used to calculate the DSH targeting factors in the DHRM have a substantial data lag of about four to five years. States may be able to offset some of the effects of DSH allotment reductions by increasing other types of Medicaid payments to providers. However, each type of Medicaid payment is subject to its own unique rules and limitations.

FIGURE 1-6. 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.

– Dash indicates zero.

[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, 2020, analysis of preliminary unreduced and reduced allotment amounts as of October 15, 2019, provided by CMS.

For example, aggregate fee-for-service (FFS) payments to hospitals, excluding DSH payments, cannot exceed a reasonable estimate of what Medicare would have paid for the same service, referred to as the upper payment limit.[31]

Relationship of DSH allotments to the statutorily required factors

As in our past reports, we find little meaningful relationship between DSH allotments and the factors that Congress asked MACPAC to consider.

Changes in number of uninsured individuals. Unreduced FY 2020 DSH allotments range from less than $100 per uninsured individual in six states to more than $1,000 per uninsured individual in nine states and the District of Columbia. Nationally, the average FY 2020 DSH allotment per uninsured individual is $449.

Amount and sources of hospital uncompensated care costs. As a share of hospital charity care and bad debt costs reported on FY 2017 Medicare cost reports, unreduced FY 2020 federal DSH allotments range from less than 10 percent in eight states to more than 80 percent in three states and the District

of Columbia. Nationally, these allotments are equal to 32 percent of hospital charity care and bad debt costs. At the state level, total unreduced FY 2020 DSH funding (including state and federal funds combined) exceeds total reported hospital charity care and bad debt costs in 10 states and the District of Columbia. 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.[32]

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 definition of essential community services.

Value-Based Payment Approaches to Using DSH Funding

The Commission is interested in reforms to Medicaid payment that drive system change toward greater efficiency and improved health outcomes. In contrast to traditional payment models that are based on the volume of care provided, value-based payment models are intended to reward providers based on delivering lower cost and higher quality care. California's Global Payment Program (GPP), which converts DSH payments to a global payment that encourages the delivery of high-value medical services, is one such model.

In December 2015, California received approval for a demonstration waiver under Section 1115 of the Social Security Act to distribute DSH funding as a global payment that incentivizes hospitals to reduce avoidable hospital use and allows hospitals to use DSH funding for physician services and other costs of care for uninsured individuals that would not normally count for DSH purposes. MACPAC highlighted this approach in its March 2017 report and has been monitoring the implementation of the program by speaking with hospitals, state officials, and evaluators of this program. In June 2019, California released its final evaluation of this program for the demonstration period. Below we summarize key findings about the foundation of this program, its implementation, and its outcomes, as well as implications for other states.

Foundation of the GPP

California's GPP is part of a series of payment reforms for public hospitals that California began more than 10 years before the approval of the GPP:

- In 2005, California targeted DSH payments to designated public hospitals as one of numerous changes to its hospital payment policies. These large health systems serve a high share of Medicaid and uninsured individuals and provide the non-federal share for DSH payments. To offset the loss of payments to the 105 privately owned hospitals that were previously receiving DSH payments, the state created a new upper payment limit (UPL) supplemental payment for these hospitals (CHCF 2006).[33]
- At the same time, California adopted a certified public expenditure model to finance inpatient hospital services provided by designated public hospitals (CHCF 2006). Under this financing arrangement, hospitals certify their costs for the services they provide and receive federal funding for these costs at the state's federal matching rate. Although hospitals continue to have unreimbursed Medicaid costs, this policy reduces the amount of Medicaid shortfall that hospitals report on DSH audits.
- Also in 2005, California received approval for a Section 1115 waiver to create a safety-net

care pool that that included an uncompensated care pool to pay for costs of care for uninsured patients that were not paid for by DSH. The safety-net care pool replaced previous UPL supplemental payments that otherwise would have been reduced when the state expanded managed care (Harbage and Ryan 2006).

- In 2010, California received approval for a Delivery System Reform Incentive Payment program, which incentivized designated public hospitals to expand primary care and reduce hospital utilization.
- California expanded Medicaid eligibility in 2010, and in 2014, the state fully adopted the ACA Medicaid expansion. As a result, hospital unpaid costs of care for uninsured patients fell and public hospitals and health systems redirected resources toward improving value-based care for the uninsured.

Implementation of the GPP

In December 2015, California received approval from CMS for a Section 1115 demonstration waiver that included the GPP. This waiver allowed the state to combine its DSH allotment and its Section 1115 uncompensated care pool into one global budget. CMS then calculated global payment amounts for each of the 12 participating designated public hospitals based on the hospital system's costs of care for uninsured patients, including the costs of physician services and other costs that would not normally count for DSH purposes.[34] Overall, for the health systems participating in the GPP, these non-hospital costs accounted for about 51 percent of all uncompensated care costs for uninsured individuals reported in the baseline year (Timbie et al. 2019).

Over the course of the demonstration, hospitals are incentivized to provide care outside of the hospital setting and reduce avoidable hospital use. For a hospital to receive its full global payment, it must provide a certain number of services to uninsured patients, which are tracked based on a point system. In later years of the demonstration, potentially avoidable services such as emergency department visits, earn fewer points.

Results

California's final evaluation of its GPP demonstration reflects data from the first three years of operation. Although the demonstration is ongoing, the data indicate that outcomes are positive on most of the dimensions the evaluators assessed (Timbie et al. 2019):

Health system improvements. All of the public hospital systems participating in the GPP reported building and strengthening infrastructure to deliver care to uninsured individuals as a result of the GPP incentives. Improved care coordination (particularly between mental and physical health providers) and improved data collection to track services provided to uninsured individuals were the most common strategies used.

Improved access to services. On average, by the third year of implementation, the number of uninsured individuals served by public hospital systems increased by 6 percent and the use of non-emergent outpatient physical health services by uninsured individuals increased by 12 percent.

Reduced avoidable hospital use. On average, by the third year of implementation, the use of inpatient hospital care by uninsured individuals declined by 15 percent and emergency department visits by uninsured individuals declined by 14 percent.

Implications for other states

Other states can apply for Section 1115 waivers to implement approaches similar to California's GPP, but we are not aware of other states that are currently interested in doing so. Because of the uncertainty surrounding the pending DSH allotment reductions, states may not be willing to make major changes to their DSH policies at this time.[35]

Although California's health care market is unique, many hospitals across the country are becoming part of integrated health systems that provide primary care and other services outside

the hospital setting, similar to California's public health systems. For example, 69.7 percent of U.S. hospitals were part of health systems in 2016, and hospitals within these health systems accounted for 91.6 percent of all U.S. hospital discharges (AHRQ 2019). However, the non-hospital services that these health systems provide do not count toward hospital uncompensated care costs that are eligible for DSH payments.

Other states and providers could also encounter various implementation challenges if they pursued an approach similar to California's GPP. For example, some executives of hospitals participating in the GPP expressed concerns that they might not meet the service delivery targets necessary to earn the GPP payments they hoped to receive. They also noted that it is difficult to monitor utilization of services and measure quality of care for uninsured patients because these patients might not have a usual source of care and face a number of social risk factors unrelated to health care delivery (MACPAC 2017).

Endnotes

[1] Additional information on all types of Medicaid payments to hospitals is provided in MACPAC's issue brief, *Medicaid Base and Supplemental Payments to Hospitals* (MACPAC 2020b).

[2] Medicare also makes DSH payments. Hospitals are eligible for Medicare DSH payments if their Medicaid and Supplemental Security Income (SSI) patient utilization rate exceeds 15 percent (MACPAC 2017). Historically, the amount of Medicare DSH payments a hospital was eligible to receive was based solely on a hospital's Medicaid and SSI patient utilization, but since 2014, the ACA has required that most Medicare DSH payments be based on a hospital's uncompensated care relative to other Medicare DSH hospitals. In addition, the ACA linked the total amount of funding for Medicare DSH payments to the uninsured rate (MACPAC 2016).

[3] Medicaid fee-for-service (FFS) payments for hospitals cannot exceed a reasonable estimate of what Medicare would have paid in the aggregate. Medicaid DSH payments are not subject to this upper payment limit, but Medicaid DSH payments to an individual hospital are limited to that hospital's uncompensated care costs for Medicaid-enrolled and uninsured patients.

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

[5] DSH spending in FY 2018 includes spending funded from prior year allotments. Total DSH spending includes an estimate of the portion of California's Section 1115 waiver spending that is based on the state's DSH allotment.

[6] States are required to submit claims for federal Medicaid funding within two years after the payment is made. However, states can sometimes claim federal match for adjusted DSH payments that are made after the initial two-year window (*Virginia Department of Medical Assistance Services*, DAB No. 1838 (2002)), https://www.hhs.gov/sites/default/files/static/dab/decisions/board-decisions/2002/dab1838.html.

[7] Analysis excludes unspent DSH funding that is reported for California and Massachusetts ($1.2 billion total) because these states use their DSH allotment in the budget neutrality assumptions for their Section 1115 waivers.

[8] 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 Medicaid DSH definition.

[9] 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.

[10] DSH hospitals are also required to have at least two obstetricians with staff privileges who will treat Medicaid enrollees (with certain exceptions for rural and children's hospitals).

[11] The Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act of 2018 (P.L. 115-271) provides a state option to cover services provided by an IMD for patients with substance use

disorders in FYs 2020–2023. Under Medicaid managed care and Section 1115 waivers, states can also make payments for some services provided by an IMD to Medicaid enrollees age 21–64 (42 CFR 438.6(e)).

[12] The amount of a state's federal DSH funds available for IMDs is limited. Each state's IMD limit is the lesser amount of either the state's DSH payment to IMDs and other mental health facilities in FY 1995 or 33 percent of the state's FY 1995 DSH allotment.

[13] In 2012, states that financed DSH payments with above-average levels of health care-related taxes distributed DSH payments to a proportion of hospitals in the state that was about double the proportion of hospitals receiving DSH funding in states that financed DSH payments with lower levels of health care-related taxes. States that financed DSH payments with above-average levels of intergovernmental transfers or certified public expenditures distributed a higher share of total DSH spending to public hospitals—about double the share to public hospitals in states that financed DSH payments with lower levels of local government funding (MACPAC 2017).

[14] The Census Bureau notes that due to differences in measurement, health insurance coverage in calendar years 2017 and 2018 should not be compared to earlier years processed with a legacy system (Berchick et al. 2019). The CPS estimate for the uninsured rate in 2017 is also lower than the rate estimated in the CPS survey published in September 2018 (Berchick et al. 2018).

[15] There are a variety of ways to count the number of uninsured individuals. Estimates in this chapter that are based on the CPS reflect the number of people without health insurance for the entire calendar year.

[16] Additional information on potential drivers of the decline in Medicaid and CHIP enrollment in 2017 and 2018 is provided in MACPAC's issue brief, *Changes in Medicaid and CHIP Enrollment* (MACPAC 2019e)

[17] DSH audit data are not due until three years after DSH payments are made and they are not published until after CMS reviews the data for completeness (42 CFR 455.304).

[18] Specifically, CMS modified the definition of charity care to include uninsured discounts and changed the way that cost-to-charge ratios were applied on Medicare cost reports. Hospitals that partially discount charges to uninsured or underinsured patients report higher uncompensated care costs on the Medicare cost reports under the new formula (MedPAC 2018, CMS 2017a).

[19] As a result of retroactive changes to Medicare cost reports, the adjusted amount of uncompensated care reported by hospitals for 2015 under the new definitions was $9 billion higher than had been reported under the prior definitions. Hospitals have retroactively adjusted their 2015 cost reports to comply with the new definitions, but they are not required to update uncompensated care data from 2013 (MACPAC 2019f).

[20] Bad debt expenses for insured and uninsured individuals are not reported separately on Medicare cost reports. The Medicare cost report data that we report in this chapter have not been audited, so bad debt and charity care costs may not be reported consistently for all hospitals. CMS began to audit charity care and bad debt costs reported on Medicare cost reports in the fall of 2018 (CMS 2018).

[21] For Medicaid-eligible patients with third-party coverage, most of the costs of care for these patients are paid by other payers because Medicaid is a payer of last resort.

[22] The amount of Medicaid shortfall reported on the AHA annual survey differs from the amount of Medicaid shortfall for DSH hospitals reported on DSH audits because of differences in the set of hospitals included in each data source and because of differences in how shortfall is calculated (Nelb et al. 2016). For example, on the AHA survey, Medicaid payments are reported after subtracting health care-related taxes, but on DSH audits health care-related taxes are not subtracted from payments (AHA 2018).

[23] Low-birthweight babies are eligible for SSI, which confers automatic eligibility for Medicaid as well. Because low-birthweight babies often have complex medical needs that require long hospital stays, a small number of low-birthweight babies can have a large effect on overall hospital costs.

[24] Nineteen states provided their Medicaid costs only after subtracting the total third-party payments received by DSH hospitals, while eight states and the District of Columbia provided their Medicaid costs without subtracting third-party payments. Tennessee provided Medicaid costs after subtracting third-party payments for all but three hospitals

(Delta Medical Center, Parkwest Medical Center, and Takoma Regional Hospital) for which third-party payments were not subtracted. Massachusetts does not make DSH payments, and does not submit a DSH audit.

[25] In 2018, about half of states (24) distributed DSH payments based on hospital uncompensated care costs (MACPAC 2018b).

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

[27] The study identified rural counties using the Office of Management and Budget designations and included 1,984 rural U.S. counties or county equivalents in the analysis.

[28] Additional information on all types of Medicaid payments to rural hospitals is provided in MACPAC's issue brief, *Rural Hospitals and Medicaid Payment Policy* (MACPAC 2018c).

[29] For states to spend the same amount of DSH funding in FY 2020 as they spent in FY 2017, DSH payments to individual hospitals may not exceed those hospitals' uncompensated care costs.

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

[31] Additional information on all types of Medicaid payments to hospitals is provided in MACPAC's issue brief, *Medicaid Base and Supplemental Payments to Hospitals* (MACPAC 2020b).

[32] 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 states can pay for with Medicaid DSH funds.

[33] UPL payments are lump-sum supplemental payments that are intended to fill in the difference between FFS base payments and the amount that Medicare would have paid for the same service. States can make additional UPL payments to providers as long as aggregate FFS payments to a class of providers are below a reasonable estimate of the amount that Medicare would have paid.

[34] Total payments under the GPP cannot exceed the sum of the state's DSH allotment (about $1.3 billion in FY 2020) and other Medicaid waiver funding that the state had previously used to pay for uncompensated care (about $236 million).

[35] One condition of obtaining federal approval for any demonstration that waives provisions of the Medicaid statute, including DSH, is demonstrating that the waiver is unlikely to result in higher federal costs than there would have been absent the demonstration. The federal DSH funding for California that finances the GPP will be reduced if and when the national allotment reductions go into effect, and the state is at risk for the use of non-federal funds to make up for the resulting shortfall.

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APPENDIX 1A: State-Level Data

TABLE 1A-1. State DSH Allotments, FYs 2020 and 2021 (millions)

State	FY 2020		FY 2021	
	Total (state and federal)	Federal	Total (state and federal)	Federal
Total	**$15,443.3**	**$8,828.9**	**$8,923.4**	**$5,142.2**
Alabama	**333.4**	240.0	**175.7**	126.5
Alaska	**42.9**	21.5	**39.3**	19.6
Arizona	**142.7**	99.9	**119.9**	83.9
Arkansas	**68.1**	48.7	**67.3**	48.1
California	**1,784.8**	892.4	**1,051.0**	525.5
Colorado	**160.6**	80.3	**108.8**	54.4
Connecticut	**336.1**	168.1	**212.9**	106.5
Delaware	**15.6**	9.0	**13.3**	7.7
District of Columbia	**52.7**	36.9	**10.5**	7.3
Florida	**266.0**	163.5	**158.2**	97.3
Georgia	**346.4**	233.1	**234.5**	157.8
Hawaii	**18.9**	10.1	**17.0**	9.1
Idaho	**23.5**	16.5	**20.2**	14.2
Illinois	**341.4**	171.2	**190.1**	95.3
Indiana	**270.5**	178.1	**168.2**	110.7
Iowa	**70.3**	43.0	**67.0**	41.0
Kansas	**59.6**	35.3	**39.3**	23.2
Kentucky	**135.1**	97.0	**37.7**	27.1
Louisiana	**821.3**	549.1	**464.3**	310.4
Maine	**155.0**	98.9	**121.5**	77.5
Maryland	**133.1**	66.5	**91.2**	45.6
Massachusetts	**307.1**	153.5	**73.1**	36.5
Michigan	**300.4**	192.4	**124.7**	79.9
Minnesota	**159.3**	79.7	**147.9**	73.9
Mississippi	**162.5**	125.1	**97.5**	75.0
Missouri	**585.0**	384.1	**341.1**	223.9
Montana	**17.4**	11.2	**14.7**	9.5
Nebraska	**55.2**	30.2	**51.3**	28.1
Nevada	**74.9**	47.9	**67.1**	42.9
New Hampshire	**276.2**	138.1	**185.0**	92.5
New Jersey	**1,034.0**	517.0	**588.7**	294.4
New Mexico	**30.0**	21.8	**28.0**	20.3

TABLE 1A-1. (continued)

State	FY 2020		FY 2021	
	Total (state and federal)	Federal	Total (state and federal)	Federal
New York	**$2,477.4**	$1,238.7	**$1,261.4**	$630.7
North Carolina	**360.3**	241.5	**215.0**	144.1
North Dakota	**21.1**	10.6	**20.4**	10.2
Ohio	**436.8**	275.3	**131.1**	82.6
Oklahoma	**56.8**	37.5	**50.9**	33.6
Oregon	**77.9**	47.7	**71.3**	43.6
Pennsylvania	**766.9**	400.7	**297.4**	155.4
Rhode Island	**74.3**	39.3	**14.7**	7.8
South Carolina	**339.2**	239.8	**145.4**	102.8
South Dakota	**21.6**	12.4	**21.2**	12.2
Tennessee[1]	**81.4**	53.1	**81.4**	53.1
Texas	**1,429.6**	870.5	**1,058.5**	644.5
Utah	**27.9**	19.0	**22.9**	15.6
Vermont	**28.0**	15.1	**7.9**	4.3
Virginia	**145.4**	72.7	**89.6**	44.8
Washington	**267.3**	133.6	**108.7**	54.4
West Virginia	**77.6**	58.1	**51.8**	38.8
Wisconsin	**173.2**	102.8	**164.5**	97.7
Wyoming	**0.5**	0.2	**0.4**	0.2

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 (beginning May 23, 2020) and by $8 billion in FY 2021, and this table reflects those reductions.

[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, 2020, analysis of CBO 2019 and the preliminary unreduced and reduced allotment amounts as of October 15, 2019, provided by CMS.

TABLE 1A-2. FY 2020 DSH Allotment Reductions, by State (millions)

State	Unreduced allotment		Allotment reduction		
	Total (state and federal)	Federal	Total (state and federal)	Federal	Percent reductions in federal DSH allotments
Total	**$22,513.3**	**$12,828.9**	**$7,070.0**	**$4,000.0**	**31.2%**
Alabama	**499.6**	359.6	**166.2**	119.6	33.3
Alaska	**47.6**	23.8	**4.7**	2.4	9.9
Arizona	**169.1**	118.4	**26.4**	18.5	15.6
Arkansas	**70.6**	50.4	**2.5**	1.8	3.5
California	**2,563.9**	1,282.0	**779.1**	389.5	30.4
Colorado	**216.3**	108.2	**55.8**	27.9	25.8
Connecticut	**467.8**	233.9	**131.7**	65.8	28.1
Delaware	**18.3**	10.6	**2.7**	1.6	14.8
District of Columbia	**102.3**	71.6	**49.6**	34.7	48.5
Florida	**380.5**	233.9	**114.5**	70.4	30.1
Georgia	**467.0**	314.3	**120.6**	81.2	25.8
Hawaii	**21.3**	11.4	**2.4**	1.3	11.1
Idaho	**27.3**	19.2	**3.9**	2.7	14.1
Illinois	**501.4**	251.4	**160.0**	80.2	31.9
Indiana	**379.6**	250.0	**109.2**	71.9	28.8
Iowa	**75.2**	46.1	**5.0**	3.0	6.6
Kansas	**81.5**	48.2	**21.9**	13.0	26.9
Kentucky	**236.1**	169.6	**101.0**	72.5	42.8
Louisiana	**1,199.2**	801.8	**377.9**	252.7	31.5
Maine	**192.5**	122.8	**37.4**	23.9	19.4
Maryland	**178.3**	89.2	**45.2**	22.6	25.4
Massachusetts	**713.3**	356.7	**406.2**	203.1	56.9
Michigan	**483.8**	309.9	**183.4**	117.5	37.9
Minnesota	**174.7**	87.3	**15.4**	7.7	8.8
Mississippi	**231.7**	178.3	**69.2**	53.2	29.9
Missouri	**843.9**	554.0	**258.8**	169.9	30.7
Montana	**20.5**	13.3	**3.1**	2.0	15.3
Nebraska	**60.5**	33.1	**5.3**	2.9	8.7
Nevada	**84.6**	54.1	**9.7**	6.2	11.5
New Hampshire	**374.4**	187.2	**98.2**	49.1	26.2
New Jersey	**1505.6**	752.8	**471.6**	235.8	31.3
New Mexico	**32.8**	23.8	**2.8**	2.0	8.4

TABLE 1A-2. (continued)

State	Unreduced allotment		Allotment reduction		
	Total (state and federal)	Federal	Total (state and federal)	Federal	Percent reductions in federal DSH allotments
New York	**$3,756.7**	$1,878.3	**$1,279.3**	$639.6	34.1%
North Carolina	**514.7**	345.0	**154.4**	103.5	30.0
North Dakota	**22.3**	11.2	**1.2**	0.6	5.4
Ohio	**753.8**	475.1	**317.0**	199.8	42.1
Oklahoma	**64.1**	42.3	**7.3**	4.8	11.4
Oregon	**86.5**	52.9	**8.6**	5.2	9.9
Pennsylvania	**1,256.1**	656.3	**489.2**	255.6	38.9
Rhode Island	**143.6**	76.0	**69.3**	36.7	48.3
South Carolina	**541.7**	383.0	**202.5**	143.2	37.4
South Dakota	**22.4**	12.9	**0.9**	0.5	3.8
Tennessee[1]	**81.4**	53.1	**–**	–	–
Texas	**1,836.5**	1,118.2	**406.9**	247.8	22.2
Utah	**33.6**	22.9	**5.7**	3.9	17.1
Vermont	**48.9**	26.3	**20.8**	11.2	42.6
Virginia	**204.9**	102.4	**59.5**	29.7	29.0
Washington	**432.7**	216.3	**165.4**	82.7	38.2
West Virginia	**105.3**	78.9	**27.8**	20.8	26.4
Wisconsin	**186.2**	110.5	**13.0**	7.7	7.0
Wyoming	**0.5**	0.3	**0.1**	0.0	15.0

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.

— Dash indicates zero; 0.0 indicates an amount less than $0.05 million that rounds to zero.

[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, 2020, analysis of CBO 2019 and the preliminary unreduced and reduced allotment amounts as of October 15, 2019, provided by CMS.

TABLE 1A-3. Number of Uninsured Individuals and Uninsured Rate, by State, 2017–2018

State	2017		2018		Difference in uninsured (2018–2017)	
	Number (thousands)	Percent of state population	Number (thousands)	Percent of state population	Number (thousands)	Percentage point change
Total	**28,019**	**8.7%**	**28,554**	**8.9%**	**535**	**0.2%**
Alabama	449	9.4	481	10.0	32	0.6
Alaska	98	13.7	90	12.6	-8	-1.1
Arizona	695	10.1	750	10.6	55	0.5
Arkansas	232	7.9	244	8.2	12	0.3
California	2,797	7.2	2,826	7.2	29	0.0
Colorado	414	7.5	422	7.5	8	0.0
Connecticut	194	5.5	187	5.3	-7	-0.2
District of Columbia	26	3.8	22	3.2	-4	-0.6
Florida	2,676	12.9	2,728	13.0	52	0.1
Georgia	1,375	13.4	1,411	13.7	36	0.3
Hawaii	53	3.8	56	4.1	3	0.3
Idaho	172	10.1	193	11.1	21	1.0
Illinois	859	6.8	875	7.0	16	0.2
Indiana	536	8.2	545	8.3	9	0.1
Iowa	146	4.7	147	4.7	1	0.0
Kansas	249	8.7	250	8.8	1	0.1
Kentucky	235	5.4	248	5.6	13	0.2
Louisiana	383	8.4	363	8.0	-20	-0.4
Maine	107	8.1	106	8.0	-1	-0.1
Maryland	366	6.1	357	6.0	-9	-0.1
Massachusetts	190	2.8	189	2.8	-1	0.0
Michigan	510	5.2	535	5.4	25	0.2
Minnesota	243	4.4	244	4.4	1	0.0
Mississippi	352	12.0	354	12.1	2	0.1
Missouri	548	9.1	566	9.4	18	0.3
Montana	88	8.5	86	8.2	-2	-0.3
Nebraska	157	8.3	158	8.3	1	0.0
Nevada	333	11.2	336	11.2	3	0.0
New Hampshire	77	5.8	77	5.7	0	-0.1
New Jersey	688	7.7	655	7.4	-33	-0.3
New Mexico	187	9.1	196	9.5	9	0.4

TABLE 1A-3. (continued)

State	2017		2018		Difference in uninsured (2018–2017)	
	Number (thousands)	Percent of state population	Number (thousands)	Percent of state population	Number (thousands)	Percentage point change
New York	1,113	5.7%	1,041	5.4%	-72	-0.3%
North Carolina	1,076	10.7	1,092	10.7	16	0.0
North Dakota	56	7.5	54	7.3	-2	-0.2
Ohio	686	6.0	744	6.5	58	0.5
Oklahoma	545	14.2	548	14.2	3	0.0
Oregon	281	6.8	293	7.1	12	0.3
Pennsylvania	692	5.5	699	5.5	7	0.0
Rhode Island	48	4.6	42	4.1	-6	-0.5
South Carolina	542	11.0	522	10.5	-20	-0.5
South Dakota	77	9.1	85	9.8	8	0.7
Tennessee	629	9.5	675	10.1	46	0.6
Texas	4,817	17.3	5,003	17.7	186	0.4
Utah	282	9.2	295	9.4	13	0.2
Vermont	28	4.6	25	4.0	-3	-0.6
Virginia	729	8.8	731	8.8	2	0.0
Washington	446	6.1	477	6.4	31	0.3
West Virginia	109	6.1	114	6.4	5	0.3
Wisconsin	309	5.4	313	5.5	4	0.1
Wyoming	70	12.3	59	10.5	-11	-1.8

Notes: Delaware is not included because of data collection issues identified after the release of 2017 data products.

0.0 percent indicates an amount between -0.05 percent and 0.05 percent that rounds to zero.

Source: Berchick et al. 2019.

TABLE 1A-4. State Levels of Uncompensated Care, FYs 2016–2017

State	Total hospital uncompensated care costs, 2016		Total hospital uncompensated care costs, 2017		Difference in total hospital uncompensated care costs (2017 less 2016)	
	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	$37,170	4.2%	$39,875	4.3%	$2,705	0.2%
Alabama	636	6.2	680	6.4	44	0.2
Alaska	75	3.9	65	3.5	-10	-0.5
Arizona	425	2.9	412	2.8	-14	-0.2
Arkansas	219	3.5	223	3.4	5	-0.1
California	1,919	1.8	2,230	2.0	312	0.2
Colorado	386	2.7	358	2.5	-28	-0.2
Connecticut	242	2.2	371	3.3	129	1.1
Delaware	73	2.6	76	2.6	3	0.0
District of Columbia	68	2.0	80	2.2	12	0.2
Florida	3,553	7.6	3,731	7.9	177	0.2
Georgia	1,868	8.1	2,078	8.5	210	0.4
Hawaii	44	1.3	221	6.4	177	5.1
Idaho	192	4.2	198	4.0	6	-0.1
Illinois	1,582	4.2	1,635	4.3	53	0.1
Indiana	819	3.8	885	4.0	65	0.2
Iowa	190	2.2	232	2.5	42	0.4
Kansas	317	3.8	342	3.9	26	0.0
Kentucky	302	2.3	335	2.4	33	0.1
Louisiana	863	6.6	493	3.7	-370	-2.9
Maine	192	3.5	213	3.7	21	0.2
Maryland	510	3.4	510	3.3	0	-0.1
Massachusetts	600	2.3	483	1.8	-118	-0.5
Michigan	520	1.7	546	1.7	26	0.0
Minnesota	268	1.5	320	1.7	52	0.2
Mississippi	577	7.3	619	7.7	42	0.4
Missouri	1,119	5.7	1,146	5.7	27	-0.0
Montana	128	3.3	105	2.6	-23	-0.7

TABLE 1A-4. (continued)

State	Total hospital uncompensated care costs, 2016		Total hospital uncompensated care costs, 2017		Difference in total hospital uncompensated care costs (2017 less 2016)	
	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses	Total (millions)	Share of hospital operating expenses (percentage point change)
Nebraska	$255	4.2%	267	4.3%	$13	0.1%
Nevada	209	3.7	228	3.8	19	0.1
New Hampshire	126	2.8	131	2.7	5	-0.0
New Jersey	906	3.8	1,025	4.4	119	0.5
New Mexico	158	3.1	148	2.7	-10	-0.3
New York	2,582	3.7	2,630	3.6	48	-0.0
North Carolina	1,616	6.2	1,638	6.0	22	-0.2
North Dakota	84	2.2	97	2.5	13	0.2
Ohio	992	2.7	1,215	3.2	223	0.5
Oklahoma	642	6.5	718	7.1	76	0.5
Oregon	248	2.1	304	2.6	56	0.5
Pennsylvania	848	2.1	829	2.0	-18	-0.1
Rhode Island	79	2.2	69	1.9	-10	-0.3
South Carolina	1,100	8.8	1,343	10.4	243	1.6
South Dakota	100	2.6	112	2.8	12	0.2
Tennessee	835	4.9	970	5.4	136	0.6
Texas	5,951	10.1	6,443	10.5	493	0.4
Utah	384	5.7	401	5.7	18	-0.0
Vermont	42	1.8	47	1.9	5	0.1
Virginia	1,279	6.6	1,455	7.4	177	0.8
Washington	417	2.1	493	2.4	76	0.3
West Virginia	177	2.9	190	2.9	13	0.0
Wisconsin	356	1.8	434	2.1	78	0.3
Wyoming	100	6.2	101	6.2	1	-0.1

Notes: FY is fiscal year. Uncompensated care is calculated using Medicare cost reports, which define uncompensated care as charity care and bad debt. Because of recent changes in Medicare cost report definitions that changed uncompensated care reporting for 2015 and subsequent years, these data are not comparable with data for prior years. Analysis excludes 1,129 hospitals that did not provide uncompensated care cost information on the FY 2017 Medicare cost reports.

$0 indicates an amount between -$0.5 million and $0.5 million that rounds to zero; 0.0 percent or -0.0 percent indicates an amount between -0.05 percent and 0.05 percent that rounds to zero.

Source: MACPAC, 2020, analysis of FYs 2016 and 2017 Medicare cost reports.

TABLE 1A-5. Number and Share of Hospitals Receiving DSH Payments and Meeting Other Criteria, by State, FY 2015

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	**6,041**	**2,720**	**45%**	**822**	**14%**	**751**	**12%**
Alabama	115	84	73	7	6	6	5
Alaska	25	4	16	2	8	2	8
Arizona	112	36	32	36	32	30	27
Arkansas	100	6	6	1	1	1	1
California	412	43	10	40	10	33	8
Colorado	102	44	43	13	13	13	13
Connecticut	41	9	22	2	5	1	2
Delaware	13	3	23	3	23	3	23
District of Columbia	13	9	69	6	46	5	38
Florida	256	73	29	36	14	33	13
Georgia	167	128	77	27	16	20	12
Hawaii[1]	26	9	35	–	–	–	–
Idaho	49	18	37	7	14	6	12
Illinois	206	51	25	45	22	41	20
Indiana	168	52	31	15	9	15	9
Iowa	121	8	7	7	6	7	6
Kansas	152	62	41	13	9	12	8
Kentucky	116	99	85	38	33	35	30
Louisiana	211	68	32	36	17	31	15
Maine	37	1	3	1	3	1	3
Maryland	60	9	15	6	10	5	8
Massachusetts[2]	100	–	–	–	–	–	–
Michigan	164	108	66	12	7	11	7
Minnesota	144	58	40	15	10	15	10
Mississippi	110	54	49	14	13	14	13
Missouri	142	110	77	24	17	23	16
Montana	65	27	42	2	3	2	3
Nebraska	97	30	31	13	13	12	12
Nevada	53	20	38	5	9	4	8
New Hampshire	30	25	83	5	17	5	17
New Jersey	97	77	79	25	26	24	25

TABLE 1A-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
New Mexico	54	7	13%	4	7%	4	7%
New York	204	186	91	44	22	43	21
North Carolina	131	80	61	19	15	18	14
North Dakota	49	7	14	5	10	5	10
Ohio	234	160	68	19	8	18	8
Oklahoma	154	47	31	15	10	12	8
Oregon	63	59	94	18	29	18	29
Pennsylvania	223	204	88	41	18	35	15
Rhode Island	15	14	93	3	20	2	13
South Carolina	82	59	72	18	22	16	20
South Dakota	62	22	35	12	19	11	18
Tennessee	141	63	45	20	14	19	13
Texas	589	179	30	88	15	87	15
Utah	61	42	69	5	8	4	7
Vermont	16	13	81	1	6	1	6
Virginia	109	32	29	4	4	3	3
Washington	102	63	62	17	17	14	14
West Virginia	61	49	80	12	20	10	16
Wisconsin	146	98	67	20	14	20	14
Wyoming	31	11	35	1	3	1	3

Notes: DSH is disproportionate share hospital. FY is fiscal year. Excludes 70 DSH hospitals that did not submit a FY 2017 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 definition of essential community services includes the following services that we could identify based on the limits of available data: 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.

— Dash indicates zero.

[1] Based on available data on Medicaid inpatient and low-income utilization rates, no DSH hospitals in Hawaii appeared to meet the deemed DSH criteria in FY 2015.

[2] Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Social Security Act allows it 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, 2020, analysis of state plan rate year 2015 DSH audits, FYs 2015 and 2017 Medicare cost reports, and the 2017 American Hospital Association annual survey.

TABLE 1A-6. Number and Share of Hospital Beds and Medicaid Days Provided by Deemed DSH Hospitals, by State, FY 2015

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	**660,985**	**386,540**	**58%**	**134,261**	**20%**	**42,062**	**27,904**	**66%**	**14,145**	**34%**
Alabama	12,552	11,130	89	814	6	683	610	89	106	15
Alaska	1,230	486	40	341	28	98	45	46	38	39
Arizona	12,662	5,843	46	5,843	46	961	623	65	623	65
Arkansas	7,987	757	9	230	3	339	28	8	0	0
California	60,969	6,963	11	5,869	10	5,217	1,123	22	990	19
Colorado	8,490	4,003	47	1,191	14	604	358	59	161	27
Connecticut	7,423	1,485	21	222	3	531	100	19	54	10
Delaware	2,222	422	19	422	19	146	33	22	33	22
District of Columbia	2,519	2,107	84	980	39	258	244	94	125	49
Florida	46,218	19,159	41	10,622	23	2,777	1,721	62	1,280	46
Georgia	18,348	15,454	84	4,639	25	1,144	1,124	98	529	46
Hawaii[1]	2,196	1,227	56	–	–	168	89	53	–	–
Idaho	2,634	1,614	61	492	19	126	95	75	28	23
Illinois	26,460	10,074	38	8,872	34	1,836	1,016	55	894	49
Indiana	14,506	5,598	39	3,073	21	835	439	53	336	40
Iowa	6,742	1,673	25	1,303	19	340	179	53	148	43
Kansas	7,139	3,854	54	1,736	24	230	159	69	108	47
Kentucky	12,188	11,428	94	4,679	38	809	782	97	458	57
Louisiana	14,711	6,808	46	2,717	18	691	402	58	220	32
Maine	2,700	51	2	51	2	137	1	1	1	1
Maryland	11,049	1,620	15	1,449	13	796	45	6	37	5
Massachusetts[2]	16,715	–	–	–	–	1,377	–	–	–	–
Michigan	20,528	15,870	77	3,104	15	1,257	987	79	374	30
Minnesota	9,463	6,231	66	1,872	20	585	495	85	252	43
Mississippi	9,703	5,359	55	1,985	20	469	271	58	160	34
Missouri	15,044	12,097	80	1,900	13	915	583	64	165	18
Montana	2,578	1,695	66	154	6	76	69	90	10	13

TABLE 1A-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
Nebraska	4,686	3,127	67%	1,377	29%	165	156	95%	100	61%
Nevada	5,341	3,090	58	1,299	24	449	371	83	220	49
New Hampshire	2,353	2,127	90	743	32	93	90	97	52	56
New Jersey	18,907	17,324	92	5,167	27	1,087	1,056	97	434	40
New Mexico	3,781	864	23	259	7	321	75	23	11	3
New York	39,981	38,633	97	8,920	22	3,645	3,534	97	1,127	31
North Carolina	18,436	15,522	84	5,289	29	1,128	1,071	95	432	38
North Dakota	2,290	996	43	669	29	82	60	72	49	60
Ohio	26,562	23,053	87	5,025	19	1,668	1,512	91	663	40
Oklahoma	9,873	4,621	47	1,459	15	480	248	52	106	22
Oregon	5,483	5,152	94	1,565	29	413	407	99	184	44
Pennsylvania	31,615	30,141	95	5,951	19	1,686	1,659	98	596	35
Rhode Island	2,567	2,485	97	805	31	139	139	100	43	31
South Carolina	10,374	9,146	88	3,447	33	570	557	98	339	59
South Dakota	2,498	1,579	63	959	38	91	84	92	60	66
Tennessee	15,517	11,330	73	4,165	27	924	797	86	443	48
Texas	58,048	30,401	52	14,920	26	3,021	2,201	73	1,415	47
Utah	4,546	3,654	80	525	12	227	220	97	51	22
Vermont	975	809	83	340	35	53	51	96	30	55
Virginia	14,125	6,768	48	751	5	709	444	63	94	13
Washington	10,177	8,265	81	2,189	22	815	723	89	204	25
West Virginia	5,487	4,908	89	1,041	19	306	295	96	113	37
Wisconsin	11,321	8,967	79	2,784	25	559	517	92	249	45
Wyoming	1,246	570	46	52	4	24	14	57	2	7

Notes: DSH is disproportionate share hospital. FY is fiscal year. Excludes 70 DSH hospitals that did not submit a FY 2017 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 1B.

— Dash indicates zero; 0 indicates an amount less than 500 that rounds to zero; 0 percent indicates an amount less than 0.5 percent that rounds to zero.

[1] Based on available data on Medicaid inpatient and low-income utilization rates, no DSH hospitals in Hawaii appeared to meet the deemed DSH criteria in FY 2015.

[2] Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Social Security Act allows it to use all of its 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, 2020, analysis of FYs 2015 and 2017 Medicare cost reports and state plan rate year 2015 DSH audits.

TABLE 1A-7. FY 2020 Unreduced DSH Allotment per Uninsured Individual and Non-Elderly Low-Income Individual, by State

State	FY 2020 unreduced DSH allotment (millions)		FY 2020 unreduced DSH allotment per uninsured individual		FY 2020 unreduced DSH allotment per non-elderly low-income individual	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Total	**$22,513.3**	**$12,828.9**	**$788.4**	**$449.3**	**$253.2**	**$144.3**
Alabama	**499.6**	359.6	**1,038.7**	747.6	**317.4**	228.4
Alaska	**47.6**	23.8	**529.3**	264.7	**286.7**	143.3
Arizona	**169.1**	118.4	**225.5**	157.9	**78.6**	55.1
Arkansas	**70.6**	50.4	**289.5**	206.7	**68.7**	49.1
California	**2,563.9**	1,282.0	**907.3**	453.6	**223.0**	111.5
Colorado	**216.3**	108.2	**512.7**	256.3	**166.6**	83.3
Connecticut	**467.8**	233.9	**2,501.4**	1,250.7	**688.6**	344.3
Delaware	**18.3**	10.6	**338.8**	196.1	**84.6**	48.9
District of Columbia	**102.3**	71.6	**4,651.0**	3,255.7	**596.2**	417.4
Florida	**380.5**	233.9	**139.5**	85.7	**63.2**	38.9
Georgia	**467.0**	314.3	**331.0**	222.7	**143.4**	96.5
Hawaii	**21.3**	11.4	**380.6**	203.5	**76.6**	40.9
Idaho	**27.3**	19.2	**141.6**	99.6	**52.1**	36.6
Illinois	**501.4**	251.4	**573.1**	287.3	**152.6**	76.5
Indiana	**379.6**	250.0	**696.6**	458.6	**201.7**	132.8
Iowa	**75.2**	46.1	**511.9**	313.3	**101.1**	61.9
Kansas	**81.5**	48.2	**326.2**	193.0	**106.6**	63.1
Kentucky	**236.1**	169.6	**952.0**	683.7	**167.2**	120.1
Louisiana	**1,199.2**	801.8	**3,303.7**	2,208.9	**770.6**	515.2
Maine	**192.5**	122.8	**1,815.6**	1,158.4	**581.5**	371.0
Maryland	**178.3**	89.2	**499.5**	249.8	**155.6**	77.8
Massachusetts	**713.3**	356.7	**3,774.2**	1,887.1	**555.7**	277.8
Michigan	**483.8**	309.9	**904.2**	579.2	**171.3**	109.7
Minnesota	**174.7**	87.3	**715.9**	358.0	**150.8**	75.4
Mississippi	**231.7**	178.3	**654.4**	503.8	**209.9**	161.6
Missouri	**843.9**	554.0	**1,490.9**	978.8	**493.2**	323.8
Montana	**20.5**	13.3	**238.3**	154.3	**70.3**	45.6

TABLE 1A-7. (continued)

State	FY 2020 unreduced DSH allotment (millions)		FY 2020 unreduced DSH allotment per uninsured individual		FY 2020 unreduced DSH allotment per non-elderly low-income individual	
	Total (state and federal)	Federal	Total (state and federal)	Federal	Total (state and federal)	Federal
Nebraska	**$60.5**	$33.1	**$382.8**	$209.4	**$126.9**	$69.4
Nevada	**84.6**	54.1	**251.8**	161.0	**97.7**	62.5
New Hampshire	**374.4**	187.2	**4,862.8**	2,431.4	**1,697.9**	849.0
New Jersey	**1,505.6**	752.8	**2,298.6**	1,149.3	**836.3**	418.1
New Mexico	**32.8**	23.8	**167.1**	121.5	**43.4**	31.5
New York	**3,756.7**	1,878.3	**3,608.7**	1,804.4	**726.7**	363.3
North Carolina	**514.7**	345.0	**471.3**	315.9	**165.9**	111.2
North Dakota	**22.3**	11.2	**413.3**	206.9	**142.3**	71.2
Ohio	**753.8**	475.1	**1,013.2**	638.5	**238.3**	150.2
Oklahoma	**64.1**	42.3	**117.0**	77.3	**51.6**	34.0
Oregon	**86.5**	52.9	**295.1**	180.7	**74.8**	45.8
Pennsylvania	**1,256.1**	656.3	**1,797.0**	938.9	**412.7**	215.6
Rhode Island	**143.6**	76.0	**3,417.9**	1,809.8	**583.3**	308.9
South Carolina	**541.7**	383.0	**1,037.7**	733.7	**352.7**	249.3
South Dakota	**22.4**	12.9	**263.7**	151.9	**100.9**	58.1
Tennessee	**81.4**	53.1	**120.6**	78.7	**39.2**	25.6
Texas	**1,836.5**	1,118.2	**367.1**	223.5	**210.4**	128.1
Utah	**33.6**	22.9	**114.0**	77.8	**42.2**	28.8
Vermont	**48.9**	26.3	**1,954.1**	1,052.5	**350.8**	189.0
Virginia	**204.9**	102.4	**280.3**	140.1	**112.0**	56.0
Washington	**432.7**	216.3	**907.1**	453.5	**248.7**	124.4
West Virginia	**105.3**	78.9	**923.9**	692.4	**182.0**	136.4
Wisconsin	**186.2**	110.5	**595.0**	353.2	**134.5**	79.9
Wyoming	**0.5**	0.3	**9.0**	4.5	**3.9**	2.0

Notes: FY is fiscal year. DSH is disproportionate share hospital. Non-elderly low-income individuals are defined as individuals under age 65 with family incomes less than 200 percent of the federal poverty level.

Source: MACPAC, 2020, analysis of state plan rate year 2015 DSH audits, the CMS Medicaid Budget Expenditure System, Berchick, et al. 2019, and Census 2020.

TABLE 1A-8. FY 2020 Unreduced DSH Allotments as a Percentage of Hospital Uncompensated Care, by State, FY 2017

State	FY 2020 unreduced federal DSH allotment (millions)	FY 2020 unreduced federal DSH allotment as a percentage of hospital uncompensated care in the state, FY 2017	FY 2020 unreduced DSH allotment (state and federal, millions)	FY 2020 total unreduced DSH allotment as a percentage of hospital uncompensated care in the state, FY 2017
Total	**$12,828.9**	**32%**	**$22,513.3**	**56%**
Alabama	359.6	53	499.6	74
Alaska	23.8	37	47.6	74
Arizona	118.4	29	169.1	41
Arkansas	50.4	23	70.6	32
California	1,282.0	57	2,563.9	115
Colorado	108.2	30	216.3	60
Connecticut	233.9	63	467.8	126
Delaware	10.6	14	18.3	24
District of Columbia	71.6	89	102.3	128
Florida	233.9	6	380.5	10
Georgia	314.3	15	467.0	22
Hawaii	11.4	5	21.3	10
Idaho	19.2	10	27.3	14
Illinois	251.4	15	501.4	31
Indiana	250.0	28	379.6	43
Iowa	46.1	20	75.2	32
Kansas	48.2	14	81.5	24
Kentucky	169.6	51	236.1	70
Louisiana	801.8	163	1,199.2	243
Maine	122.8	58	192.5	90
Maryland	89.2	17	178.3	35
Massachusetts	356.7	74	713.3	148
Michigan	309.9	57	483.8	89
Minnesota	87.3	27	174.7	55
Mississippi	178.3	29	231.7	37
Missouri	554.0	48	843.9	74
Montana	13.3	13	20.5	20
Nebraska	33.1	12	60.5	23

TABLE 1A-8. (continued)

State	FY 2020 unreduced federal DSH allotment (millions)	FY 2020 unreduced federal DSH allotment as a percentage of hospital uncompensated care in the state, FY 2017	FY 2020 unreduced DSH allotment (state and federal, millions)	FY 2020 total unreduced DSH allotment as a percentage of hospital uncompensated care in the state, FY 2017
Nevada	$54.1	24%	$84.6	37%
New Hampshire	187.2	143	374.4	286
New Jersey	752.8	73	1,505.6	147
New Mexico	23.8	16	32.8	22
New York	1,878.3	71	3,756.7	143
North Carolina	345.0	21	514.7	31
North Dakota	11.2	12	22.3	23
Ohio	475.1	39	753.8	62
Oklahoma	42.3	6	64.1	9
Oregon	52.9	17	86.5	28
Pennsylvania	656.3	79	1,256.1	151
Rhode Island	76.0	110	143.6	208
South Carolina	383.0	29	541.7	40
South Dakota	12.9	12	22.4	20
Tennessee	53.1	5	81.4	8
Texas	1,118.2	17	1,836.5	29
Utah	22.9	6	33.6	8
Vermont	26.3	56	48.9	103
Virginia	102.4	7	204.9	14
Washington	216.3	44	432.7	88
West Virginia	78.9	42	105.3	55
Wisconsin	110.5	25	186.2	43
Wyoming	0.3	0	0.5	1

Notes: FY is fiscal year. DSH is disproportionate share hospital. Excludes 70 DSH hospitals that did not submit a Medicare cost report. Uncompensated care is calculated using 2017 Medicare cost reports, which define uncompensated care as charity care and bad debt. Because of recent changes in Medicare cost report definitions that changed uncompensated care reporting for 2015 and subsequent years, these data are not comparable with data for prior years.

0 indicates an amount less than 0.5 percent that rounds to zero.

Source: MACPAC, 2020, analysis of state plan rate year 2015 DSH audits, the CMS Medicaid Budget Expenditure System, FY 2017 Medicare cost reports, and the 2017 American Hospital Association annual survey.

TABLE 1A-9. FY 2020 DSH Allotment per Deemed DSH Hospital Providing at Least One Essential Community Service, by State

State	FY 2020 unreduced DSH allotment (millions)		FY 2020 unreduced DSH allotment per deemed DSH hospital (millions)		FY 2020 unreduced 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	**$22,513.3**	**$12,828.9**	**$27.4**	**$15.6**	**$30.0**	**$17.1**
Alabama	**499.6**	359.6	**71.4**	51.4	**83.3**	59.9
Alaska	**47.6**	23.8	**23.8**	11.9	**23.8**	11.9
Arizona	**169.1**	118.4	**4.7**	3.3	**5.6**	3.9
Arkansas	**70.6**	50.4	**70.6**	50.4	**70.6**	50.4
California	**2,563.9**	1,282.0	**64.1**	32.0	**77.7**	38.8
Colorado	**216.3**	108.2	**16.6**	8.3	**16.6**	8.3
Connecticut	**467.8**	233.9	**233.9**	116.9	**467.8**	233.9
Delaware	**18.3**	10.6	**6.1**	3.5	**6.1**	3.5
District of Columbia	**102.3**	71.6	**17.1**	11.9	**20.5**	14.3
Florida	**380.5**	233.9	**10.6**	6.5	**11.5**	7.1
Georgia	**467.0**	314.3	**17.3**	11.6	**23.3**	15.7
Hawaii[1]	**21.3**	11.4	**–**	–	**–**	–
Idaho	**27.3**	19.2	**3.9**	2.7	**4.6**	3.2
Illinois	**501.4**	251.4	**11.1**	5.6	**12.2**	6.1
Indiana	**379.6**	250.0	**25.3**	16.7	**25.3**	16.7
Iowa	**75.2**	46.1	**10.7**	6.6	**10.7**	6.6
Kansas	**81.5**	48.2	**6.3**	3.7	**6.8**	4.0
Kentucky	**236.1**	169.6	**6.2**	4.5	**6.7**	4.8
Louisiana	**1,199.2**	801.8	**33.3**	22.3	**38.7**	25.9
Maine	**192.5**	122.8	**192.5**	122.8	**192.5**	122.8
Maryland	**178.3**	89.2	**29.7**	14.9	**35.7**	17.8
Massachusetts[2]	**713.3**	356.7	**–**	–	**–**	–
Michigan	**483.8**	309.9	**40.3**	25.8	**44.0**	28.2

TABLE 1A-9. (continued)

State	FY 2020 unreduced DSH allotment (millions)		FY 2020 unreduced DSH allotment per deemed DSH hospital (millions)		FY 2020 unreduced 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
Minnesota	**$174.7**	$87.3	**$11.6**	$5.8	**$11.6**	$5.8
Mississippi	**231.7**	178.3	**16.5**	12.7	**16.5**	12.7
Missouri	**843.9**	554.0	**35.2**	23.1	**36.7**	24.1
Montana	**20.5**	13.3	**10.2**	6.6	**10.2**	6.6
Nebraska	**60.5**	33.1	**4.7**	2.5	**5.0**	2.8
Nevada	**84.6**	54.1	**16.9**	10.8	**21.1**	13.5
New Hampshire	**374.4**	187.2	**74.9**	37.4	**74.9**	37.4
New Jersey	**1,505.6**	752.8	**60.2**	30.1	**62.7**	31.4
New Mexico	**32.8**	23.8	**8.2**	6.0	**8.2**	6.0
New York	**3,756.7**	1,878.3	**85.4**	42.7	**87.4**	43.7
North Carolina	**514.7**	345.0	**27.1**	18.2	**28.6**	19.2
North Dakota	**22.3**	11.2	**4.5**	2.2	**4.5**	2.2
Ohio	**753.8**	475.1	**39.7**	25.0	**41.9**	26.4
Oklahoma	**64.1**	42.3	**4.3**	2.8	**5.3**	3.5
Oregon	**86.5**	52.9	**4.8**	2.9	**4.8**	2.9
Pennsylvania	**1,256.1**	656.3	**30.6**	16.0	**35.9**	18.8
Rhode Island	**143.6**	76.0	**47.9**	25.3	**71.8**	38.0
South Carolina	**541.7**	383.0	**30.1**	21.3	**33.9**	23.9
South Dakota	**22.4**	12.9	**1.9**	1.1	**2.0**	1.2
Tennessee	**81.4**	53.1	**4.1**	2.7	**4.3**	2.8
Texas	**1,836.5**	1,118.2	**20.9**	12.7	**21.1**	12.9
Utah	**33.6**	22.9	**6.7**	4.6	**8.4**	5.7
Vermont	**48.9**	26.3	**48.9**	26.3	**48.9**	26.3
Virginia	**204.9**	102.4	**51.2**	25.6	**68.3**	34.1
Washington	**432.7**	216.3	**25.5**	12.7	**30.9**	15.5

TABLE 1A-9. (continued)

State	FY 2020 unreduced DSH allotment (millions)		FY 2020 unreduced DSH allotment per deemed DSH hospital (millions)		FY 2020 unreduced 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
West Virginia	**$105.3**	$78.9	**$8.8**	$6.6	**$10.5**	$7.9
Wisconsin	**186.2**	110.5	**9.3**	5.5	**9.3**	5.5
Wyoming	**0.5**	0.3	**0.5**	0.3	**0.5**	0.3

Notes: FY is fiscal year. DSH is disproportionate share hospital. Excludes 70 DSH hospitals that did not submit a FY 2017 Medicare cost report. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. Our definition of essential community services includes the following services based on the limits of available data: 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 1B.

– Dash indicates that the category is not applicable.

[1] Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Social Security Act allows it 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 categorized as DSH or deemed DSH hospitals.

[2] Based on available data on Medicaid inpatient and low-income utilization rates, no DSH hospitals in Hawaii appeared to meet the deemed DSH criteria in FY 2015.

Source: MACPAC, 2020, analysis of CMS Medicaid Budget Expenditure System, state plan rate year 2015 DSH audits, FYs 2015 and 2017 Medicare cost reports, and the 2017 American Hospital Association annual survey.

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APPENDIX 1B: 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, uncompensated care, and 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 2015 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 are subject to change as CMS completes its internal review of state DSH audit reports.

Overall, 2,720 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 (81 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 (89 hospitals were excluded under these criteria). These facilities submit Medicare cost reports but do not receive Medicaid 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 2,720 DSH hospitals were included in these analyses. We excluded 70 DSH hospitals without matching 2017 Medicare cost reports.

When using Medicare cost reports to analyze hospital uncompensated care, we excluded hospitals that reported uncompensated care costs that were greater than hospital operating expenses. One hospital was excluded under this criterion.

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 quartiles or below the lowest quartile (422 hospitals were excluded from our analysis of FY 2017 margins under this criterion). 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).

Definition of Essential Community Services

MACPAC's authorizing 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 (§ 1900 of the Social Security Act (the Act)).

In this report, we use the same definition to identify these hospitals that was used in MACPAC's 2016 *Report to Congress on Medicaid Disproportionate Share Hospital Payments*. This 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 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 2015.

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-fifth 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 2017 Medicare cost reports and the 2017 American Hospital Association (AHA) annual survey (Table 1B-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.

For this report, for the sake of inclusiveness, any deemed DSH hospital providing at least one essential community service was included in our analysis. We also included certain hospital types if they were the only hospital in their geographic area to provide certain types of services. These hospital types included critical access hospitals because they are often the only hospital within a 25-mile radius.

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

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

For this report, for the sake of inclusiveness, any deemed DSH hospital providing at least one essential community service was included in our analysis. We also included certain hospital types if they were the only hospital in their geographic area to provide certain types of services. These hospital types included critical access hospitals because they are often the only hospital within a 25-mile radius.

Projections of DSH Allotments

DSH allotment reductions from FY 2020 were calculated using projections provided by CMS after its DSH allotment reduction methodology was finalized in September 2019. DSH allotments for FY 2021 were calculated by increasing prior year allotments based on the Consumer Price Index for All Urban Consumers and doubling the amount of reductions, consistent with the current schedule of DSH allotment reductions in statute. Unreduced allotments increase each year for all states except Tennessee, whose DSH allotment is specified in statute (§ 1923(f)(6)(A)(vi) of the Act). Per the final rule, DSH allotment reductions are limited to 90 percent of each state's unreduced DSH allotment (CMS 2019). This reduction cap limits the reductions for two states and the District of Columbia in FY 2021, and their excess reduction amounts are proportionately allocated among the remaining states that do not exceed the reduction cap.

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Chapter 2:

State Readiness to Report Mandatory Core Set Measures

State Readiness to Report Mandatory Core Set Measures

Key Points

- Beginning in fiscal year (FY) 2024, states are required to report on the core set of quality measures for children enrolled in Medicaid and the State Children's Health Insurance Program (CHIP) and the core set of behavioral health measures for adults enrolled in Medicaid.
- The core sets allow states, the public, and the Centers for Medicare & Medicaid Services (CMS) to monitor performance on standardized indicators of the quality of care provided to Medicaid and CHIP beneficiaries.
- States and CMS incorporate the core sets into a variety of initiatives, such as value-based purchasing initiatives and monitoring of Section 1115 substance use disorder demonstration waivers and Section 1945 health homes. The core sets are also used in the Medicaid and CHIP Scorecard.
- Voluntary reporting of the Child and Adult Core Set measures has increased over the last several years, but reporting varies by state, measure, and core set.
- In the FY 2018 reporting year, all 50 states and the District of Columbia reported at least one Child Core Set measure, but the total number of measures reported by states, regardless of whether the measures met minimum state reporting and data quality criteria, ranged from 1 to 24 measures, with a median of 18.
- Congress provided six years between the 2018 enactment of the reporting mandate and its implementation. Past experience implementing new policies points to the need for CMS to issue early and clear guidance to provide states sufficient time to plan for and make necessary policy and programmatic changes, and address challenges.
- Challenges states and plans face include accessing certain data, adhering to the core set technical specifications, and having sufficient administrative capacity. These challenges are not new but are more pressing now that reporting will be mandatory.
- While states and CMS have begun to prepare, more needs to be done to ensure that states will be able to report on all measures. States identified factors that would bolster their readiness, including early CMS guidance, ongoing technical assistance, and additional resources.
- CMS has not yet issued guidance. Several questions that will affect state planning are unanswered and states cannot fully prepare.
- CMS is considering strategies to address the concerns and challenges that states and plans face. CMS is also considering ways to make core set reporting less burdensome.

CHAPTER 2: State Readiness to Report Mandatory Core Set Measures

Beginning in fiscal year (FY) 2024, states will be required to report on the core set of health care quality measures for children enrolled in Medicaid and the State Children's Health Insurance Program (CHIP) and on the core set of behavioral health measures for adults enrolled in Medicaid. The Bipartisan Budget Act of 2018 (BBA, P.L. 115-123) made state reporting on the Child Core Set mandatory. Subsequently, in an effort to measure and evaluate the quality of substance use disorder (SUD) treatment services in the midst of the nationwide opioid epidemic, Congress required that states report behavioral health measures in the Adult Core Set under the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act of 2018 (SUPPORT Act, P.L. 115-271).

The goals of the Child and Adult Core Sets are to facilitate standardized reporting by states on a uniform set of performance measures and encourage states to use results to drive quality improvement (CMS 2019a). The core sets also allow states, the public, and the Centers for Medicare & Medicaid Services (CMS) to monitor trends in performance on standardized indicators of quality of care provided to Medicaid and CHIP beneficiaries under both fee-for-service (FFS) and managed care arrangements and examine performance across states (HHS 2011a). Reporting is currently voluntary, and states vary in the number of measures they report. For example, although all 50 states and the District of Columbia reported at least one Child Core Set measure in FY 2018, the number of measures reported ranged from 1 to 24 (CMS 2019b).

The deadline for mandatory reporting is still several years away, meaning that states and CMS have time to plan and to make any needed policy and operational changes. However, past experience implementing new Medicaid policies and initiatives suggests that considerable resources and attention will be needed to develop implementation parameters, make policy and programmatic changes, and address challenges that arise. As CMS and states begin preparing for this mandate, MACPAC assessed state readiness to meet the statutory requirements for core set reporting, including state planning efforts, current administrative capacity, and how CMS can best support these activities. This chapter presents our findings.

The chapter begins with an overview of the Child and Adult Core Sets and the development, selection, and maintenance of core set measures. We then discuss funding, technical assistance, and other resources that CMS has provided to states to assist with reporting. The chapter continues with a look at the current state of Child and Adult Core Set reporting, including annual timelines, changes in state reporting capacity, and how states use the core measures to inform quality improvement efforts. Then, based on findings from our interviews with states, CMS, and other stakeholders, the chapter discusses challenges in reporting related to administrative capacity and the availability and timeliness of performance data.

To meet the FY 2024 deadline, states will need guidance from CMS within the next year on the specific core set reporting requirements, including the list of measures that will be mandatory and how deviations from the core set technical specifications will be addressed. Some states already have capacity to report many of the core set measures and are optimistic about their readiness for mandatory reporting, but others are less ready. Many states would welcome additional technical assistance and other resources, particularly to address areas that historically have been challenging. Challenges facing states include accessing data from medical records or maintained by other state agencies, obtaining data for certain populations to ensure complete reporting, and having sufficient administrative capacity to collect and analyze data.

The Commission will continue to monitor state planning and federal policies to support state Medicaid and CHIP programs in meeting the core set reporting mandate.

Development of the Core Sets

Prior to implementation of the core set, there was wide variation in the reliability and completeness of state data on the quality of care received by enrollees in Medicaid and CHIP, reflecting differences in state resources, data collection systems and capabilities, performance measures, and quality improvement priorities (CMS 2011). According to a 2010 report by the Secretary of the U.S. Department of Health and Human Services (the Secretary) on the quality of care for children in Medicaid and CHIP, such variation made it difficult to examine performance across states and populations (CMS 2011, Mangione-Smith et al. 2011, HHS 2010). Measurement and reporting systems used by many state Medicaid agencies often lagged behind those used by managed care organizations (MCOs), hindering statewide performance measurement (HHS 2010). In addition, states identified a need to shift the overall focus of quality monitoring to include measures that capture population-level health outcomes and progress toward specific program goals (Smith et al. 2009). The introduction of a standardized core set of measures was also intended to allow states to track their performance over time and benchmark their own outcomes against national data (Mangione-Smith et al. 2011).

CMS established the Child and Adult Core Sets in response to congressional directives and consulted states, quality measurement experts, and stakeholders in the development process. Reporting still varies by state, but has increased overall since voluntary reporting began.

Initial Child Core Set

The Children's Health Insurance Program Reauthorization Act of 2009 (CHIPRA, P.L. 111-3) required development of a core set of children's health care quality measures to monitor the quality of care and health outcomes for children covered by Medicaid and CHIP (§ 1139A of the Social Security Act (the Act)). The legislation directed the Secretary to identify, by January 1, 2010, an initial set of measures based on existing quality of care measures, with a specific focus on capturing duration of insurance coverage, availability and effectiveness of preventive services, treatment and management of chronic conditions, and patient experiences with care (Mangione-Smith et al. 2011).

CMS collaborated with the Agency for Healthcare Research and Quality (AHRQ) to develop the initial Child Core Set in consultation with key stakeholders, including provider groups, national organizations representing children and families, state Medicaid and CHIP officials, and organizations involved in health care quality measurement; this group was referred to as the AHRQ Subcommittee of the National Advisory Council on Quality Measures for Children's Healthcare in Medicaid and CHIP Programs (SNAC).[1] In 2009, AHRQ convened the SNAC to review measures based on the criteria of scientific validity, feasibility of reporting and use by state Medicaid and CHIP programs, alignment with federal quality measurement priorities, and importance in improving health outcomes for children (CMS 2011, Mangione-Smith et al. 2011).[2] To address feasibility in reporting, the SNAC sought to create a set of measures that struck a balance in terms of different data sources (such as administrative or medical record data), types of measures (outcome, process, or structural), and types of services assessed (such as primary care or specialty care). CMS and AHRQ compiled the initial core set primarily from the National Committee for Quality Assurance (NCQA) Healthcare Effectiveness Data and Information Set (HEDIS) and other existing quality of care measures for children.[3] Following a review of 119 nominated measures, public comments, and several rounds of voting, the SNAC eliminated measures that did not meet the committee's criteria for validity, feasibility, and importance; the committee also examined measures to see if any overlapped (Mangione-Smith et al. 2011).[4] The committee ultimately recommended 25

measures to the Secretary for inclusion in the initial core set. The Secretary released an initial core set of 24 measures in 2009, with voluntary reporting to begin in FY 2010 (HHS 2011a).

The initial Child Core Set included measures capturing receipt of preventive services such as immunizations, developmental screenings, and well-child visits; management of acute and chronic conditions such as asthma and diabetes; and family experiences of care (HHS 2011a).[5]

Initial Adult Core Set

The Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) required the development of a core set of adult health care quality measures in Medicaid (§ 1139B of the Act). In 2010, CMS and AHRQ convened a separate advisory committee to evaluate measures for inclusion in the initial Adult Core Set (HHS 2012, AHRQ 2011). Measures for review included those endorsed by the National Quality Forum (NQF), those submitted by Medicaid medical directors, measures currently in use by CMS, and other measures recommended by members of the SNAC. Similar to the process used for identifying the initial Child Core Set, AHRQ and CMS identified five criteria for evaluating the proposed core set measures: importance in leading to gains in health care quality or improving health outcomes, scientific evidence, scientific soundness, current use in and alignment with existing federal programs (such as the National Quality Strategy and the Medicare and Medicaid Electronic Health Record Incentive Programs), and feasibility for state reporting (Dougherty et al. 2014, HHS 2012).

Similar to the Child Core Set, the initial Adult Core Set was designed to reflect the health needs of the target population, with measures capturing cancer screenings and management of chronic conditions such as diabetes, hypertension, and chronic obstructive pulmonary disorder (HHS 2012). The Adult Core Set also included five behavioral health measures to capture use of preventive and treatment services for mental health conditions and substance use disorders. During the public comment period, stakeholders commented on the desirability of selecting measures that were already in use by other federal performance measurement programs (including the Child Core Set), and concerns about feasibility of reporting. CMS issued the initial core set of 26 adult quality measures in 2012, and voluntary reporting of these measures began in 2014 (HHS 2014).

Early experience and CMS support to states

Creation of the Child and Adult Core Sets was accompanied by a number of other companion efforts focused on quality improvement activities, including some activities that used core set measures. CHIPRA required CMS to establish quality demonstration projects to identify and replicate strategies for improving quality of care for children. In 2010, grants were awarded to 18 states to help build an infrastructure for data collection and reporting of the Child Core Set, with a particular focus on promoting use of data from electronic health records to support quality improvement (AHRQ 2015, HHS 2010). States participating in these demonstrations implemented projects that included developing pediatric electronic health records and applying health information technology to quality improvement efforts, and they used Child Core Set measures to monitor policy, programmatic, and delivery model changes (AHRQ 2019).[6] For example, Maine's Medicaid program used performance data on six Child Core Set measures to determine whether providers in the state's Accountable Communities Initiative were eligible to receive shared savings (AHRQ 2015).

The ACA created the Adult Medicaid Quality (AMQ) grant program. From 2012 to 2014, this program supported state Medicaid agencies in developing staff capacity to collect, report, analyze, and use data from the Adult Core Set to monitor and improve quality of care and in implementing at least two quality improvement projects relating to Adult Core Set measures.[7]

CHIPRA also required CMS to provide technical assistance to states for adopting and implementing the Child Core Set (§ 1139A(a)(7) of the Act). The goals were to increase the number of states consistently and uniformly reporting the initial measures based on CMS technical specifications and to facilitate state use of performance data to drive quality improvement (CMS 2011).

In addition, CHIPRA established the Pediatric Quality Measures Program (PQMP) to strengthen the initial Child Core Set and to test, validate, and develop new quality measures across several domains for inclusion in subsequent iterations of the Child Core Set. Another goal of the PQMP was to contribute to improvements in quality of care and to the elimination of child health care disparities. In 2011, AHRQ and CMS awarded grants to seven centers of excellence—including health services researchers, state Medicaid agencies, and stakeholders—to evaluate how measures are implemented at the provider level and to develop new and enhanced pediatric measures (AHRQ 2018). Current PQMP grantees are focusing on assessing the usability of newly developed measures by states, health plans, and providers (AHRQ 2018).

Current Reporting

For FY 2020, there are 24 measures in the Child Core Set, and 13 behavioral health measures in the Adult Core Set (Appendix 2A). In the Child Core Set, 15 measures (approximately two-thirds) are HEDIS measures. The remaining Child Core Set measures come from other measure stewards such as CMS or the Centers for Disease Control and Prevention (CDC).[8] Among the Adult Core Set behavioral health measures, nine are HEDIS measures.[9]

For each measure, CMS establishes technical specifications on data collection, preparation, and reporting (CMS 2019c). These technical specifications include detailed instructions on populations eligible for inclusion, data collection time frames, and calculation of performance rates. The specifications also include references for value sets, which are complete sets of codes that must be used to identify a service or condition in calculating the performance measure. CMS generally adopts the measure specifications of the measure steward, although it may customize these to reflect the specific needs of the Medicaid program.

The Child and Adult Core Sets are reviewed and updated annually for reporting feasibility and clinical relevance (§§ 1139A and 1139B of the Act). Since 2014, CMS has worked with the NQF's Measures Application Partnership (MAP) to convene stakeholder reviews of both the Child and Adult Core Sets (CMS 2014a). These reviews provide an opportunity to add or remove measures to the core sets and to identify potential gaps in measure domains where further quality improvement efforts are needed (Brooks 2018).

Typically, CMS has added two to three measures each year to capture emerging quality improvement areas, such as maternal health and access to behavioral health care services (CMS 2019a, 2014a, 2013a, 2013b). For example, CMS added three measures in recent years to track performance in addressing misuse of opioids: use of opioids at high dosage in persons without cancer (OHD-AD), use of pharmacotherapy for opioid use disorder (OUD-AD), and concurrent use of opioids and benzodiazepines (COB-AD). At least one measure has been retired each year, usually as a result of low reporting rates and state data collection challenges.[10] However, CMS has also removed measures from the core sets in instances where states reach consistently high performance rates with little room for further improvement (Mathematica 2019).[11]

Both the child and adult MAP workgroups have emphasized the need to shift the focus of the core sets from process measures, which may capture receipt of specific services, to outcome measures, in particular those for certain populations such as children with chronic health care needs (NQF 2018, Brooks 2016).

States report measures on a uniform timeline; this is meant to support consistency in reporting and comparability across states (Table 2-1).

TABLE 2-1. Timeline for State Reporting of Child and Adult Core Set Measures, FY 2019

Time period	Activity
May 2018	MAP workgroups met to review proposed FY 2019 Child and Adult Core Sets
November 2018	CMS released FY 2019 Child and Adult Core Set measures
February 2019	CMS released technical specifications and resource manuals for core sets
September 2019	States began reporting FY 2019 performance data in MACPro
December 2019	Deadline for states to submit FY 2019 performance data[1]

Notes: FY is fiscal year. MAP is the National Quality Forum's Measures Application Partnership. MACPro is the Medicaid and CHIP Program Portal.

[1] States were required to submit FY 2019 performance data by December 31, 2019.

Sources: CMS 2019d. NQF 2018.

State reporting of the Child and Adult Core Set measures has increased over the last several years, but varies by state, measure, and core set (Figure 2-1; Figure 2-2; and Appendix 2B, Table 2B-1).[12] The number of Child Core Set measures that met minimum state reporting and data quality criteria and were publicly reported by CMS increased from 12 for FY 2010 to 23 for FY 2018 (CMS 2019b, HHS 2011b). (CMS only reports state performance on measures that are reported by at least 25 states using the core set technical specifications, and that meet CMS standards for data quality.[13]) For the FY 2018 reporting year, all 50 states and the District of Columbia reported at least one of the 26 Child Core Set measures, but the total number of measures reported by states, regardless of whether the measures met minimum state reporting and data quality criteria, ranged from 1 to 24 measures with a median of 18 (CMS 2019b). States were more likely to report measures which rely on administrative or hybrid data (that is, data from both administrative sources and medical records); they were less likely to report measures that rely solely on medical record review, vital records data, or electronic health records (CMS 2019b, 2019e).[14]

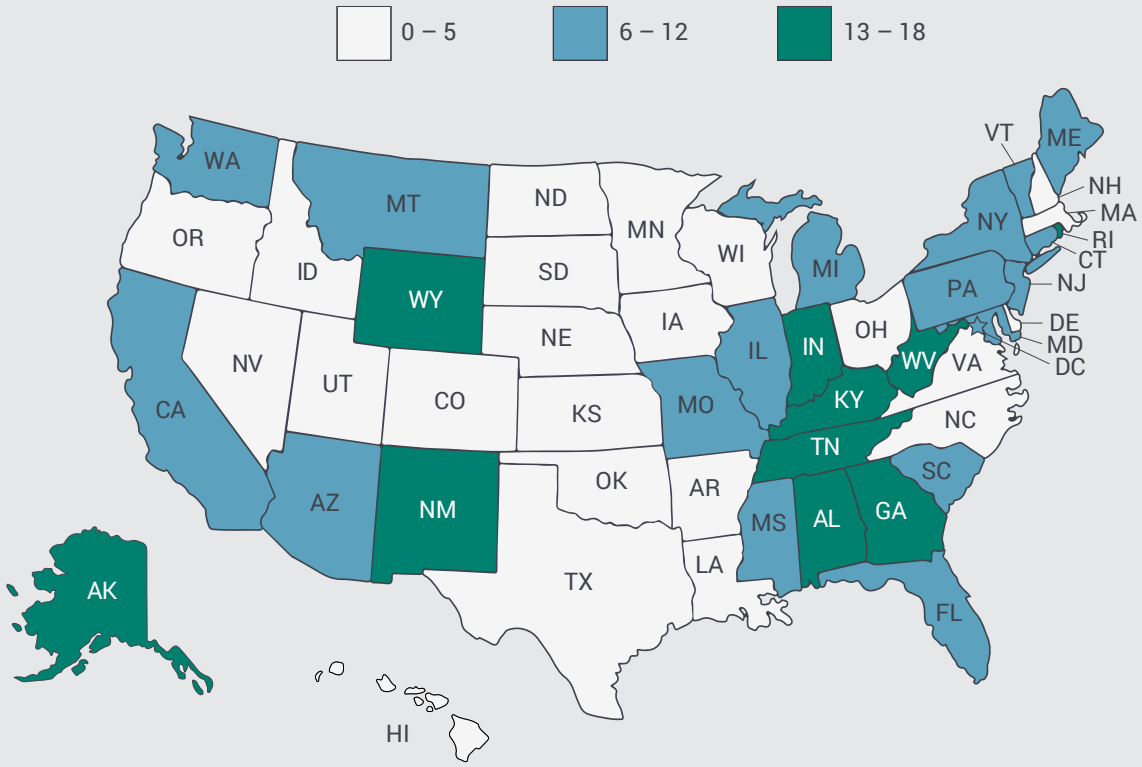
The number of behavioral health measures in the Adult Core Set publicly reported by CMS has also increased—from two in FY 2014 to six in FY 2018 (CMS 2019e, 2015). Forty-four states and the District of Columbia reported at least one of the 11 behavioral health measures in the Adult Core Set for FY 2018; the total number of measures reported by states ranged from 0 to 11 measures, with a median of 7 (CMS 2019e).

Use of the Core Sets

The Child and Adult Core Sets are components of several broader federal and state efforts to improve quality of care for children and adults covered by Medicaid.[15] At the state level, Medicaid programs are working with partner agencies, health plans, and providers to promote use of core set in value-based purchasing initiatives (CMS 2016).[16] For example, Maryland has used performance rates for four of the Child Core Set measures to establish payment incentive thresholds for managed care plans (CMS 2016). Florida's clinician incentive program includes measures for well-child visits and child and adolescent access to primary care (Orfield et al. 2019). Well-child visit performance metrics are also used in Indiana's pay-for-outcomes program (MDwise 2018).

CMS requires states to report certain core measures under the special terms and conditions of Section 1115 SUD demonstration waivers and to comply with Section 1945 health homes requirements (CMS 2017b). For example, states with Section 1115 SUD demonstrations are required to report annually on core set measures such as initiation and engagement of alcohol and other drug abuse or dependence treatment (IET-AD) and concurrent use of opioids and benzodiazepines (COB-AD)

FIGURE 2-1. Number of Child Core Set Measures Reported by States, FY 2010



Notes: FY is fiscal year. Data are based on all Child Core Set measures reported by states for the FY 2010 reporting cycle. Totals include measures reported using Child Core Set or other specifications, which may include specifications for Healthcare Effectiveness Data and Information Set measures.

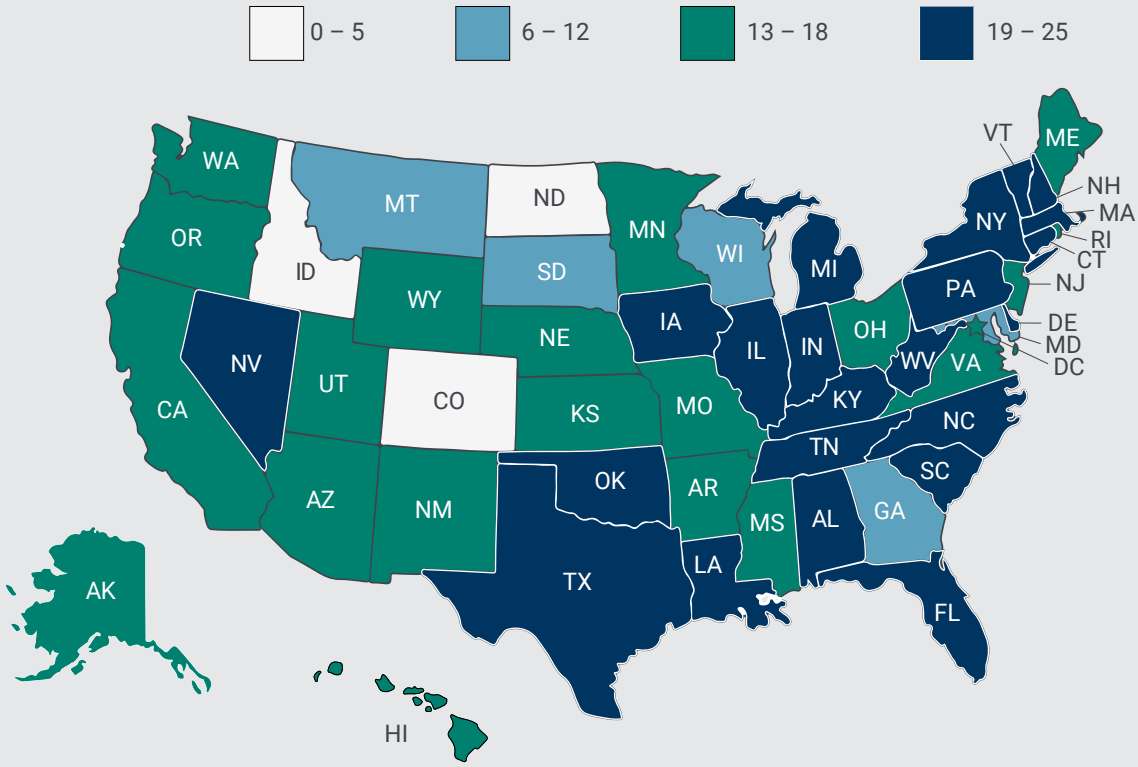
Source: MACPAC, 2019, analysis of HHS 2011b.

(CMS 2019f). In addition, in November 2019, CMS added two behavioral health measures from the Adult Core Set (use of pharmacotherapy for opioid use disorder (OUD-AD) and follow-up after emergency department visit for alcohol and other drug abuse or dependence (FUA-AD)) to the existing health home core set for states operating health homes programs for individuals with substance use disorders (CMS 2019g).[17]

CMS has also incorporated several measures from the Child and Adult Core Sets as part of its Medicaid and CHIP Scorecard. Initially, the scorecard included measures focused on behavioral health, postpartum care, well-child visits, and chronic disease management (CMS 2019h).

In November 2019, CMS released an updated version of the scorecard, with data on state performance for several additional measures from the Child and Adult Core Sets, including preventive care (breast cancer screening (BCS-AD)), chronic disease management (comprehensive diabetes care: hemoglobin A1c (HbA1c) poor control (>9.0%) (HPC-AD)), and maternal health (live births weighing less than 2,500 grams (LBW-CH)) (CMS 2019i).

FIGURE 2-2. Number of Child Core Set Measures Reported by States, FY 2018



Notes: FY is fiscal year. Data are based on all Child Core Set measures reported by states for the FY 2018 reporting cycle. Totals include measures reported using Child Core Set or other specifications, which may include specifications for Healthcare Effectiveness Data and Information Set measures.

Source: MACPAC, 2019, analysis of CMS 2019b.

Factors Affecting State Readiness for Core Reporting

Mandatory reporting of the core sets is four years away and, in the intervening time, CMS and states have work to do to address the challenges associated with data collection and measure calculation. Much can be learned from states' experience with voluntary core set reporting.

To understand the status of state readiness, and to identify what steps states and CMS need to take to prepare for FY 2024, MACPAC contracted with Mathematica to conduct interviews with Medicaid and CHIP officials in seven states, representatives of MCOs and behavioral health organizations (BHOs) involved in state core set reporting, and CMS staff and contractors. We selected states for inclusion in the study based on a range of characteristics: the proportion of beneficiaries covered through managed care (as an indication of states' ability to leverage MCOs for reporting); the number of measures reported for the most recent year; the rate of increase in measures reported over a one- to two-year period; and whether a state reported a measure that was reported by less than half of other states in the most recent reporting year (as an indication of states' ability to report on more challenging measures).[18]

While states and CMS have begun to prepare, more needs to be done to ensure that states will be able to report on all measures. State Medicaid programs face numerous technical challenges that will affect their ability to meet the FY 2024 mandate (Christensen et al. 2017, Shah et al. 2016, Doetsch and Smith 2014, Knapp et al. 2014, HHS 2010). These include accessing data from medical records or other state agencies; adhering to the core set technical specifications when these deviate from the HEDIS specifications or if state billing codes differ from codes in specifications; and having sufficient administrative capacity to collect and analyze data. These challenges are not new but become more pressing as mandatory reporting approaches.

Moreover, CMS has not yet issued guidance, which states indicate is a key barrier to preparing for mandatory reporting. Without early guidance, several questions that will affect state planning are unanswered; examples include what measures will be required and how deviations from the core set technical specifications will be handled.

Accessing data

Measures in the Child and Adult Core Sets draw on multiple sources of data, each of which poses specific collection challenges. Nine of the Child Core Set measures rely on administrative data; 13 on administrative, hybrid, or electronic health record (EHR) data; and the remainder use state vital records or survey data. Eight of the adult behavioral health measures rely exclusively on administrative data; four on the administrative, hybrid, or EHR data, and the remaining measure is based on survey data.

Medical record and EHR data. Collecting data from paper and electronic medical records can be difficult for states, MCOs, and BHOs for several reasons (Box 2-1). Accessing data from paper charts and EHRs for hybrid measures requires establishing cooperative relationships with clinicians and clinician networks before conducting the reviews themselves. Providers receive multiple concurrent requests for performance data, and their offices are not necessarily set up to respond to the volume of data requested.

Theoretically, it should be easier to collect and analyze information from EHRs than paper charts, but EHRs are not always complete and systems are not all interoperable. In our interviews, some states indicated that it was unlikely that they could address the challenges with EHR interoperability and data extraction from EHRs by FY 2024. EHRs can be incomplete if providers do not record data that are not tied to a payment or if reporting is not incorporated into provider workflow. Further, providers use different EHR systems, which vary in robustness and data format. This lack of uniformity creates challenges for states and MCOs as they work with providers to program data extraction according to measure specifications.

States and plans noted that providers would need time to implement EHR programming changes if the core set for mandatory reporting in 2024 includes hybrid or EHR-based measures. Officials in Massachusetts estimated needing at least two years to prepare for hybrid data collection for just one of the suggested data collection systems.[19] One state indicated that it planned to begin working with MCOs on a limited basis to incorporate reporting on one or two EHR measures into upcoming contract revisions. This would allow the state and MCOs to work together to identify challenges and options for overcoming them before 2024.

Accessing medical record and EHR data can be especially challenging for states with FFS delivery systems in which state staff are responsible for collecting and reporting this data. Compared to MCOs or BHOs, some state Medicaid agencies have less in-house technical expertise and infrastructure. States are currently weighing the cost of resources required to capture non-HEDIS measures based on medical record or EHR data against the perceived value of reporting these measures.

Data from other state entities. State Medicaid programs face technical and administrative barriers to accessing data that are collected and maintained by other state agencies (Box 2-1). Examples include

BOX 2-1. Challenges in Collecting Data on Behavioral Health Services

The often-fragmented nature of behavioral health service delivery can make it difficult to obtain data needed for core set reporting. For example, to report on the measure of screening for depression and follow-up plan: ages 12–17 (CDF-CH), data for a single individual may need to be obtained from multiple care settings. In addition, reporting systems in community behavioral health agencies may lack the technical capability to transmit behavioral health data to the Medicaid agency. Medicaid officials in one state noted that long-term efforts are underway to enhance these systems.

Linking and sharing of data on treatment for substance use disorder (SUD) is complicated by federal confidentiality and disclosure rules, commonly referred to as 42 CFR Part 2, which govern the use of SUD treatment and prevention records for people receiving treatment from federally assisted programs. MACPAC has previously reported that confusion among plans and providers about the applicability of 42 CFR Part 2, including requirements for patient consent for disclosure of data, could hamper data sharing and result in missing or incomplete patient medical records or claims data (MACPAC 2018).

It can be especially challenging to obtain electronic health record (EHR) data for users of behavioral health services because behavioral health providers are less likely to use EHRs than other providers (MACPAC 2018). Historically, behavioral health providers have lacked financial incentives for adoption of EHRs and they face technical and cost barriers to establishing and maintaining 42 CFR Part 2 compliant systems (MACPAC 2018).

immunization registry data needed to calculate the childhood immunization status measure (CIS-CH), and state vital records data needed for the live births weighing less than 2,500 grams measure (LBW-CH). There are two particular challenges: securing a data use agreement (DUA) and linking person-level information.

Accessing data from other agencies requires establishing a DUA or a memorandum of understanding (MOU); some states estimate that this can take six months or longer. Some state officials interviewed noted that their Medicaid agencies had relatively limited experience with this process and that having sample DUAs from other states would be helpful. Even when DUAs are established, lack of uniform identifiers between state registries and other data sources and Medicaid claims data can make it difficult to link the data. Thus, states need to find other approaches for linking data. For example, some states are considering the feasibility of using names and birth dates to link data but they acknowledge that recording errors and differences in spelling or birth dates could be problematic.

Data quality, completeness, and timeliness. Incomplete and poor quality data have prevented some states from including certain populations or services in core set reporting. States have had difficulty including tribal populations, individuals dually eligible for Medicaid and Medicare, and, in some cases, the FFS population in measure calculation. For example:

- Some tribal nations do not share data on health care services provided to Medicaid-eligible tribal members by the Indian Health Service due to concerns about sovereignty over the data of their people as well as for technical reasons such as limitations of tribal EHR systems, limited access to broadband internet, and insufficient staff capacity.
- Challenges accessing Medicare data prevent some state Medicaid agencies from being able to report on individuals who are dually eligible

for Medicare and Medicaid.[20] In interviews, CMS and its technical assistance contractors characterized accessing Medicare data as one of the most difficult challenges facing states. Requesting Medicare data is a complex and multistep process requiring state Medicaid agency officials to navigate various Medicare data sources, make clear and specific requests for data that satisfy administrative requirements, and determine the most feasible and appropriate method for integrating Medicare and Medicaid data (SDRC 2019). To facilitate state Medicaid agency access to and use of Medicare data, CMS established a data resource center to provide guidance and assistance in navigating the process for requesting and working with the data (SDRC 2019).[21] CMS anticipates that states will need ongoing technical assistance in this area.

- Some states do not include their FFS population in core set reporting because they primarily rely on MCOs to provide data for core set measures. Oregon reports core set measures based on administrative data for both managed care and FFS populations, but does not include FFS populations in measures that use the hybrid or EHR data collection methodologies. Washington does not report on the FFS population for measures using EHR data, but does so for some of the measures that use administrative data.[22]

State administrative data may be incomplete for purposes of core set reporting if providers do not record all needed data elements. In addition, Medicaid administrative data may lack information on services that clinicians provide but do not bill for. For example, some providers may not bill for certain services (e.g., developmental screening) because of low payment rates. State payment policies may also affect completeness of administrative data. For example, Arkansas pays a global fee for pregnancy care but does not have the claims for individual prenatal or postnatal visits needed for core measures related to timeliness of prenatal care (e.g., PPC-CH).

Data needed for certain core measures may not be available in a timely manner. For example, the technical specifications for the children's experience of care measure require annual data from the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey, but some states (e.g., Washington and Arkansas) do not require MCOs to conduct the CAHPS® survey annually, due in part to the cost of administering it. MCO contracts could be changed to require the survey to be conducted annually, but states would need to weigh the costs of doing so against other programmatic objectives. Data from vital records also might not be available prior to the core set reporting deadline. Officials in Indiana and Washington noted there could be time lags of 12–18 months in the availability of those data.

Adhering to technical specifications

States sometimes face challenges in strictly adhering to the core set technical specifications, which can affect the consistency of state reporting. This is particularly an issue for certain HEDIS measures with technical specifications that differ from those for similar core set measures; for example, the CMS age ranges for certain measures are more granular than the HEDIS age ranges.[23] Some states (e.g., Massachusetts) take additional analytic steps to report the age stratifications in the core set technical specifications; however others do not, instead reporting the measure as calculated by the MCO or BHO for the purpose of HEDIS reporting.

Some states deviate from the core set technical specifications to account for state-specific billing and coding practices.[24] For example, Massachusetts directs providers to use state-specific modifiers that describe who delivered the service and if a need was identified when billing for developmental screenings. However, the sets of codes used in the technical specifications to identify a service or condition for measure calculation (referred to as the value set) for the developmental screening in the first three years of life measure (DEV-CH) do not include these modifiers. Thus, services reported with the state's modifiers would be

left out of the core set measure calculation, which Medicaid officials in Massachusetts say produces an inaccurate measure of the state's performance. Similarly, Arkansas found that calculating the measure of follow-up after emergency department visit for mental illness (FUA-AD) using the core set specifications produced inaccurately low rates of follow-up visits; when the state began calculating the measure based on the state-specific codes, accuracy improved.

CMS has acknowledged that it may not always be possible for states to adhere to the specifications, instructing states to report information about any such deviations (CMS 2019c). Looking ahead, it is not clear whether such deviations will be accepted for mandatory reporting in FY 2024.

HEDIS versus non-HEDIS measures. States view reporting on HEDIS measures as relatively straightforward because data collection and reporting is generally contractually delegated to MCOs or BHOs. Reporting on non-HEDIS measures, particularly those using hybrid data collection, is more challenging because it is not typically delegated to MCOs or BHOs. However, some of the non-HEDIS measures may have analogous HEDIS measures; examples of such measures are use of opioids at high dosage in persons without cancer (OHD-AD), concurrent use of opioids and benzodiazepines (COB-AD), and diabetes care for people with serious mental illness: hemoglobin A1c (HbA1c) poor control (>9.0%) (HPCMI-AD). Thus, states may have to consider whether to use their own resources to calculate and report non-HEDIS measures per specifications or deviate from the specifications and instead report the analogous HEDIS measure calculated by MCOs or BHOs.

Future changes to core sets or specifications. The Secretary must annually update and refine the core sets (§ 1139A(b)(5) of the Act). Once reporting is mandatory, implementation of such changes and the amount of lead time states will be given to report new or amended measures will have a substantial effect on state readiness for reporting. In our interviews, state and CMS officials noted that it can take a number of years for states to report measures when technical specifications change or new measures are added. States, MCOs, and BHOs may be more able to adapt if new measures come from HEDIS or rely on administrative data. In addition, states with managed care delivery systems, because they can delegate data collection and reporting to MCOs and BHOs, may be able to implement the changes more easily than states with FFS systems because Medicaid agency staff in FFS states would have to assume those responsibilities.

Administrative capacity

As noted earlier, voluntary state reporting of core set measures has increased over time, so to some extent, the states' infrastructure and processes for reporting are already in place. However, voluntary reporting allows states to increase or decrease their core set reporting activities commensurate with available resources and other quality measurement efforts. Washington, for example, defines a common measurement set used by public and private payers to track performance for its statewide quality measurement and accountability effort each year. Although many of its measures are the same as core set measures, the state sometimes determines that alternate measures more accurately assess performance on state-specific health priorities. For instance, in 2019, Washington did not include the core set measure of medical assistance with smoking and tobacco use cessation (MSC-AD) in its state common measurement set or report it to CMS. Instead, the state opted to add a state-specific measure to its common measurement set to assess youth use of tobacco and electronic vapor products, a priority issue for the state.

State roles and resources. Current efforts to report on the core sets are time- and resource-intensive. With mandatory reporting, states anticipate having to increase the amount of resources dedicated to core set reporting.

Even when states rely heavily on MCOs and BHOs to collect data and calculate measures, state officials are responsible for many key functions.

State staff roles include administrative functions (e.g., modifying contracts and managing contractors) and analytic functions. For example, to use state immunization registry data, state staff must establish DUAs for accessing the data, create data linkages, assess data integrity and completeness, and conduct systems programming for using the data in measure calculation. State officials also work with vendors to compile data for reporting. Once data are submitted, state officials work with MCOs, BHOs, and vendors to ensure accuracy and understanding of the data before using it to calculate the state-level measures for reporting to CMS. For non-HEDIS measures, state staff are responsible for programming, data collection, and measure calculation. In addition, data for all measures must be submitted manually through the CMS Medicaid and CHIP Program portal, which some states find inefficient and vulnerable to errors.

States anticipate needing to hire and train additional staff. However, it is often difficult to hire and retain staff with technical skills in data collection (including clinicians to conduct medical record reviews), measure production, and reporting, particularly in states that are small or have tight labor markets.

Plan roles and resources. MCOs have teams involved in data collection and reporting of HEDIS measures and, by extension, core set measures. For example, MCO staff extract data according to technical specifications and required formats—and in some cases integrate needed data sources—so that the data can be sent to their contracted HEDIS vendor to calculate measure rates; MCO staff also oversee the vendor contract. They also employ clinicians to review and extract data from medical records, including EHRs and paper charts.[25] Other analytic staff assess data for completeness and accuracy and interpret results to identify areas for potential MCO-specific quality improvement activities. MCOs may also have staff that work with providers and clinics to encourage complete data reporting.

Like states, MCOs and BHOs also anticipate needing to hire and train staff once the reporting mandate takes effect. The need for more staff may be heightened if states delegate additional tasks such as reporting on non-HEDIS core set measures to MCOs or BHOs. MCOs and BHOs would need to develop new processes and systems for data collection and measure calculation.

Factors that can facilitate readiness for mandatory reporting

States identified several factors that would bolster their readiness for mandatory reporting in FY 2024, including early guidance from CMS, ongoing technical assistance from CMS, and additional resources.

Early guidance. States emphasized the need for CMS to issue guidance as early as possible, particularly regarding the specific measures to be reported and how the reporting mandate will be implemented. CMS decisions on these matters will have direct bearing on the steps states must take to prepare. For example, if CMS decides that all measures on the current core set must be reported in 2024, then state Medicaid programs will need to start taking steps now to access data maintained by other state entities as well as medical records data. If, however, CMS decides to phase in requirements, such as beginning with mandatory reporting of measures that use administrative data and gradually incorporating those requiring medical record or EHR data, states would have more time to access those data. Another approach suggested by states would be to create mandatory and voluntary core set measures with the number of mandatory measures growing over time. CMS officials stated they plan to work closely with states to determine the best approach for implementing mandatory reporting.

States also seek guidance on whether CMS will continue to accept measure reporting that deviates from the core set technical specifications, because that will affect the required scope of their data collection and their

processes for calculating measures. States support maintaining some degree of flexibility.

It is difficult to say definitively how much lead time states need to prepare for mandatory reporting, particularly given the many unknowns. However, some states estimate needing at least two years to ramp up their efforts. During this period, states must do the following: assess staffing and budgetary needs and availability; recruit and train staff; assess data sources; engage clinicians to encourage more complete billing, diagnosis, and procedure coding for quality measurement; identify new data sources; enter into DUAs or MOUs for data sharing with other agencies; plan, develop, and test data collection systems and linkages to sources; and modify contracts with MCOs, BHOs, and possibly other vendors.

In the past, lack of state readiness has led to delays in implementation of new policies. For example, electronic visit verification (EVV) implementation has been hampered by a relatively short implementation timeframe, lack of timely guidance and clarity about EVV requirements, and technical difficulties (ANCOR 2018). The EVV requirements were slated to take effect in January 2019, two years after the requirements were established. However, CMS did not issue formal guidance until May 2018, seven months before the effective date.[26] The timing of the guidance, along with remaining questions, such as which providers are subject to EVV requirements and stakeholder concerns about privacy, challenged states' ability to fully prepare for implementation. In response, Congress took action in July 2018 to postpone EVV implementation for personal care services (PCS) to January 2020.[27] In addition, CMS has granted exemptions from the implementation deadline to nearly all states, delaying implementation to 2020 or 2021 (CMS 2019j, MACPAC 2019).[28]

Technical assistance. CMS and its technical assistance contractor already provide technical assistance to states on a number of core set-related topics, but as they look to mandatory reporting, states have identified a need for additional assistance. Currently, CMS and its contractor develop and issue fact sheets, toolkits, and webinars; provide one-on-one support; and host an annual quality conference. These publications and events cover a number of topics including:

- interpreting technical specifications for the core set measures, including applications across delivery systems, data sources, and data collection approaches;
- assessing data quality to improve completeness and accuracy of state reporting of the core set measures; and
- designing and implementing quality improvement initiatives focused on the core set measures (CMS 2018a).[29]

CMS's technical assistance contractor also provides support to health plans and clinicians—if they are coordinated with the state's Medicaid agency—as they extract necessary data and calculate the core set measures.

States have also identified the following additional technical assistance needs:

- how to collect data and calculate measures for populations covered under FFS;
- approaches for securing access to data from other state entities and tribal governments;
- strategies for accessing EHR data; and
- leveraging external quality review organization (EQRO) capabilities for core set reporting.

States noted particular challenges in reporting on the Adult Core Set behavioral health measures and expressed interest in targeted technical assistance on obtaining data for these measures. Nearly all data challenges associated with core set reporting are heightened for behavioral health data because of the variety of settings where Medicaid beneficiaries obtain behavioral health services and specific protections and sensitivities surrounding behavioral health data, especially data related to treatment for SUDs.

MCOs and BHOs play key roles in collecting and reporting data for core set measures and will also need ongoing technical assistance. Even though CMS's technical assistance contractor currently provides assistance to plans in coordination with states, MCO and BHO staff may be unaware of this opportunity.

Resources. States will need to hire and train staff and dedicate resources to support mandatory reporting activities. For example, states will need to hire additional analytic and clinical staff, engage in more laborious medical record data collection, and train staff for medical record data extractions. However, the statutes establishing the reporting mandate did not provide additional resources for states.

CMS efforts to support state readiness

CMS is aware of many of the concerns and challenges that states and plans face with core set reporting, and is considering a variety of strategies to address them. First, CMS has increased collaboration with states and subject matter experts in the annual review of the core set measures to identify measures that will be most useful for state Medicaid agencies and CMS and most relevant to Medicaid beneficiaries. In addition, CMS anticipates expanding the one-on-one technical assistance provided to states as well as technical assistance resources such as fact sheets, sample programming code, and webinars.

CMS is also considering ways to make reporting less burdensome on states. CMS is assessing the availability of data needed for reporting on all categories of beneficiaries and the feasibility of leveraging the Transformed Medicaid Statistical Information System (T-MSIS) to support core set reporting. For example, CMS might be able to use the T-MSIS to calculate certain claims-based measures on states' behalf, thus freeing up state resources for more complex measures. CMS estimates that up to 50 percent of current core set measures could be calculated for states using T-MSIS data. As of December 2019, CMS was actively engaged in developing a strategy and timeline for marshalling the CMS resources required to implement this approach.

CMS identified EQROs as a resource that states could leverage to calculate and report on core set measures. For example, EQROs could help states validate performance measures by reviewing the data and information to determine the accuracy of the performance measures reported by MCOs and BHOs. They can also aggregate performance measure data reported across MCOs and BHOs.

Our analysis focused on state readiness for mandatory core set reporting, but CMS's readiness—as well as the resources it has to assist states with their reporting efforts and to analyze the state-submitted data—is an important consideration. For example, as the reporting mandate draws nearer, states, MCOs, and BHOs will need more CMS technical assistance. In addition, if all states report on all mandatory core set measures, CMS will receive more core set data to review and validate than what they receive under voluntary reporting.

Looking Ahead

The core sets provide federal and state governments, MCOs, and providers with a standard set of quality measures for assessing performance and identifying opportunities for improvement. In mandating state reporting of the core sets, Congress sought to ensure the availability of standardized data on the quality of care that Medicaid beneficiaries receive, to inform opportunities to improve quality of care (115th Congress 2018).

States are starting to consider the steps that will be needed to comply with the requirement. However, they cannot fully prepare for mandatory reporting until CMS issues guidance concerning how the mandate will be implemented (e.g., gradually phased in or all at once), which measures will be in the mandatory core set, and whether deviations from the technical specifications will be acceptable and under what circumstances. CMS will also need

to provide states with early and ongoing technical assistance.

Fortunately, Congress provided a six-year period between the 2018 enactment and the FY 2024 implementation of the core set reporting mandate. In addition, states and CMS have experience with voluntary core set reporting, which should offer insights into the challenges that states, plans, and CMS will need to address. Although FY 2024 may seem distant now, past experience with implementing new policies point to the need for CMS to issue early and clear guidance to provide states sufficient time to plan for and make necessary policy or programmatic changes. The Commission will continue to track state core set reporting as well as CMS's next steps for implementing the reporting mandate.

Endnotes

[1] SNAC members included state Medicaid and CHIP officials; organizations representing states (e.g., the National Academy for State Health Policy and the National Association of Medicaid Directors); provider groups such as the American Academy of Family Physicians, the American Academy of Pediatrics, and the National Association of Pediatric Nurse Practitioners; and patient advocacy groups such as the March of Dimes (Mangione-Smith et al. 2011).

[2] In addition to accepting nominations for measures from its members, the SNAC solicited proposed measures through a public nomination process (Mangione-Smith et al. 2011).

[3] In addition, some of the initial Child Core Set measures, including those that capture receipt of preventive dental services, were derived from reporting requirements for Form CMS-416. As another example, the measure on family care experience was based on the Consumer Assessment of Healthcare Providers and Systems (CAHPS®) survey (HHS 2011a).

[4] Criteria for importance included: the measure is actionable; cost of the condition to the nation is high; health care systems should clearly be accountable for the quality problem assessed by the measure; the extent of the quality problem addressed by the measure should be substantial; there should be documented variation in performance on the measure; the measure should be representative of a class of quality problems; the measure should assess an aspect of health care where there are known disparities; the measure should contribute to a final core set that represents a balanced portfolio of measures that is consistent with the intent of the [CHIPRA] legislation; and improving performance on measures included in the core set should have the potential to transform care for the nation's children (Mangione-Smith et al. 2011).

[5] Although access to primary care was a discrete domain in the initial measure list (and in subsequent annual updates to the Child Core Set through FY 2019), the core set was primarily a vehicle for measuring quality, which can be defined as health care services that are safe, effective, patient-centered, timely, efficient, and equitable (IOM 2001).

[6] Ten states (Alaska, Florida, Illinois, Maine, Massachusetts, North Carolina, Oregon, Pennsylvania, South Carolina, and West Virginia) implemented CHIPRA demonstration projects using quality measures to improve care quality (AHRQ 2019).

[7] Twenty-six states were eligible to receive up to $1 million a year over the two-year period. Some states used these funds to design and develop data analytic units for the first time. The AMQ grant program was funded by the ACA (CMS 2013c).

[8] CMS, AHRQ, and NCQA are often referred to as measure stewards. In this capacity, they are responsible for developing, maintaining, and updating a particular measure or set of measures (CMS 2017a).

[9] In part to mitigate reporting burden for states and in part to align the core sets with existing measures, the majority (about two-thirds) of measures in both initial core sets were HEDIS measures (HHS 2012). However, at the time the initial core sets were being created, CMS and other stakeholders commented on the limitations of HEDIS measures, which were originally developed for use by health plans, and supported including measures that would address a broad range of health care settings and conditions relevant to the Medicaid population (HHS 2012).

[10] For example, in 2013, CMS retired the measure of otitis media with effusion—avoidance of inappropriate systemic antimicrobials in children age 2–12 (NQF #0657). Most Medicaid and CHIP agencies had not been able to report this measure because it draws from Current Procedural Terminology Category II codes. Providers do not commonly report these codes because they are not used for billing (AMA 2019, CMS 2013a).

[11] For example, CMS removed the measure of use of multiple concurrent antipsychotics in children and adolescents (APC-CH) from the FY 2020 Child Core Set because state performance was consistently high. In 2017, the median performance rate for this measure was 2.7 percent, with lower rates being better (Mathematica 2019).

[12] We do not report on state variation in reporting of adult behavioral health measures because it has not changed much over time.

[13] CMS is required to report to Congress every three years on the status of voluntary reporting on the core quality measures and on other efforts to advance quality of care in Medicaid and CHIP. CMS also issues a report each year describing state performance on the measures (CMS 2018b, 2018c).

[14] For FY 2018, 48 states reported the measure of well-child visits in the third, fourth, fifth, and sixth years of life (W34-CH). By comparison, 16 states reported the measure of cesarean birth (PC02-CH), which relies on medical record review and vital records data. In addition, three states reported on the measure of audiological diagnosis no later than three months of age (AUD-CH), which is based exclusively on electronic health record data (CMS 2019b).

[15] For example, in 2010, CMS launched the Oral Health Initiative, which established goals for states to increase the use of preventive dental services by children enrolled in Medicaid (CMS 2014b). To facilitate standardized reporting among participating states, and to promote alignment with existing measure sets, CMS encouraged states to use two measures from the initial Child Core Set (receipt of preventive dental services (PDENT), and receipt of dental treatment services (TDENT)) to monitor trends in oral health.

[16] Medicaid managed care plans use HEDIS measures (many of which are Child and Adult Core Set measures) for NCQA accreditation; 26 states delivering services through managed care require contracted plans to have NCQA accreditation (NCQA 2019).

[17] State reporting on health homes for individuals with substance use disorders was established through Section 1945(c)(4)(B) of the Act. The core set of health homes quality measures was established in 2013 (CMS 2013c). The FY 2020 Health Home Core Set consists of eight measures from the Adult Core Set, an additional measure on hospital admissions for chronic conditions, and three utilization measures capturing emergency department visits and hospital and institutional admissions (CMS 2019k).

[18] We examined state policies for coverage of behavioral health services as an indicator of state reporting capacity for the behavioral health measures in the Adult Core Set.

[19] State officials identified numerous steps that they would need to take including incorporating reporting into managed care entity contracts, working with managed care plans to understand their chart extraction process, establishing a plan for data gathering and reporting to the state, and testing plan extraction and reporting systems.

[20] Washington noted that historical data on services covered through Medicare Parts A and B for dually eligible beneficiaries was typically not available in a timely enough fashion for use in annual core set reporting.

[21] CMS's State Data Resource Center provides guidance documents for making data requests from the nine available data files using four data request processes (SDRC 2019).

[22] State officials noted that many FFS enrollees often do not meet the continuous enrollment criteria (which dictate how long a beneficiary must be enrolled in Medicaid to be included in the measure) in the technical specifications. For example, to be included in the measure of well-child visits in the third, fourth, fifth, and sixth years of life (W34-CH), children must be continuously enrolled for one year. The technical specifications allow for one gap in enrollment of up to 45 days. In addition, state officials in Washington noted that they do not have experience in vetting and operationalizing non-HEDIS measures based on medical record and EHR data.

[23] Many HEDIS measures include wide age ranges (e.g., age 5–64), whereas the age ranges for core set measures are more stratified (e.g., under age 18, 18–64, and 65 and older). According to CMS contractors, age stratifications in the core set were introduced partly to accommodate state data limitations (Orfield et al. 2019). Some states told CMS that they would not be able to report data for dually eligible beneficiaries, so many Adult Core Set measures include a breakout for adults age 65 and older to separate out this population.

[24] The technical specifications may not account for state-specific billing and coding policies for certain services, which can result in excluding some services from the calculation of performance on core set measures even though the services were provided.

[25] The sample size for HEDIS measures that use the hybrid method should be 411, except in certain circumstances as described in the technical specifications (CMS 2019c).

[26] In addition, CMS hosted two webinars, one in December 2017 and one in January 2018.

[27] In 2016, the 21st Century Cures Act (P.L. 114-255) mandated that states adopt electronic visit verification (EVV) systems for Medicaid-covered PCS. EVV systems require providers to electronically verify certain information to confirm that scheduled visits actually occurred. This is intended to reduce opportunities for fraud and improper Medicaid payments for PCS. Legislation enacted in July 2018 (P.L. 115-222) delayed implementation in response to stakeholder concerns about readiness.

[28] States demonstrating that they have experienced unavoidable delays despite having made good faith efforts to implement EVV may request postponement of implementation of EVV for up to one year (CMS 2019l).

[29] CMS's core set technical assistance contractor is Mathematica.

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APPENDIX 2A: Child and Adult Core Set Measures, FY 2020

TABLE 2A-1. Child Core Set Measures, FY 2020

Measure abbreviation	Measure name	Data collection method
Primary care access and preventive care		
WCC-CH	Weight assessment and counseling for nutrition and physical activity for children/adolescents	Administrative, hybrid, or EHR
CHL-CH	Chlamydia screening in women ages 16–20	Administrative or EHR
CIS-CH	Childhood immunization status	Administrative, hybrid, or EHR
CDF-CH	Screening for depression and follow-up plan: ages 12–17	Administrative or EHR
W15-CH	Well-child visits in the first 15 months of life	Administrative or hybrid
IMA-CH	Immunizations for adolescents	Administrative or hybrid
DEV-CH	Developmental screening in the first three years of life	Administrative or hybrid
W34-CH	Well-child visits in the third, fourth, fifth and sixth years of life	Administrative or hybrid
AWC-CH	Adolescent well-care visits	Administrative or hybrid
Maternal and perinatal health		
PC02-CH	PC-02: Cesarean birth	Hybrid
AUD-CH	Audiological diagnosis no later than 3 months of age	EHR
LBW-CH	Live births weighing less than 2,500 grams	State vital records
PPC-CH	Prenatal and postpartum care: timeliness of prenatal care	Administrative or hybrid
CCP-CH	Contraceptive care – postpartum women ages 15–20	Administrative
CCW-CH	Contraceptive care – all women ages 15–20	Administrative
Care of acute and chronic conditions		
AMR-CH	Asthma medication ratio: ages 5–18	Administrative
AMB-CH	Ambulatory care: emergency department (ED) visits	Administrative
Behavioral health care		
ADD-CH	Follow-up care for children prescribed attention-deficit/hyperactivity disorder (ADHD) medication	Administrative or EHR
FUH-CH	Follow-up after hospitalization for mental illness: ages 6–17	Administrative
APM-CH	Metabolic monitoring for children and adolescents on antipsychotics	Administrative

TABLE 2A-1. (continued)

Measure abbreviation	Measure name	Data collection method
APP-CH	Use of first-line psychosocial care for children and adolescents on antipsychotics	Administrative
Dental and oral health services		
SEAL-CH	Dental sealants for 6-9 year-old children at elevated caries risk	Administrative
PDENT-CH	Percentage of eligibles who received preventive dental services	Administrative (Form CMS-416)
Experience of care		
CPC-CH	Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Health Plan Survey 5.0H – Child version including Medicaid and children with chronic conditions supplemental items	Survey

Notes: FY is fiscal year. EHR is electronic health record.

Source: CMS, 2019m, *2020 Core set of children's health care quality measures for Medicaid and CHIP (Child Core Set)*, Baltimore, MD: CMS, https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2020-child-core-set.pdf.

TABLE 2A-2. Behavioral Health Measures in the Adult Core Set, FY 2020

Measure abbreviation	Measure name	Data collection method
CDF-AD[1]	Screening for depression and follow-up plan: age 18 and older	Administrative or EHR
IET-AD	Initiation and engagement of alcohol and other drug abuse or dependence treatment	Administrative or EHR
MSC-AD	Medical assistance with smoking and tobacco use cessation	Survey
AMM-AD	Antidepressant medication management	Administrative or EHR
FUH-AD	Follow-up after hospitalization for mental illness: age 18 and older	Administrative
SSD-AD	Diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medications	Administrative
HPCMI-AD	Diabetes care for people with serious mental illness: hemoglobin A1c (HbA1c) poor control (> 9.0%)	Administrative or hybrid
OHD-AD	Use of opioids at high dosage in persons without cancer	Administrative
COB-AD	Concurrent use of opioids and benzodiazepines	Administrative
OUD-AD	Use of pharmacotherapy for opioid use disorder	Administrative
FUA-AD	Follow-up after emergency department visit for alcohol and other drug abuse or dependence	Administrative
FUM-AD	Follow-up after emergency department visit for mental illness	Administrative
SAA-AD	Adherence to antipsychotic medications for individuals with schizophrenia	Administrative

Notes: FY is fiscal year. EHR is electronic health record.

[1] CDF-AD is included in the Behavioral Health Core Set. In the Adult Core Set, it is identified as a primary care access and preventive care measure.

Source: CMS, 2019n, *2020 Core set of adult health care quality measures for Medicaid (Adult Core Set)*, Baltimore, MD: CMS, https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2020-adult-core-set.pdf.

APPENDIX 2B: Changes in State Reporting of the Child Core Set Measures, FYs 2010 and 2018

TABLE 2B-1. Number of Child Core Set Measures Reported by States, FYs 2010 and 2018

State	FY 2010	FY 2018
Total number of measures in core set	**24**	**26**
Alabama	13	24
Alaska	14	17
Arizona	8	15
Arkansas	0	17
California	9	16
Colorado	5	3
Connecticut	10	19
Delaware	0	22
District of Columbia	12	18
Florida	12	21
Georgia	18	9
Hawaii	0	13
Idaho	0	1
Illinois	7	20
Indiana	14	23
Iowa	3	23
Kansas	0	17
Kentucky	13	21
Louisiana	5	22
Maine	11	15
Maryland	12	12
Massachusetts	0	22
Michigan	12	21
Minnesota	3	14
Mississippi	8	18
Missouri	12	15
Montana	7	11
Nebraska	5	15
Nevada	3	19
New Hampshire	5	24
New Jersey	6	17
New Mexico	15	16

TABLE 2B-1. (continued)

State	FY 2010	FY 2018
New York	9	22
North Carolina	2	22
North Dakota	2	1
Ohio	3	16
Oklahoma	4	22
Oregon	0	15
Pennsylvania	9	23
Rhode Island	15	18
South Carolina	9	24
South Dakota	4	11
Tennessee	15	23
Texas	0	22
Utah	3	16
Vermont	9	21
Virginia	3	17
Washington	6	18
West Virginia	15	22
Wisconsin	2	8
Wyoming	13	18

Notes: FY is fiscal year. NA is not applicable. Data are based on all Child Core Set measures reported by states for the FY 2010 and 2018 reporting cycles. Totals include measures reported using Child Core Set or other specifications, which may include specifications for Healthcare Effectiveness Data and Information Set (HEDIS) measures.

Source: MACPAC, 2019, analysis of CMS, 2019b, *Quality of care for children in Medicaid and CHIP: Findings from the 2018 Child Core Set, Chart pack,* September 2019, Baltimore, MD: CMS, https://www.medicaid.gov/medicaid/quality-of-care/downloads/performance-measurement/2019-child-chart-pack.pdf; and U.S. Department of Health and Human Services (HHS), 2011, *2011 Annual report on the quality of care for children in Medicaid and CHIP: Appendices*, Washington, DC: HHS, https://www.medicaid.gov/medicaid/quality-of-care/downloads/2011_sec_rep_app.pdf.

Chapter 3:

Improving the Quality and Timeliness of Section 1115 Demonstration Evaluations

Improving the Quality and Timeliness of Section 1115 Demonstration Evaluations

Key Points

- Section 1115 of the Social Security Act provides the federal government with broad authority to waive certain Medicaid requirements to allow states to test demonstration projects likely to promote the objectives of the program.
- Under the statute, Section 1115 demonstrations must be evaluated, but state and federal administrations have historically focused on the flexibility offered under Section 1115 and placed limited emphasis on evaluation.
- Many evaluations have not generated findings that are timely or sufficiently rigorous to support decision making. The U.S. Government Accountability Office, MACPAC, and others have expressed concern regarding evaluation quality and how findings are used.
- To gather more specific information on issues in conducting evaluations and using findings, MACPAC convened an expert roundtable made up of state and federal Medicaid officials, evaluators of state demonstration programs, researchers, and other stakeholders. This chapter relies heavily on perspectives shared at the roundtable.
- The Centers for Medicare & Medicaid Services (CMS) has taken significant steps over the last five years to improve the quality of state-led evaluations, culminating with the 2019 release of new tools and guidance to help states develop strong evaluations.
- However, when planning and designing evaluations, states continue to struggle with methodological challenges, such as designation of comparison groups and availability of data. They also experience administrative challenges, such as constrained implementation timelines and budgets.
- States currently fund and direct the scope of evaluations, which has implications for evaluation independence and quality. States may be reluctant to devote time and resources to evaluation over program implementation, especially if doing so competes with political priorities.
- Given the importance of gathering evidence to inform decisions about the future of a demonstration policy, states should have an idea, before program implementation, of the measures and data sources they will use to assess whether the demonstration is making progress toward its objectives.
- Establishing appropriate standards of rigor and quality is difficult given state constraints. It may be appropriate to target standards related to content, rigor, and timing of evaluation deliverables according to demonstration type and scope.
- Achieving meaningful improvements in evaluations will take time, and will require CMS to continue focusing on these issues.
- At this time, MACPAC has not identified a need for further legislative or regulatory steps, but will continue to monitor how states and CMS carry out evaluations and use findings for decision making.

CHAPTER 3: Improving the Quality and Timeliness of Section 1115 Demonstration Evaluations

Section 1115 of the Social Security Act (the Act) provides the federal government with broad authority to waive federal Medicaid requirements to allow states to make changes to their Medicaid programs. Specifically, this authority allows the Secretary of the U.S. Department of Health and Human Services (the Secretary) to waive most of the requirements under Section 1902 of the Act to the extent necessary to enable a state to carry out an experimental, pilot, or demonstration project that the Secretary deems likely to assist in promoting the objectives of Medicaid (§ 1115 of the Act).[1] Section 1115 and its accompanying regulations require states to evaluate demonstrations approved under this authority (42 CFR 431.424).[2]

States have requested and received flexibility through Section 1115 authority to adopt a wide variety of innovations, including implementing alternative payment models and delivery systems, imposing additional eligibility criteria for certain beneficiary groups, providing new services to certain populations, and receiving federal matching funds for costs not otherwise matchable.[3] Federal administrations have also encouraged states to use Section 1115 authority to advance specific policy priorities. For example, the Centers for Medicare & Medicaid Services (CMS) recently approved Section 1115 demonstrations that allow states to adopt policies that have not been previously authorized, such as work and community engagement requirements as a condition of eligibility.

Robust evaluation findings about the effects of Section 1115 demonstrations can inform decision making at the state and federal levels. States can use findings from their own evaluations or those of other states to inform decisions such as applying for extensions or new demonstration authority. CMS can use evaluation findings to make approvals and develop new directions for federal Medicaid policy. Congress can use such information to make changes to the Medicaid statute. Historically, however, states and federal administrators have primarily focused on the flexibility offered under Section 1115 waivers, placing limited emphasis on evaluation and the role of a demonstration to produce evidence of the effects of new policies. Many demonstration evaluations have not generated findings that are timely or sufficiently rigorous to support decision making. Moreover, CMS has approved or extended many Section 1115 demonstrations with minimal evaluation evidence (GAO 2019, 2018). The U.S. Government Accountability Office (GAO), MACPAC, and others have expressed concern regarding evaluation quality and timeliness and how CMS uses findings to inform decisions.

CMS has taken significant steps over the last five years to improve the quality of state-led evaluations. Between 2017 and 2019, CMS released guidance outlining expectations for the content and research methods in evaluation design and reports, and a variety of other technical assistance resources (CMS 2019a). It also began including requirements for evaluation content and timing in the special terms and conditions (STCs) of each demonstration.[4] However, states continue to experience methodological and administrative challenges in carrying out strong evaluations, and the extent to which evaluations can or will be used to inform policy remains unclear.

This chapter begins by providing background information on Section 1115 demonstration authority in Medicaid and an overview of evaluation and monitoring requirements. It goes on to describe the concerns raised by GAO and CMS's recent efforts to improve evaluations.

The second portion of the chapter discusses the issues that remain for states and CMS when it comes to conducting evaluations and using

evidence; these include evaluation planning and funding, methodological challenges, timing issues, standards for evaluation quality, evidence needed to inform policy, and public comment and transparency. The discussion draws heavily on perspectives shared at a November 2019 expert roundtable convened by MACPAC to bring together state and federal officials, evaluators of several state demonstration programs, researchers, and other stakeholders.[5] The goals of this roundtable were to gather more specific information on the challenges states and CMS face in conducting timely, methodologically rigorous evaluations that can inform policy decisions; to solicit opinions on the appropriate balance of state flexibility and federal oversight; and to discuss potential steps that could be taken by states and the federal government to improve Section 1115 waiver evaluation processes.[6]

MACPAC is encouraged by the actions CMS has taken to help states conduct better evaluations. These actions appear to have also been well-received by states and evaluators. Evaluation guidance and evaluation-related STCs in place since 2017 will direct states receiving new or renewed demonstration approval but will not affect states with ongoing demonstrations. Achieving meaningful improvements in evaluation quality and usefulness will take time, and the effort requires CMS to remain vigilant in ensuring that states adhere to new expectations. At this time, MACPAC has not identified a need for further legislative or regulatory steps on this issue, but we will continue to monitor how states and CMS carry out evaluations and how these evaluations are used in decision making.

Use of Section 1115 Authority

Section 1115 predates the enactment of Medicaid as a vehicle for testing new approaches in a variety of federally funded programs and, in the early years of the program, was used infrequently for policy experimentation (MACPAC 2019). Its use has broadened over time: demonstrations authorized under Section 1115 over the last three decades have laid the groundwork for major Medicaid program changes. For example, the first Medicaid managed care programs were authorized under Section 1115 demonstration authority, as were the first programs offering Medicaid coverage of home- and community-based services (Rosenbaum 2017, Vladeck 1995). Several states used Section 1115 to expand coverage to low-income adults under age 65 not eligible on the basis of disability prior to the Medicaid expansion enacted in the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) (Hinton et al. 2019, Holahan et al. 1995).

Section 1115 demonstrations are typically first approved for five years, and they can typically be extended for three or five years.[7] States apply for Section 1115 demonstrations by submitting a proposal to CMS; the proposal is the start of what can be a lengthy negotiation process between the two parties. The Secretary reviews each demonstration proposal to determine whether its stated objectives are aligned with those of the Medicaid program and whether proposed provisions and expenditures are consistent with federal policy (CMS 2019b). The Secretary has broad discretion to make such determinations and may do so in line with the administration's policy preferences. As such, Section 1115 has long been used by administrations as a mechanism to chart new Medicaid policy. Similarly, states use the flexibility afforded by Section 1115 to shape Medicaid policy to reflect their policy goals.

Currently authorized demonstrations

As of January 2020, there were 65 approved Section 1115 demonstrations underway in 47 states, with another 45 demonstration actions pending approval (including new demonstrations, amendments, and extensions) (CMS 2020). Although each of these demonstration programs has unique features, current demonstrations often do one or more of the following:

- require most or all Medicaid beneficiaries to enroll in managed care;

- adopt managed long-term services and supports (MLTSS) programs;
- implement delivery system reform programs;
- authorize federal spending for costs not otherwise matchable (e.g., uncompensated care pools);
- test alternative eligibility policies for low-income adults not eligible for Medicaid on the basis of disability (e.g., work and community engagement requirements or premiums as a condition of Medicaid eligibility);
- test strategies to address social determinants of health among certain populations or geographic areas;
- expand coverage to certain groups that would not otherwise be eligible for Medicaid in the state, such as individuals with HIV/AIDS or children with disabilities;
- expand access to certain benefits for individuals, such as those with substance use disorders (SUDs), or serious mental illness (SMI) and serious emotional disturbance (SED); or
- provide family planning benefits to certain populations.

Some of these demonstrations encompass most or all Medicaid beneficiaries or the entire state Medicaid program, while others target only a small subset of Medicaid beneficiaries or a discrete feature of the program. Some have been approved relatively recently, such as those implementing alternative policies for low-income adults not eligible on the basis of disability; others have been in place for decades, including managed care programs in several states.

Some of the policies included in these demonstrations can be implemented only through Section 1115 authority while others can be implemented under other authorities. For example, mandatory Medicaid managed care programs for most populations can be implemented through Section 1915(b) waiver authority or Section 1932 state plan authority. States using these authorities face more predictable approval application processes, and in the case of state plan authority, are not required to negotiate renewals or evaluate the program.[8] Many states, however, implement managed care under Section 1115 authority to show savings under the budget neutrality rules that can be used to finance other program changes (MACPAC 2018).[9] States may also prefer Section 1115 authority because it offers greater flexibility to limit certain services or policies to discrete populations. Additionally, states with long-standing managed care programs authorized under Section 1115 may lack administrative resources or capacity to reorganize their programs under a different authority.

Monitoring and Evaluation Requirements

Section 1115 demonstrations require both monitoring and evaluation; these are distinct activities with different purposes and timing. Monitoring provides ongoing updates on implementation and collects data on process and outcome measures, which may help states and CMS identify whether mid-course corrections are needed. Evaluations are completed later in the demonstration period or after the demonstration is complete; their purpose is to assess whether demonstrations have achieved their goals and to inform decisions about the future of the policy being tested. Although monitoring and evaluation are interrelated, the focus of this chapter is on evaluation.

Monitoring

All states must submit annual and quarterly monitoring reports describing the status of demonstration implementation and containing data on process and outcome measures.[10] According to federal regulations, several elements

must be included in annual monitoring reports, including early findings about the effect of the demonstration in meeting its objectives; a summary of grievances, appeals, and any feedback received from stakeholders; and information on various programmatic aspects of the demonstration (e.g., the number of people enrolled, legislative developments that affect the demonstration) (42 CFR 431.428). Quarterly reports typically contain implementation updates, a summary of press reports and issues arising during the quarter, and monitoring data. CMS requires states to collect and report monitoring data on specific metrics for certain demonstration types. For example, states with SUD demonstrations are required to report information on milestones and performance measures, such as trends related to assessment of need and qualification for SUD services, access to care, and the use of SUD-specific, evidence-based patient placement criteria (CMS 2019c).

States and CMS can use the information in monitoring reports to understand how implementation is affecting the program or its population and to make any needed mid-course adjustments. For example, monthly monitoring metrics reported in quarterly reports might show that beneficiaries in certain demographic subgroups are experiencing relatively high disenrollment rates. Such a finding might suggest the need to alter the specifications of the policy or provide additional support to those beneficiaries, or the need for additional analysis of the demonstration's effects by subgroup.

Evaluation

Currently, all states are required to submit a series of evaluation deliverables for each demonstration, including an evaluation design, an interim report, and a summative report. Requirements for these deliverables are set forth in federal regulation, the approved demonstration's STCs, and CMS evaluation design guidance.

Each deliverable must be submitted to CMS within a specified time frame:

- evaluation designs are due to CMS within 180 days following demonstration approval;
- interim evaluations are due with the demonstration renewal application or one year before demonstration expiration; and
- summative reports are due within 18 months of the end of the demonstration period.[11]

Evaluation designs specify the hypotheses being tested and describe the measures that will be used to assess progress toward the expected outcomes (42 CFR 431.424). They must include background information, research questions, methodology, and limitations and must identify the state's independent evaluator and include an evaluation budget (CMS 2019d).

CMS guidance requires reports to reflect the approved evaluation design. Both interim and summative evaluation reports must use quantitative methods whenever feasible and must minimize burden on beneficiaries and protect their privacy (42 CFR 431.424). Reports must also include results, conclusions about whether the demonstration met its goals, policy implications, details on interactions with other state initiatives, lessons learned, recommendations to policymakers and stakeholders, and a discussion of the study's limitations (CMS 2019e).

CMS reviews and provides comments on these evaluation deliverables and must approve them before they become final and are made publicly available. This provides the agency with several opportunities to guide the evaluation process.

Concerns about Evaluation Quality and Processes

GAO has repeatedly expressed concerns about the quality of evaluations, the timeliness of public release of evaluation findings, and the extent to which evaluations are used for policy decisions: In several studies published between 2007 and 2019,

GAO found that state-led evaluations have been limited by methodological shortcomings or selective reporting of outcomes, and that CMS has approved demonstration extensions despite evaluation results that are incomplete or inconclusive (GAO 2019, 2018, 2015, 2007).[12] Specific findings include:

- **Inconsistent application of evaluation requirements.** GAO has noted inconsistent application of evaluation requirements in several instances. For example, it found that CMS approved an extension application from Florida even though the state did not submit a required interim evaluation report as part of the application (GAO 2019). GAO also found that CMS deemed amendment applications from several states to be complete when they were missing information or when states had indicated that they were not planning to modify their evaluation designs, despite a requirement that states describe how they will do so when applying for amendments (GAO 2019).[13]
- **Significant methodological weaknesses.** GAO found that state-led evaluations often have significant methodological limitations that hamper their usefulness in informing decision making. Specifically, GAO noted that demonstrations in several states lacked adequate comparison groups or sufficient sample sizes and response rates for beneficiary surveys (GAO 2018).
- **Gaps in results.** In a review of several different demonstration types in a variety of states, GAO found that evaluations yielded few meaningful results. Specifically, it noted that several evaluations failed to address important hypotheses or report on key outcome measures for major aspects of the demonstrations. For example, under its delivery system reform incentive payment demonstration, Massachusetts was required to evaluate whether participating hospitals improved access to care, quality of care, and population health. However, the evaluation report included only descriptive information about the number and types of projects implemented by participating hospitals and did not report on effects or provide conclusions. Moreover, GAO noted a lack of evaluation results for many repeatedly renewed demonstrations that had never been subject to a final, comprehensive evaluation (GAO 2018).)[14]
- **Inadequate public comment processes.** GAO has repeatedly found that CMS approved demonstrations without adequate opportunity for, or consideration of, public input on their design and evaluation (GAO 2019, 2013, 2007). GAO has also observed that the extent to which CMS considered public comments in approving evaluation designs and evaluation components of STCs was unclear (GAO 2019). For example, it was unclear whether CMS considered public input in the approved evaluation design for the 2017 extension of Massachusetts' MassHealth demonstration, which did not include plans to examine the effects of its policy to discontinue provisional eligibility for most adults, despite concerns raised by many public commenters (GAO 2019). In other cases, CMS' feedback to states aligned with concerns raised in public comments. For example, CMS provided feedback on the evaluation design for Arkansas's work and community engagement demonstration, directing the state to address several concerns that were consistent with those raised during the public comment period (GAO 2019).

Efforts to Improve Evaluations

Evaluation requirements have evolved over the last two decades as Congress and CMS have made a number of changes to improve evaluation quality and processes (Table 3-1).

TABLE 3-1. Key Developments in Federal Policy for Evaluation of Demonstrations Approved under Section 1115 of the Social Security Act

Date	Action
1994	The Centers for Medicare & Medicaid Services (CMS) published policies and procedures for use in its review and approval of Section 1115 demonstrations, including high-level principles for evaluation.
2007	CMS issued a technical assistance guide for states, which highlighted basic principles and standards for the types of measures to use, comparison groups, and methods for distinguishing demonstration effects from other factors that could affect intended outcomes.
2010	Section 10201(i) of the ACA required the Secretary to establish a formal process for reviewing, approving, and conducting Section 1115 demonstration evaluations.
2012	In accordance with the ACA, CMS finalized regulations specifying monitoring and evaluation requirements. The regulations established a common set of reports that states must submit to CMS and make available on state websites, as well as minimum requirements for Section 1115 demonstration evaluations.
2017	CMS revised demonstration STCs to apply to demonstrations approved starting in 2017. The STCs describe common requirements and timing for evaluation designs and interim and summative evaluation reports for all demonstrations.[1]
2017	CMS released general evaluation design guidance setting forth its expectations for the format and content of evaluation designs, including required sections on background information, hypotheses and research questions, methodology, limitations, and information on the states' evaluator and evaluation budget.
2017	CMS issued an informational bulletin describing new strategies it planned to deploy in its review, approval, monitoring, and evaluation of Section 1115 demonstrations, including: • templates to streamline the initial application process for new demonstrations; • expedited approval of extensions of routine, successful, non-complex demonstrations for up to 10 years; and • fast-track approvals for established demonstrations that CMS found to have positive monitoring and evaluation results.
2019	CMS released additional guidance for developing evaluation designs in general and for specific demonstrations (such as work and community engagement demonstrations, demonstrations implementing premium requirements, and SUD and SMI/SED demonstrations).

Notes: Section 1115 is Section 1115 of the Social Security Act. ACA is the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended). The Secretary is the Secretary of the U.S. Department of Health and Human Services. STC is standard terms and conditions. SUD is substance use disorder. SMI is serious mental illness. SED is serious emotional disturbance.

[1] The current set of standard STCs regarding evaluation content and timing was implemented in 2017. Demonstrations approved earlier than 2017 have slightly different timing requirements for evaluation reports than those included in newer approvals. SUD-specific guidance was made available to states in 2018 but published by CMS to Medicaid.gov in 2019. CMS required states to follow this guidance on a state-by-state basis before it was released.

Sources: Bradley et al. 2019. CMS 2019a, 2017b, 2012, 2007. HCFA 1994.

Historically, such reforms have been geared toward promoting transparency and establishing expectations and consistent processes for evaluation content and timing. More recent reforms have emphasized improving quality and rigor.

Over the last five years, CMS has focused on strengthening state-led evaluations of Section 1115 demonstrations by providing guidance and technical assistance to states. Specifically, CMS has increased efforts to provide individualized feedback on draft evaluation deliverables, with attention to both compliance with requirements and technical rigor. CMS also published a new set of resources to help states in designing and executing their evaluations, including:

- a series of white papers that discuss common evaluation challenges (e.g., comparison group selection, best practices in causal inference);
- general evaluation design guidance, including requirements for the format and content of evaluation designs; and
- policy-specific guidance, with expectations for the components of evaluation designs for certain demonstration types (e.g., work and community engagement, premiums, SUD).[15]

The policy-specific guidance documents provide examples of logic models (or, in the case of the SUD guidance, a driver diagram) to help states think through a theory of change that incorporates hypotheses and expected outcomes. It also includes example design tables that suggest measures, data sources, and analytic approaches.

Participants at MACPAC's roundtable agreed that CMS's recent guidance has been important for establishing expectations for evaluations. Several participants pointed to the example logic models in policy-specific guidance as particularly helpful in encouraging states to consider their demonstration goals and anticipated outcomes.

CMS's recent efforts to raise evaluation standards will take time to yield meaningful progress. Since CMS began issuing policy-specific evaluation guidance, it has seen improvements in the quality of some states' draft evaluation designs, such as in the clarity of hypotheses and research questions.[16] However, it is too soon to know the full practical effects of the new guidance. Although CMS has approved and posted some evaluation designs that follow the new guidance to Medicaid.gov, no interim evaluation reports are yet available. Additionally, existing demonstrations will not be subject to new evaluation requirements until CMS incorporates them into the STCs for renewals.

Issues in Conducting Evaluations and Using Findings

There are many challenges to designing and carrying out strong evaluations. These include administrative challenges, such as limited evaluation budgets, lack of internal state expertise in research methods, and compressed implementation timelines. There are also methodological challenges (many of which are common to health services research in general), such as selecting comparison groups, obtaining reliable data, and separating effects of specific policies in multifaceted demonstrations. These challenges affect states to different degrees.

Evidence gathered through robust evaluation can help states and CMS make decisions about the future of the policies being tested. Historically, evaluations have not yielded findings that are rigorous or timely enough to be used for this purpose. But establishing appropriate standards of rigor and quality is difficult given the constraints states face. Setting evaluation schedules that produce timely findings is also difficult given data availability constraints. Even when robust and timely, findings may not be generalizable to other states, and they may not be sufficiently disseminated to inform broader policy discussions. We also note that decision making processes are influenced by a number of factors other than the evidence produced from specific evaluations,

including the desire to let states test new approaches and political and policy priorities of state and federal administrations.

Evaluation planning and funding

Although states must receive CMS approval of their evaluation designs, they have wide latitude in planning, budgeting, and procuring vendors to conduct the evaluation, and they vary in their approaches to doing so. The value proposition for investing time and resources in evaluations is not always clear to state legislators and executives. A disconnect between the statutory role of Section 1115 as a demonstration authority and state policymakers' use of Section 1115 as a mechanism for program flexibility may make state decision makers reluctant to invest in evaluation. This is often reflected in the evaluation budget, planning efforts, and overall quality of the evaluation, particularly if such investments are seen as competing with funds for the provision of health services. On the other hand, as one roundtable participant noted, some state Medicaid agencies may view evaluations as an opportunity to show state legislators a return on investment and persuade them to extend funding for the demonstration.

The state's role in directing and funding evaluations. The current arrangement, in which a state funds and directs the scope of evaluations, has implications for evaluation independence and quality. On the one hand, this arrangement allows those knowledgeable about the state's Medicaid program, its beneficiaries, and the available data sources to be closely involved with evaluation activities. On the other hand, it may limit the independence of evaluations, jeopardizing their quality. One risk of the arrangement is that it puts the state in charge of the budget rather than allowing evaluators or other entities to determine the level of funding required to conduct necessary evaluation activities. Political pressures or other state-specific circumstances may also influence how evaluators carry out evaluations and make decisions.

Evaluation budgeting. There are few requirements or guidelines for evaluation budgeting. Although recent CMS guidance has laid out expectations for evaluation format, content, and acceptable analytic methods, CMS has not provided explicit budget guidelines, including how budgets might vary based on demonstration characteristics, such as number of beneficiaries affected, complexity of the demonstration objectives, potential for adverse beneficiary consequences (e.g., disenrollment), and whether the demonstration authorizes policies that are relatively new and untested.

Lacking federal guidelines, states often determine evaluation budgets based on legislators' willingness to provide funds rather than on the cost of the necessary evaluation components. Other factors influencing budgets include the value policymakers place on evaluations (discussed above) and evaluation capacity and expertise among agency staff; states with relatively greater evaluation capacity are more likely to understand the level of funding needed to support strong evaluations. In some states, evaluation funds are not specifically allocated, meaning that any funds spent on evaluation reduce the amount available for Medicaid services or other administrative activities. This makes it more difficult for state agencies or evaluators to argue for larger evaluation budgets. Moreover, state budget cycles may not align with evaluation contracts; for example, a demonstration that is approved for five years may have an evaluation funded at a given level for the first year, but funding for subsequent evaluations may be subject to change from year to year during the state's budgeting process.

The appropriate level of evaluation spending is difficult to determine and will vary based on demonstration scope. Although states can use CMS guidance to help design their evaluations and can determine their budgets based on that design, conducting rigorous evaluations and adopting approaches recommended in the guidance, such as beneficiary surveys, may cost more than many states expect to spend. Additional CMS guidance and feedback could help states, for example,

guidance on typical costs for rigorous evaluation approaches or for evaluations of different types of demonstrations.

Roundtable participants noted that CMS could convey its commitment to improving evaluations by taking action such as increasing federal funding for evaluations or providing additional feedback and guidance on budgeting. Mechanisms for increasing federal investment in evaluations could include funding the full cost of evaluations or raising the federal matching rate for evaluations from the standard 50 percent administrative rate. Additionally, using a broader interpretation of the regulations governing the enhanced matching rate for mechanized claims processing and information retrieval systems could allow states to access a 75 percent or 90 percent federal matching rate for at least some evaluation activities.[17]

Early evaluation considerations. Efforts to consider evaluation early in the waiver application and implementation process may yield stronger evaluations. States typically begin evaluation planning after demonstrations are approved. However, discussing evaluations earlier—even before demonstration approval—could help states and CMS settle on demonstration designs that lend themselves to strong evaluation and give evaluators more time to design rigorous evaluation approaches. For example, evaluators can help states prioritize research questions and determine cost-effective ways to address them, assess needs for baseline data prior to implementing the demonstration, and help create an in-state comparison group by randomizing assignment to the demonstration or phasing in implementation.

CMS has recently begun encouraging states to involve evaluators as early in the process as possible; however, in many cases, states do not want to procure an evaluator until they have been granted approval for the demonstration or, in some cases, the evaluation design. Some roundtable participants noted that CMS could require states to demonstrate progress toward procuring an evaluator within a defined period of time after demonstration approval (e.g., by having a contract in place or identifying an evaluation design consultant or other partner). One roundtable participant suggested that CMS set up a contracting vehicle to allow states to access technical assistance resources from evaluation experts earlier in the process. Another roundtable participant suggested changing the Section 1115 demonstration application template to encourage states to define more explicitly what they are seeking to demonstrate and what hypotheses they would like to test.

Methodological challenges

There are methodological challenges in designing and carrying out Section 1115 evaluations, many of which are common in health services research and public program evaluation more generally, such as selecting comparison groups and obtaining reliable data. States and evaluators could address some of these challenges with advanced planning; in other cases, additional investment may be needed.

Comparison groups. Comparison groups are one of the most challenging methodological issues for evaluation. Absent a comparison group, it is difficult to understand whether changes in outcomes are due to demonstration policies or other factors. States have several options for selecting or constructing comparison groups, including in-state comparison groups consisting of Medicaid beneficiaries who are not subject to demonstration policies or other state comparison groups consisting of Medicaid beneficiaries in a similar state that does not have the same Section 1115 demonstration policies.

Both approaches have strengths and weaknesses. Using another state's Medicaid population as a comparison group may be appealing when comparable in-state populations are unavailable, but it may be difficult to find a comparable state. Data use agreements must be established in order to share individual-level administrative data across states; this can be difficult, especially if the comparison state has little incentive to participate.

Processing another state's data can be resource intensive because states use different data formats and file structures. In some cases, federal Medicaid data sets can be used for cross-state comparisons, although Transformed Medicaid Statistical Information System (T-MSIS) data have not been available until recently, and it is not yet clear if they can be used for evaluation.[18] One roundtable participant noted that there are efforts underway to enable the sharing of aggregated administrative data through distributed research networks such as the Medicaid Outcomes Distributed Research Network (MODRN). However, use of such data networks in Medicaid is not widespread.[19]

States can also use phased or randomized implementation strategies to construct comparison groups. These approaches do not require cooperation from other states and do not involve costs associated with sharing data, but still require careful planning and execution. States face several challenges when undertaking such advance planning, including coming into conflict with state priorities regarding implementation, and balancing those priorities against what is desirable or practical (e.g., the desire to provide new SUD services to the entire eligible population rather than a subset of individuals).

Alternatively, states can use analytic approaches that do not require comparison groups, such as interrupted time series analysis. Such approaches also require advance planning because they require many pre-period observations. They also may not be possible for states whose demonstrations have been in place for a long time and for which pre-period data are unavailable or outdated. Although such approaches cannot establish causal inference with the same level of rigor as approaches that use comparison groups, they can still produce useful information if properly designed (Bradley et al. 2019). However, planning and execution of these strategies may require staff expertise that Medicaid agencies do not have.

Obtaining data to examine particular demonstration outcomes. Data availability has long been a challenge for Medicaid research, including research on Section 1115 demonstrations. States and evaluators often lack the necessary data to address specific hypotheses. For example, Medicaid administrative data cannot be used to examine the effects of demonstration programs seeking to transition beneficiaries to commercial health insurance or outcomes that occur after leaving Medicaid. Additionally, Medicaid administrative data cannot measure many important outcomes of demonstrations. For example, in demonstrations implementing MLTSS, administrative data cannot provide insight regarding the extent to which the services and supports provided by managed care plans meet the needs and preferences of those receiving services, enhance community inclusion, and improve quality of life.

In some cases, administrative data from sources other than Medicaid can be used to examine such outcomes. For example, in a work and community engagement demonstration, unemployment insurance filings, tax returns, information in all-payer claims databases, or other data can be used to observe long-term outcomes among former beneficiaries or to track beneficiaries as they cycle on and off Medicaid. However, such data may be difficult to link to Medicaid data and may have other limitations.[20]

Beneficiary surveys are a key data source: they can assess beneficiary understanding of demonstration rules and incentives, help Medicaid programs connect with their beneficiaries, and generate evidence about beneficiary experience. However, such surveys can be challenging and expensive to administer, particularly those that follow beneficiaries over time to observe long-term outcomes. Due to low response rates, it can be difficult to achieve sufficient sample sizes for statistically sound analyses. National household surveys may include some data of interest for Medicaid beneficiaries, but they also present sample-size limitations and may not collect information on the specific population categories or policies that are relevant for demonstration evaluations. Other strategies

to gain insight on beneficiary behavior or experience include focus groups or systematic stakeholder interviews; these can yield qualitative information on beneficiary experience, but do not typically yield quantitative data that can be used to test all relevant hypotheses.

Estimating effects of specific policies in multifaceted demonstrations. Many states implement multiple policies through Section 1115 demonstrations that are intended to influence the same set of outcomes simultaneously. In other cases, a state's Section 1115 demonstration may be one of several concurrent initiatives that affect the Medicaid program and its beneficiaries—for example, a demonstration designed to provide services for beneficiaries in need of SUD treatment could be occurring alongside initiatives funded by other federal, state, or non-governmental programs with the same goal. This also makes it difficult to isolate the effects of one policy.

There are methodological strategies for disentangling the effects of multiple demonstration policies, such as randomization or sequential implementation of individual policies (Bradley et al. 2019; Reschovsky and Bradley 2019). However, these require advance planning and specialized expertise that states or even evaluators may lack.

Given these challenges and to help isolate the effects of specific policies, CMS has begun to encourage states to develop logic models for each policy and to focus on measuring outcomes that are likely to be affected by a single policy(CMS 2019d).

Timing

Timing requirements for evaluation deliverables vary by state and are generally linked to demonstration approval or expiration. These requirements, as currently structured, may contribute to the difficulty of conducting evaluations that can be used to inform policy.

Timing of evaluation design relative to demonstration implementation. It can take eight months or more after CMS approves a demonstration for the state to draft an evaluation design, obtain CMS comments, and gain approval (Bradley et al. 2019). Although CMS encourages states to plan for evaluation early, it does not currently require states to have an approved evaluation design prior to implementation.

States that move ahead without an approved evaluation design limit their options for robust analytic approaches. For example, experimental designs, the strongest method for public program evaluation, require randomized assignment into the demonstration, which must take place prior to implementation. Rigorous quasi-experimental designs may require the collection of some baseline data or a phased implementation in order to create a comparison group (Reschovsky and Bradley 2019). Under any approach, states should have an idea at the outset of the measures and data sources they will use to assess whether the demonstration is making progress toward its objectives.

This issue was highlighted by a recent experience in Arkansas, where the state received approval for community engagement requirements (through a demonstration amendment), implemented these policies, and then disenrolled beneficiaries for non-compliance before CMS had approved an evaluation design. In a letter to the Secretary, MACPAC expressed concern that without an approved evaluation design, Arkansas and CMS would not be able to interpret early experience with the demonstration, and that the short implementation time frame contributed to an "absence of sufficient measures and data to interpret early results and guide adjustments" (MACPAC 2018).[21]

On the other hand, it might not always be feasible to have an approved evaluation design plan in place prior to program implementation. States and CMS may prioritize program implementation and operation over evaluation. They may be bound by implementation timelines established by state law or by state procurement rules that slow down the process of obtaining an evaluator to work with on the evaluation design. There may also be pressure to move ahead quickly after approval, given the

five-year demonstration period, particularly in the case of demonstrations seeking to make broad, long-term program changes (e.g., delivery system reform). States may also be eager to begin providing access to new coverage or services for individuals (e.g., demonstrations that provide enhanced benefits for beneficiaries with SUD).

Timing of interim evaluation reports. States are required to submit interim evaluation reports to CMS with renewal applications or, if they are not seeking renewal, at least one year prior to demonstration expiration. The primary purpose of these reports is to inform CMS decisions about extension approvals. However, the timing of interim evaluation reports often results in short data collection periods, which limit the type of data that can be included and thus the usefulness of these reports. Depending on the length of the demonstration period and the details of the evaluation design, interim evaluations may be based on as little as a single year of demonstration experience. Data collected from the first year or two of a new demonstration, when the policies are not fully implemented and the operation of the program has not reached a steady state, might not be appropriate for inclusion in evaluations of policy outcomes or as the basis for awarding extensions.

In recent years, CMS has been more likely to approve five-year demonstrations. Although these longer approval periods provide more time for data collection and analysis before the interim report is due, there may still be significant data gaps. A three- to five-year data collection period is often insufficient to adequately assess the effects of a policy, especially if there have been delays in demonstration implementation or if changes have been made to the demonstration during implementation. When states make a mid-course change to the implementation approach or operational features of their demonstration, or if they pursue and receive approval for a demonstration amendment, evaluators may have to adjust the evaluation approach, and the timeframe in which data can be collected may be further reduced.

Currently, interim reports are generally intended to provide the same (or similar) information as the summative report, but at an earlier stage in the demonstration period. Noting the difficulty of collecting information on demonstration outcomes—some of which may be long-term outcomes—in short data collection periods, some roundtable participants cited examples of states working with CMS to clearly describe analyses that can be conducted in the interim versus the summative report.

Additionally, some roundtable participants suggested focusing interim reports on implementation. Information on process indicators (e.g., the share of providers participating in an intervention) or proximal outcomes (e.g., the share of beneficiaries who know about the incentive or requirement) could help indicate whether the demonstration has been implemented according to the design and provide information on how the demonstration is working. Evaluators could also collect and analyze qualitative data through key informant interviews and focus groups and assessments of program documentation. Information gathered through implementation research can help evaluators design analyses of outcome measures and can help states, CMS, and other stakeholders interpret findings on demonstration outcomes. This could improve the interpretation of findings from summative evaluation reports. Still, to serve their purpose of informing renewal decisions, interim evaluation reports would need to include some interim findings beyond implementation information.

Timing of summative reports. Summative evaluation reports, which are based on more years of data than interim reports, are due to CMS 18 months after the expiration of a demonstration cycle. This means that they are not available until after CMS decides to extend or renew the demonstration, which must generally happen by the end of a waiver cycle.[22] Findings from summative reports could inform future extensions or amendments, and may be of use to other states considering similar policies or to federal Medicaid policy deliberations more broadly. It

is important to note, however, that some long-term outcomes may not occur or be measurable within a five-year demonstration period.

Standards for evaluation quality

In recent evaluation design guidance, CMS clarified its expectations for the format and content of evaluations, including the hypotheses, measures, data sources, and analytic methods that would most likely produce strong evaluation findings. But because states are not required to adopt these approaches, CMS has begun to use STCs to describe hypotheses that states must articulate in order to test key demonstration policies on the outcomes of interest.[23] CMS also uses the guidance as a framework for reviewing states' designs and collaborating with them on improvements before approving revisions. Even so, there are no specific requirements for states to use certain methodological features. For example, CMS has not established standards for when specific components, such as comparison groups or beneficiary surveys, are necessary.

The wide variation in demonstration type and scope make it challenging to establish standards that would apply across all evaluations.[24] One possible approach would be to target standards and requirements related to content, rigor, and timing of evaluation deliverables according to demonstration type and scope. For example, roundtable participants and others in the policy community have raised the idea of categorizing demonstrations so that CMS can apply different standards and requirements to demonstrations of different types. Participants discussed several criteria that could be used, including risk of beneficiary harm, whether the policy being tested is a novel approach, the strength of the evidence for the policy, the likelihood of replication in other states, and the level of federal investment involved.[25]

Such an approach could require more rigorous evaluation features, such as randomized control groups and beneficiary surveys for demonstrations that pose high risk to beneficiaries (e.g., disenrollment for failure to comply with work and community engagement requirements) or involve a considerable federal investment (e.g., delivery system reform incentive payment programs). However, creating a system to categorize demonstrations would be difficult given different perspectives among decision makers and stakeholders about what constitutes risk or otherwise merits a higher standard of scrutiny.

Roundtable participants noted that greater collaboration between evaluators would be helpful for improving evaluations and establishing collective standards of rigor. For example, CMS could facilitate opportunities for states and evaluators to collaborate to improve skills, share lessons learned regarding demonstration evaluation, and distribute sample evaluation designs or evaluation requests for proposal across states.

Evidence needed to inform policy

Given the purpose of Section 1115 to allow states to experiment with new or different approaches, the statute anticipates that evidence gathered from formal program evaluations will address whether demonstrations achieve their objectives and the objectives of the Medicaid program as effectively or more effectively than the approaches permitted under current law. Despite this expectation, there are several long-standing demonstrations and demonstration policies that have been repeatedly extended with minimal evaluation evidence. For example, many states have had waivers of retroactive eligibility and non-emergency medical transportation policies in place for years. These features have received minimal attention by evaluators, however, and the effects of waiving these provisions of statute have not been clearly demonstrated.

In other cases, evidence is available but decision makers might find it difficult to assess whether there is enough evidence to make broader decisions such as providing statutory authority for the policy or, conversely, determining that the policy should not be permitted. For example, premiums and

cost sharing policies are commonly incorporated into Section 1115 demonstrations and have been studied extensively; evaluations have shown that premiums discourage enrollment, that cost sharing often leads to individuals avoiding care (including needed care), and that incentives for behavior change are poorly understood by enrollees and typically do not lead to the desired changes (MACPAC 2015, KCMU 2013). States, however, continue to seek and receive Section 1115 authority to implement such changes. In some cases, this may be because the changes they seek are variations on previous approaches, making the effects uncertain. In other cases, it may be because the literature is not well-known to state and federal policymakers, or because the findings conflict with policy priorities.

Judging the strength of evidence is not a straightforward undertaking and may require in-depth assessment of evaluation methods and interpretation of findings. Although standards have been proposed for rating the strength of evidence from clinical interventions, such standards can be difficult to apply to program evaluations given their complexity and the importance of context (Lohr 2004, Rychetnik et al. 2002).

Moreover, it is important to note that even high-quality evaluations that produce strong evidence can be of limited use in informing policy. Findings from one state's demonstration are unlikely to be definitive. Because of state-specific circumstances, differences in implementation design, or other factors, evaluation findings from one demonstration program may not produce information that is useful to another state that is looking to implement a similar policy. Moreover, Medicaid demonstration evaluations are designed to assess effects on the Medicaid program and on its beneficiaries, but are not designed to capture the effects of the demonstration on other aspects of the health care system or safety net, which can be meaningful.

Public comment and transparency

Federal regulations require federal and state public notice and comment periods for demonstration applications, but there are few opportunities for the public to comment on evaluation designs or findings. Interim reports are made available for public comment as part of the state's demonstration renewal application. However, relatively narrow dissemination of evaluation products limits the public's ability to review and comment on findings and the extent to which findings are shared and used by researchers and policymakers who are not otherwise involved in the demonstration.

Consideration of public input. The federal public notice process for state waiver application materials offers an opportunity for the public to comment on the pending application in light of any interim evaluation findings.[26] Public comments often raise concerns over certain demonstration features and can also be used to identify areas of risk that could benefit from careful evaluation. Federal rules for waiver applications in 42 CFR 431.412 do not explicitly require states to describe how public comments should inform evaluation hypotheses, and it is unclear if and how public comments are used when designing evaluations. A GAO report issued in 2019 noted that the extent to which CMS considers areas of risk identified through public input in evaluation designs and evaluation components of STCs is unclear and inconsistent (GAO 2019). Two roundtable participants noted that their state agencies share public comments with evaluators to inform demonstration hypotheses and research questions. However, it is not clear if this is a common practice. Several roundtable participants noted that it can be difficult to gather helpful public comments and feedback, citing low attendance at post-award forums and the lengthy and technical nature of evaluation.

Dissemination of findings. States and CMS are currently required to publish evaluation findings to their websites, but findings are not typically disseminated more broadly. Roundtable participants discussed how wider dissemination of evaluation findings, through a greater variety of channels, including post-award forums, blog posts, academic journals, and conferences, could expand the reach of these findings. Distilling findings so that they are easier to read and are more understandable to

lay audiences (e.g., through one-page summaries of findings) may also increase awareness and elicit higher-quality public comments.

Endnotes

[1] Generally, the Secretary may not waive provisions except those specified in Section 1902 of the Act. For example, the provisions related to federal medical assistance percentages (FMAPs) that are specified in Section 1903 may not be waived.

[2] The focus of this chapter is on state-led evaluations. However, it is important to note that the Centers for Medicare & Medicaid Services (CMS) at times conducts federal evaluations. For example, CMS sponsored a national, cross-state evaluation of several different types of Section 1115 demonstrations, underway from September 2014 through fiscal year (FY) 2019. Beginning in September 2018, CMS is also sponsoring federal evaluations through meta-analyses of certain types of Medicaid Section 1115 demonstrations. Additionally, CMS has sponsored several other state-specific and cross-state evaluations.

[3] Under Section 1115 authority, states can apply savings generated from portions of their demonstrations to request federal matching funds for costs that are not otherwise matchable under the state plan, making the demonstration budget neutral (§ 1115(a)(2) of the Act). These expenditures have been used to finance the following: coverage expansions to populations that are not otherwise eligible for Medicaid; additional payments to providers, such as uncompensated care pools or delivery system reform incentive payments; and additional payments to states (MACPAC 2018).

[4] Each approved Section 1115 demonstration is subject to STCs. These are legally binding documents that include a description of the statutory requirements being waived, the parameters of those waivers, state requirements and deliverables, beneficiary protections that must be guaranteed, budget neutrality calculations, and other terms of the waiver.

[5] The roundtable was held at MACPAC's office on November 14, 2019, and included officials from CMS and GAO; state Medicaid officials from four states; evaluators of state Section 1115 demonstration programs who were not from the same states as the Medicaid officials in attendance; researchers; and other stakeholders.

[6] MACPAC contracted with Mathematica to organize and moderate the roundtable and to prepare a background paper for participants, a formal agenda, and a summary report of the discussion.

[7] Customarily, CMS has approved initial demonstrations for five years and renewed them for up to five years (MACPAC 2019). However, in some cases, CMS has approved demonstrations for shorter or longer periods (CMS 2017a).

[8] Medicaid managed care programs implemented through Section 1915(b) waiver authority are subject to independent assessment rather than evaluation. States must contract with an independent entity to assess waiver performance during the first two years of operation and following the first renewal period. Independent assessments must address beneficiary access to services, quality of care, and cost-effectiveness of the waiver (MACPAC 2018).

[9] States can apply savings generated from the managed care portions (and other portions) of their demonstrations to request federal matching funds for costs not otherwise matchable and offset any associated additional costs to comply with the long-standing CMS policy that demonstrations be budget neutral to the federal government. Although many states using Section 1115 authority could operate their managed care programs under Section 1915(b) authority, doing so would limit their ability to use managed care savings to support additional spending under Section 1115 expenditure authority (MACPAC 2018).

[10] For some demonstrations, states submit annual or semiannual monitoring reports rather than quarterly reports (e.g., Maine Medicaid's Section 1115 Health Care Reform Demonstration for Individuals with HIV/AIDS and Georgia's Planning for Healthy Babies demonstration).

[11] These timing requirements were implemented after a policy change included in CMS's 2017 guidance and evaluation-related STCs. This means that demonstrations that have not been renewed since the policy change are not subject to this evaluation schedule.

[12] We note that GAO's reports to date generally examine evaluations for demonstrations approved prior to CMS's new guidance and evaluation requirements.

[13] Regulations governing application procedures require states to include their evaluation activities and findings to date in their extension applications (42 CFR 431.412(c)(2)(vi)). Regulations governing evaluations for extensions require the state to submit an interim report as part of the extension request (42 CFR 431.424(d)(1)).

[14] Prior to 2017, CMS policy required final, comprehensive evaluation reports after the expiration of the demonstrations rather than at the end of each three- to five-year demonstration cycle (GAO 2018). CMS changed this policy in 2017; summative evaluations are now due at the end of each demonstration cycle.

[15] Policy-specific guidance is currently available for SUD demonstrations, demonstrations focused on serious mental illness and serious emotional disturbance, and Section 1115 eligibility and coverage policies including community engagement requirements, premiums, non-eligibility periods (lockouts), and retroactive eligibility waivers (CMS 2019a).

[16] CMS does not usually release its review comments on states' evaluation products, but CMS posted comments on the draft evaluation designs submitted by Arkansas and Indiana to Medicaid.gov in 2018. Both states submitted their drafts before the release of the new eligibility and coverage evaluation design guidance in 2019. Some of the issues identified in these publicly released comments, such as unclear hypotheses and inadequate analytic approaches, have been improved in other states' draft designs for eligibility and coverage evaluations since the guidance was released. However, improvements are not consistent across states (Bradley et al. 2019).

[17] Federal law provides a 90 percent federal matching rate to the design, development, and implementation of mechanized claims processing and information retrieval systems and 75 percent for maintenance and operations of these systems (§ 1903(a)(3)(A)–(B) of the Act). A wider regulatory interpretation could allow states to access a 75 percent or 90 percent federal matching rate for at least some evaluation activities, such as coding, data analysis, and system development. CMS officials raised this possibility at the roundtable meeting, noting that this idea has been discussed, but no concrete action has yet been taken. Additionally, it is important to note that such a change may necessitate additional federal oversight to ensure that the enhanced matching rate is allowed only for activities authorized under current guidance.

[18] CMS and states are actively working on improving the quality and availability of T-MSIS data. CMS and others have expressed hope that the T-MSIS can resolve some of the data issues with evaluations, including permitting cross-state comparisons (GAO 2018).

[19] As of November 2019, MODRN is comprised of 11 state-university partnerships using a common data structure. Its primary cross-state project is an assessment of opioid use disorder treatment quality and outcomes in Medicaid, although it may be adapted for use in future Medicaid research on other topics (Sheets and Kennedy 2019).

[20] For example, in its initial draft evaluation design plan for its work and community engagement demonstration, Arkansas proposed using tax returns and the state's all payer claims database to track the income and health insurance status of beneficiaries who left Medicaid. In feedback provided to the state, CMS noted that evaluators for Arkansas's previous demonstration period were unable to track premium assistance beneficiaries into exchange coverage, and that tax returns might be limited as a data source because people with very low incomes are not required to file taxes (CMS 2018).

[21] Until Arkansas's demonstration was vacated by the U.S. District Court for the District of Columbia in March 2019, CMS was working with the state to develop an adequate evaluation design plan.

[22] The current requirement to submit summative reports after each demonstration approval period was instituted in 2017. Previously, final reports were due at demonstration expiration or closure rather than at the end of the approval cycle. This meant that states renewing their demonstrations were effectively not required to submit summative reports. To remedy this problem, CMS began including STCs that required states to submit summative reports after each demonstration approval cycle.

[23] CMS specifies these STCs in accordance with the evaluation guidance.

[24] In other types of Section 1115 demonstrations, the federal government has included more specific requirements for evaluation methodologies. For example, the Administration for Children and Families (ACF) generally required states with Section 1115 demonstrations that made changes to the Aid to Families with Dependent Children (AFDC) program (e.g., welfare reform demonstrations) to use an experimental design with a randomized selection process. Further details, such as sample size, procedures for drawing the sample, and control processes for maintaining the integrity of the design, were negotiated between states and ACF. Like Medicaid demonstrations, AFDC demonstrations also varied by state, and their evaluation costs were shared evenly between the state and federal government (Harvey et al. 2000).

[25] In November 2017, CMS announced plans to make distinctions in the level of evaluation and monitoring required for different demonstrations. The guidance includes some broad criteria, including demonstrations that are long-standing, non-complex, and unchanged; have previously been rigorously evaluated and determined successful, without issues or concerns that would require more regular reporting; include a small number of enrollees (approximately 500 or less); have been operating smoothly without administrative changes; have been subject to only a minimal number of appeals and grievances; have no state issues with CMS 64 reporting or budget neutrality; or do not have a corrective action plan in place (CMS 2017b). Further details have not been released. However, following the release of this guidance, GAO issued a 2018 report recommending that CMS issue written criteria for when it will allow limited evaluation of a demonstration, including defining what it means for a demonstration to meet the various conditions identified (e.g., long-standing or non-complex) (GAO 2018).

[26] Federal regulations at 42 CFR 431.408 and 431.416 require both state and federal public notices for demonstration applications. The regulations outline specific content for public notices, including proposed demonstration policies and hypotheses to be tested.

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Appendix

Authorizing Language (§ 1900 of the Social Security Act)

Medicaid and CHIP Payment and Access Commission

(a) ESTABLISHMENT.—There is hereby established the Medicaid and CHIP Payment and Access Commission (in this section referred to as "MACPAC").

(b) DUTIES.—

(1) REVIEW OF ACCESS POLICIES FOR ALL STATES AND ANNUAL REPORTS.—MACPAC shall—

(A) review policies of the Medicaid program established under this title (in this section referred to as "Medicaid") and the State Children's Health Insurance Program established under title XXI (in this section referred to as "CHIP") affecting access to covered items and services, including topics described in paragraph (2);

(B) make recommendations to Congress, the Secretary, and States concerning such access policies;

(C) by not later than March 15 of each year (beginning with 2010), submit a report to Congress containing the results of such reviews and MACPAC's recommendations concerning such policies; and

(D) by not later than June 15 of each year (beginning with 2010), submit a report to Congress containing an examination of issues affecting Medicaid and CHIP, including the implications of changes in health care delivery in the United States and in the market for health care services on such programs.

(2) SPECIFIC TOPICS TO BE REVIEWED.—Specifically, MACPAC shall review and assess the following:

(A) MEDICAID AND CHIP PAYMENT POLICIES.—Payment policies under Medicaid and CHIP, including—

(i) the factors affecting expenditures for the efficient provision of items and services in different sectors, including the process for updating payments to medical, dental, and health professionals, hospitals, residential and long-term care providers, providers of home and community based services, Federally-qualified health centers and rural health clinics, managed care entities, and providers of other covered items and services;

(ii) payment methodologies; and

(iii) the relationship of such factors and methodologies to access and quality of care for Medicaid and CHIP beneficiaries (including how such factors and methodologies enable such beneficiaries to obtain the services for which they are eligible, affect provider supply, and affect providers that serve a disproportionate share of low-income and other vulnerable populations).

(B) ELIGIBILITY POLICIES.—Medicaid and CHIP eligibility policies, including a determination of the degree to which Federal and State policies provide health care coverage to needy populations.

(C) ENROLLMENT AND RETENTION PROCESSES.—Medicaid and CHIP enrollment and retention processes, including a determination of the degree to which Federal and State policies encourage the enrollment of individuals who are eligible for such programs and screen out individuals who are ineligible, while minimizing the share of program expenses devoted to such processes.

(D) COVERAGE POLICIES.—Medicaid and CHIP benefit and coverage policies, including a determination of the degree to which Federal and State policies provide access to the services enrollees require to improve and maintain their health and functional status.

(E) QUALITY OF CARE.—Medicaid and CHIP policies as they relate to the quality of care provided under those programs, including a determination of the degree to which Federal and State policies achieve their stated goals and interact with similar goals established by other purchasers of health care services.

(F) INTERACTION OF MEDICAID AND CHIP PAYMENT POLICIES WITH HEALTH CARE DELIVERY GENERALLY.—The effect of Medicaid and CHIP payment policies on access to items and services for children and other Medicaid and CHIP populations other than under this title or title XXI and the implications of changes in health care delivery in the United States and in the general market for health care items and services on Medicaid and CHIP.

(G) INTERACTIONS WITH MEDICARE AND MEDICAID.—Consistent with paragraph (11), the interaction of policies under Medicaid and the Medicare program under title XVIII, including with respect to how such interactions affect access to services, payments, and dually eligible individuals.

(H) OTHER ACCESS POLICIES.—The effect of other Medicaid and CHIP policies on access to covered items and services, including policies relating to transportation and language barriers and preventive, acute, and long-term services and supports.

(3) RECOMMENDATIONS AND REPORTS OF STATE-SPECIFIC DATA.—MACPAC shall—

(A) review national and State-specific Medicaid and CHIP data; and

(B) submit reports and recommendations to Congress, the Secretary, and States based on such reviews.

(4) CREATION OF EARLY-WARNING SYSTEM.—MACPAC shall create an early-warning system to identify provider shortage areas, as well as other factors that adversely affect, or have the potential to adversely affect, access to care by, or the health care status of, Medicaid and CHIP beneficiaries. MACPAC shall include in the annual report required under paragraph (1)(D) a description of all such areas or problems identified with respect to the period addressed in the report.

(5) COMMENTS ON CERTAIN SECRETARIAL REPORTS AND REGULATIONS.—

(A) CERTAIN SECRETARIAL REPORTS.—If the Secretary submits to Congress (or a committee of Congress) a report that is required by law and that relates to access policies, including with respect to payment policies, under Medicaid or CHIP, the Secretary shall transmit a copy of the report to MACPAC. MACPAC shall review the report and, not later than 6 months after the date of submittal of the Secretary's report to Congress, shall submit to the appropriate committees of

Congress and the Secretary written comments on such report. Such comments may include such recommendations as MACPAC deems appropriate.

(B) REGULATIONS.—MACPAC shall review Medicaid and CHIP regulations and may comment through submission of a report to the appropriate committees of Congress and the Secretary, on any such regulations that affect access, quality, or efficiency of health care.

(6) AGENDA AND ADDITIONAL REVIEWS.—

(A) IN GENERAL.—MACPAC shall consult periodically with the chairmen and ranking minority members of the appropriate committees of Congress regarding MACPAC's agenda and progress towards achieving the agenda. MACPAC may conduct additional reviews, and submit additional reports to the appropriate committees of Congress, from time to time on such topics relating to the program under this title or title XXI as may be requested by such chairmen and members and as MACPAC deems appropriate.

(B) REVIEW AND REPORTS REGARDING MEDICAID DSH.—

(i) IN GENERAL.—MACPAC shall review and submit an annual report to Congress on disproportionate share hospital payments under section 1923. Each report shall include the information specified in clause (ii).

(ii) REQUIRED REPORT INFORMATION.—Each report required under this subparagraph shall include the following:

(I) Data relating to changes in the number of uninsured individuals.

(II) Data relating to the amount and sources of hospitals' uncompensated care costs, including the amount of such costs that are the result of providing unreimbursed or under-reimbursed services, charity care, or bad debt.

(III) 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 quarternary care, including the provision of trauma care and public health services.

(IV) State-specific analyses regarding the relationship between the most recent State DSH allotment and the projected State DSH allotment for the succeeding year and the data reported under subclauses (I), (II), and (III) for the State.

(iii) DATA.—Notwithstanding any other provision of law, the Secretary regularly shall provide MACPAC with the most recent State reports and most recent independent certified audits submitted under section 1923(j), cost reports submitted under title XVIII, and such other data as MACPAC may request for purposes of conducting the reviews and preparing and submitting the annual reports required under this subparagraph.

(iv) SUBMISSION DEADLINES.—The first report required under this subparagraph shall be submitted to Congress not later than February 1, 2016. Subsequent reports shall be submitted as part of, or with, each annual report required under paragraph (1)(C) during the period of fiscal years 2017 through 2024.

(7) AVAILABILITY OF REPORTS.—MACPAC shall transmit to the Secretary a copy of each report submitted under this subsection and shall make such reports available to the public.

(8) APPROPRIATE COMMITTEE OF CONGRESS.—For purposes of this section, the term "appropriate committees of Congress" means the Committee on Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate.

(9) VOTING AND REPORTING REQUIREMENTS.—With respect to each recommendation contained in a report submitted under paragraph (1), each member of MACPAC shall vote on the recommendation, and MACPAC shall include, by member, the results of that vote in the report containing the recommendation.

(10) EXAMINATION OF BUDGET CONSEQUENCES.—Before making any recommendations, MACPAC shall examine the budget consequences of such recommendations, directly or through consultation with appropriate expert entities, and shall submit with any recommendations, a report on the Federal and State-specific budget consequences of the recommendations.

(11) CONSULTATION AND COORDINATION WITH MEDPAC.—

(A) IN GENERAL.—MACPAC shall consult with the Medicare Payment Advisory Commission (in this paragraph referred to as "MedPAC") established under section 1805 in carrying out its duties under this section, as appropriate and particularly with respect to the issues specified in paragraph (2) as they relate to those Medicaid beneficiaries who are dually eligible for Medicaid and the Medicare program under title XVIII, adult Medicaid beneficiaries (who are not dually eligible for Medicare), and beneficiaries under Medicare. Responsibility for analysis of and recommendations to change Medicare policy regarding Medicare beneficiaries, including Medicare beneficiaries who are dually eligible for Medicare and Medicaid, shall rest with MedPAC.

(B) INFORMATION SHARING.—MACPAC and MedPAC shall have access to deliberations and records of the other such entity, respectively, upon the request of the other such entity.

(12) CONSULTATION WITH STATES.—MACPAC shall regularly consult with States in carrying out its duties under this section, including with respect to developing processes for carrying out such duties, and shall ensure that input from States is taken into account and represented in MACPAC's recommendations and reports.

(13) COORDINATE AND CONSULT WITH THE FEDERAL COORDINATED HEALTH CARE OFFICE.—MACPAC shall coordinate and consult with the Federal Coordinated Health Care Office established under section 2081 of the Patient Protection and Affordable Care Act before making any recommendations regarding dually eligible individuals.

(14) PROGRAMMATIC OVERSIGHT VESTED IN THE SECRETARY.—MACPAC's authority to make recommendations in accordance with this section shall not affect, or be considered to duplicate, the Secretary's authority to carry out Federal responsibilities with respect to Medicaid and CHIP.

(c) MEMBERSHIP.—

(1) NUMBER AND APPOINTMENT.—MACPAC shall be composed of 17 members appointed by the Comptroller General of the United States.

(2) QUALIFICATIONS.—

(A) IN GENERAL.—The membership of MACPAC shall include individuals who have had direct experience as enrollees or parents or caregivers of enrollees in Medicaid or CHIP and individuals with national recognition for their expertise in Federal safety net health programs, health finance and economics, actuarial science, health plans and integrated delivery systems, reimbursement for health care, health information technology, and other providers of health services, public health, and other related fields, who provide a mix of different professions, broad geographic representation, and a balance between urban and rural representation.

(B) INCLUSION.—The membership of MACPAC shall include (but not be limited to) physicians, dentists, and other health professionals, employers, third-party payers, and individuals with expertise in the delivery of health services. Such membership shall also include representatives of children, pregnant women, the elderly, individuals with disabilities, caregivers, and dually eligible individuals, current or former representatives of State agencies responsible for administering Medicaid, and current or former representatives of State agencies responsible for administering CHIP.

(C) MAJORITY NONPROVIDERS.—Individuals who are directly involved in the provision, or management of the delivery, of items and services covered under Medicaid or CHIP shall not constitute a majority of the membership of MACPAC.

(D) ETHICAL DISCLOSURE.—The Comptroller General of the United States shall establish a system for public disclosure by members of MACPAC of financial and other potential conflicts of interest relating to such members. Members of MACPAC shall be treated as employees of Congress for purposes of applying title I of the Ethics in Government Act of 1978 (Public Law 95–521).

(3) TERMS.—

(A) IN GENERAL.—The terms of members of MACPAC shall be for 3 years except that the Comptroller General of the United States shall designate staggered terms for the members first appointed.

(B) VACANCIES.—Any member appointed to fill a vacancy occurring before the expiration of the term for which the member's predecessor was appointed shall be appointed only for the remainder of that term. A member may serve after the expiration of that member's term until a successor has taken office. A vacancy in MACPAC shall be filled in the manner in which the original appointment was made.

(4) COMPENSATION.—While serving on the business of MACPAC (including travel time), a member of MACPAC shall be entitled to compensation at the per diem equivalent of the rate provided for level IV of the Executive Schedule under section 5315 of title 5, United States Code; and while so serving away from home and the member's regular place of business, a member may be allowed travel expenses, as authorized by the Chairman of MACPAC. Physicians serving as personnel of MACPAC may be provided a physician comparability allowance by MACPAC in the same manner as Government physicians may be provided such an allowance by an agency under section 5948 of title 5, United States Code, and for such purpose subsection (i) of such section shall apply to MACPAC in the same manner as it applies to the Tennessee Valley Authority. For purposes of pay (other than pay of members of MACPAC) and employment benefits, rights, and privileges, all personnel of MACPAC shall be treated as if they were employees of the United States Senate.

(5) CHAIRMAN; VICE CHAIRMAN.—The Comptroller General of the United States shall designate a

member of MACPAC, at the time of appointment of the member as Chairman and a member as Vice Chairman for that term of appointment, except that in the case of vacancy of the Chairmanship or Vice Chairmanship, the Comptroller General of the United States may designate another member for the remainder of that member's term.

(6) MEETINGS.—MACPAC shall meet at the call of the Chairman.

(d) DIRECTOR AND STAFF; EXPERTS AND CONSULTANTS.—Subject to such review as the Comptroller General of the United States deems necessary to assure the efficient administration of MACPAC, MACPAC may—

(1) employ and fix the compensation of an Executive Director (subject to the approval of the Comptroller General of the United States) and such other personnel as may be necessary to carry out its duties (without regard to the provisions of title 5, United States Code, governing appointments in the competitive service);

(2) seek such assistance and support as may be required in the performance of its duties from appropriate Federal and State departments and agencies;

(3) enter into contracts or make other arrangements, as may be necessary for the conduct of the work of MACPAC (without regard to section 3709 of the Revised Statutes (41 USC 5));

(4) make advance, progress, and other payments which relate to the work of MACPAC;

(5) provide transportation and subsistence for persons serving without compensation; and

(6) prescribe such rules and regulations as it deems necessary with respect to the internal organization and operation of MACPAC.

(e) POWERS.—

(1) OBTAINING OFFICIAL DATA.—MACPAC may secure directly from any department or agency of the United States and, as a condition for receiving payments under sections 1903(a) and 2105(a), from any State agency responsible for administering Medicaid or CHIP, information necessary to enable it to carry out this section. Upon request of the Chairman, the head of that department or agency shall furnish that information to MACPAC on an agreed upon schedule.

(2) DATA COLLECTION.—In order to carry out its functions, MACPAC shall—

(A) utilize existing information, both published and unpublished, where possible, collected and assessed either by its own staff or under other arrangements made in accordance with this section;

(B) carry out, or award grants or contracts for, original research and experimentation, where existing information is inadequate; and

(C) adopt procedures allowing any interested party to submit information for MACPAC's use in making reports and recommendations.

(3) ACCESS OF GAO TO INFORMATION.—The Comptroller General of the United States shall have unrestricted access to all deliberations, records, and nonproprietary data of MACPAC, immediately upon request.

(4) PERIODIC AUDIT.—MACPAC shall be subject to periodic audit by the Comptroller General of the United States.

(f) FUNDING.—

(1) REQUEST FOR APPROPRIATIONS.—MACPAC shall submit requests for appropriations (other than for fiscal year 2010) in the same manner as the Comptroller General of the United States submits requests for appropriations, but amounts appropriated for MACPAC shall be separate from amounts appropriated for the Comptroller General of the United States.

(2) AUTHORIZATION.—There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this section.

(3) FUNDING FOR FISCAL YEAR 2010.—

(A) IN GENERAL.—Out of any funds in the Treasury not otherwise appropriated, there is appropriated to MACPAC to carry out the provisions of this section for fiscal year 2010, $9,000,000.

(B) TRANSFER OF FUNDS.—Notwithstanding section 2104(a)(13), from the amounts appropriated in such section for fiscal year 2010, $2,000,000 is hereby transferred and made available in such fiscal year to MACPAC to carry out the provisions of this section.

(4) AVAILABILITY.—Amounts made available under paragraphs (2) and (3) to MACPAC to carry out the provisions of this section shall remain available until expended.

Biographies of Commissioners

Melanie Bella, MBA (Chair), is head of partnerships and policy at Cityblock Health, which facilitates health care delivery for low-income urban populations, particularly Medicaid beneficiaries and those dually eligible for Medicaid and Medicare. Previously, she served as the founding director of the Medicare-Medicaid Coordination Office at the Centers for Medicare & Medicaid Services (CMS), where she designed and launched payment and delivery system demonstrations to improve quality and reduce costs. Ms. Bella also was the director of the Indiana Medicaid program, where she oversaw Medicaid, the State Children's Health Insurance Program (CHIP), and the state's long-term care insurance program. Ms. Bella received her master of business administration from Harvard University.

Charles Milligan, JD, MPH (Vice Chair), is the national dual eligible special needs plans executive director for UnitedHealthcare Community & State. Previously, he was chief executive officer (CEO) of UnitedHealthcare's Community Plan in New Mexico, a Medicaid managed care organization with enrolled members in all Medicaid eligibility categories. Mr. Milligan is a former state Medicaid and CHIP director in New Mexico and Maryland. He also served as executive director of the Hilltop Institute, a health services research center at the University of Maryland at Baltimore County, and as vice president at The Lewin Group. Mr. Milligan directed the 2005–2006 Commission on Medicaid and has conducted Medicaid-related research projects in numerous states. He received his master of public health from the University of California, Berkeley, and his law degree from Harvard Law School.

Thomas Barker, JD, is a partner at Foley Hoag, LLP, where he specializes in Medicaid and Medicare regulatory, coverage, and reimbursement issues and is a member of the executive committee. He also has a pro bono law practice focusing on health care issues facing immigrants. Previously, he held numerous positions within the U.S. Department of Health and Human Services (HHS), including acting general counsel, counselor to the Secretary of HHS, chief legal officer for CMS, and senior health policy counselor to the administrator of CMS. Mr. Barker received his law degree from Suffolk University School of Law.

Tricia Brooks, MBA, is a research professor at the McCourt School of Public Policy at Georgetown University and a senior fellow at the Georgetown University Center for Children and Families (CCF), an independent, non-partisan policy and research center whose mission is to expand and improve health coverage for children and families. At CCF, Ms. Brooks focuses on issues relating to the policy, program administration, and quality of Medicaid and CHIP coverage for children and families. Prior to joining CCF, she served as the founding CEO of New Hampshire Healthy Kids, a legislatively created non-profit corporation that administered CHIP in the state, and served as the Medicaid and CHIP consumer assistance coordinator. Ms. Brooks holds a master of business administration from Suffolk University.

Brian Burwell is vice president, healthcare policy and research, at Ventech Solutions, where his work includes research, consulting services, policy analysis, and technical assistance in financing and delivery of long-term services and supports, and data analysis related to integrated care models for dually eligible beneficiaries and managed long-term services and supports. Previously, Mr. Burwell was a senior executive in the government health and human services unit at Watson Health in Cambridge, Massachusetts. He received his bachelor of arts degree from Dartmouth College.

Martha Carter, DHSc, MBA, APRN, CNM, is the founder and former CEO of FamilyCare Health Centers, a community health center that serves four counties in south-central West Virginia. Dr. Carter practiced as a certified nurse-midwife in Kentucky, Ohio, and West Virginia for 20 years and is a member of the West Virginia Alliance for Creative Health Solutions, a practice-led research and advocacy network. Dr. Carter was a Robert Wood Johnson Foundation Executive Nurse Fellow in 2005–2008 and received the Robert Wood Johnson Foundation Community Health Leader award in 1999. She holds a doctorate of health sciences from

A.T. Still University in Mesa, Arizona, and a master of business administration from West Virginia University in Morgantown, West Virginia.

Frederick Cerise, MD, MPH, is president and CEO of Parkland Health and Hospital System, a large public safety-net health system in Dallas, Texas. Previously, he oversaw Medicaid and other programs for the state of Louisiana as secretary of the Department of Health and Hospitals. Dr. Cerise also held the position of medical director and other leadership roles at various health care facilities operated by Louisiana State University. He began his career as an internal medicine physician and spent 13 years treating patients and teaching medical students in Louisiana's public hospital system. Dr. Cerise received his degree in medicine from Louisiana State University and his master of public health from Harvard University.

Kisha Davis, MD, MPH, is regional medical director for Aledade. Previously, Dr. Davis was Maryland medical director for VaxCare Corporation; worked as a family physician at CHI Health Care in Rockville, Maryland; and served as program manager at CFAR in Philadelphia, Pennsylvania, where she supported projects for family physicians focused on payment reform and practice transformation to promote health system change. Dr. Davis has also served as the medical director and director of community health at CHI and as a family physician at a federally qualified health center (FQHC) in Maryland. As a White House Fellow at the U.S. Department of Agriculture, she established relationships among leaders of FQHCs and the Women, Infants, and Children nutrition program. Dr. Davis received her degree in medicine from the University of Connecticut and her master of public health from Johns Hopkins University.

Toby Douglas, MPP, MPH, is senior vice president, national Medicaid, at Kaiser Permanente. Previously, Mr. Douglas was senior vice president for Medicaid solutions at Centene Corporation, and prior to that, a long-standing state Medicaid official, serving for 10 years as an executive in California Medicaid. He served as director of the California Department of Health Care Services and was director of California Medicaid for six years, during which time he also served as a board member of the National Association of Medicaid Directors and as a CHIP director. Earlier in his career, Mr. Douglas worked for the San Mateo County Health Department in California, as a research associate at the Urban Institute, and as a VISTA volunteer. He received his master of public policy and master of public health from the University of California, Berkeley.

Leanna George is the parent of a teenager with a disability who is covered under Medicaid and a child covered under CHIP. A resident of Benson, North Carolina, Ms. George is the chair of the North Carolina Council on Educational Services for Exceptional Children, a special education advisory council for the state board of education. She also serves as the secretary of the Johnston County Consumer and Family Advisory Committee, which advises the Board of the County Mental Health Center, and on the Client Rights Committee of the Autism Society of North Carolina, a Medicaid provider agency.

Darin Gordon is president and CEO of Gordon & Associates in Nashville, Tennessee, where he provides health care-related consulting services to a wide range of public- and private-sector clients. Previously, he was director of Medicaid and CHIP in Tennessee for 10 years, where he oversaw various program improvements, including the implementation of a statewide value-based purchasing program. During this time, he served as president and vice president of the National Association of Medicaid Directors for a total of four years. Before becoming director of Medicaid and CHIP, he was the chief financial officer and director of managed care programs for Tennessee's Medicaid program. Mr. Gordon received his bachelor of science degree from Middle Tennessee State University.

Christopher Gorton, MD, MHSA, was formerly president of public plans at Tufts Health Plan, a non-profit health plan in Massachusetts, Rhode Island, and New Hampshire, as well as CEO of a regional health plan that was acquired by the Inova Health System of Falls Church, Virginia. Other positions held include vice president for medical

management and worldwide health care strategy for Hewlett Packard Enterprise Services and president and chief medical officer for APS Healthcare, a behavioral health plan and care management organization based in Silver Spring, Maryland. After beginning his career as a practicing pediatrician in FQHCs in Pennsylvania and Missouri, Dr. Gorton served as chief medical officer in the Pennsylvania Department of Public Welfare. Dr. Gorton received his degree in medicine from Columbia University's College of Physicians and Surgeons and his master of health systems administration from the College of Saint Francis in Joliet, Illinois.

Stacey Lampkin, FSA, MAAA, MPA, is an actuary and principal with Mercer Government Human Services Consulting, where she has led actuarial work for several state Medicaid programs. She previously served as an actuary and assistant deputy secretary for Medicaid finance and analytics at Florida's Agency for Health Care Administration and as an actuary at Milliman. She has also served as a member of the Federal Health Committee of the American Academy of Actuaries (AAA), as vice chairperson of AAA's uninsured work group, and as a member of the Society of Actuaries project oversight group for research on evaluating medical management interventions. Ms. Lampkin is a fellow of the Society of Actuaries and a member of the AAA. She received her master of public administration from Florida State University.

Sheldon Retchin, MD, MSPH, is professor of medicine and public health at The Ohio State University in Columbus, Ohio. Dr. Retchin's research and publications have addressed costs, quality, and outcomes of health care as well as workforce issues. From 2015 until 2017, he was executive vice president for health sciences and CEO of the Wexner Medical Center. From 2003 until 2015, he served as senior vice president for health sciences at Virginia Commonwealth University (VCU) and as CEO of the VCU Health System, in Richmond, Virginia. Dr. Retchin also led a Medicaid health maintenance organization, Virginia Premier, with approximately 200,000 covered lives. Dr. Retchin received his medical and public health degrees from The University of North Carolina at Chapel Hill, where he was also a Robert Wood Johnson Clinical Scholar.

William Scanlon, PhD, is a consultant for the West Health Institute. He began conducting health services research on the Medicaid and Medicare programs in 1975, with a focus on such issues as the provision and financing of long-term care services and provider payment policies. He previously held positions at Georgetown University and the Urban Institute, was managing director of health care issues at the U.S. Government Accountability Office, and served on the Medicare Payment Advisory Commission. Dr. Scanlon received his doctorate in economics from the University of Wisconsin, Madison.

Peter Szilagyi, MD, MPH, is professor of pediatrics, executive vice chair, and vice chair for research in the Department of Pediatrics at the Mattel Children's Hospital at the University of California, Los Angeles (UCLA). Prior to joining UCLA, he served as chief of the division of general pediatrics and professor of pediatrics at the University of Rochester and as associate director of the Center for Community Health within the University of Rochester's Clinical Translational Research Institute. His research has addressed CHIP and child health insurance, access to care, quality of care, and health outcomes, including the delivery of primary care with a focus on immunization delivery, health care financing, and children with chronic disease. From 1986 to 2014, he served as chairman of the board of the Monroe Plan for Medical Care, a large Medicaid and CHIP managed care plan in upstate New York. He is editor-in-chief of Academic Pediatrics and has served as the president of the Academic Pediatric Association. Dr. Szilagyi received his medical and public health degrees from the University of Rochester.

Katherine Weno, DDS, JD, is an independent public health consultant. Previously, she held positions at the Centers for Disease Control and Prevention, including senior advisor for the National Center for Chronic Disease Prevention and Health Promotion and director of the Division of Oral Health. Dr. Weno also served as the director of the Bureau of Oral Health in the Kansas Department of Health and Environment. Previously, she was the CHIP advocacy project director at Legal Aid of Western Missouri and was an associate attorney at Brown, Winick, Graves, Gross, Baskerville, and Shoenebaum in Des Moines, Iowa. Dr. Weno started her career as a dentist in Iowa and Wisconsin. She earned degrees in dentistry and law from the University of Iowa.

Biographies of Staff

Kirstin Blom, MIPA, is the contracting officer and a principal analyst. Before joining MACPAC, Ms. Blom was an analyst in health care financing at the Congressional Research Service. Before that, Ms. Blom worked as a principal analyst at the Congressional Budget Office, where she estimated the cost of proposed legislation on the Medicaid program. Ms. Blom has also been an analyst for the Medicaid program in Wisconsin and for the U.S. Government Accountability Office (GAO). She holds a master of international public affairs from the University of Wisconsin, Madison.

James Boissonnault, MA, is the chief information officer. Prior to joining MACPAC, he was the information technology (IT) director and security officer for OnPoint Consulting. At OnPoint, he worked on several federal government projects, including projects for the Missile Defense Agency, the U.S. Department of the Treasury, and the U.S. Department of Agriculture. He has nearly two decades of IT and communications experience. Mr. Boissonnault holds a master of arts in Slavic languages and literatures from The University of North Carolina and a bachelor of arts in Russian from the University of Massachusetts.

Kacey Buderi, MPA, is a senior analyst. Prior to joining MACPAC, she worked in the Center for Congressional and Presidential Studies at American University and completed internships in the office of U.S. Senator Ed Markey and at the U.S. Department of Health and Human Services (HHS). Ms. Buderi holds a master of public administration and a bachelor of arts in political science, both from American University.

Kathryn Ceja is the director of communications. Previously, she served as lead spokesperson for Medicare issues in the Centers for Medicare & Medicaid Services (CMS) press office. Prior to her tenure in the press office, Ms. Ceja was a speechwriter for the Secretary of HHS as well as the speechwriter for a series of CMS administrators. Ms. Ceja holds a bachelor of arts in international studies from American University.

Moira Forbes, MBA, is a policy director focusing on payment policy and the design, implementation, and effectiveness of program integrity activities in Medicaid and the State Children's Health Insurance Program (CHIP). Previously, she served as director of the division of health and social service programs in the Office of Executive Program Information at HHS and as a vice president in the Medicaid practice at The Lewin Group. At Lewin, Ms. Forbes worked with every state on issues relating to program integrity and eligibility quality control in Medicaid and CHIP. She has extensive experience with federal and state policy analysis, Medicaid program operations, and delivery system design. Ms. Forbes has a master of business administration from The George Washington University and a bachelor's degree in Russian and political science from Bryn Mawr College.

Ryan Greenfield, MPP, is a senior analyst. Prior to joining MACPAC, Mr. Greenfield worked as a senior program analyst in the HHS Office of the Assistant Secretary for Financial Resources, focused on Medicaid financing, payment, and prescription drug issues. Previously, he worked on a variety of health policy issues for the Health Subcommittee of the U.S. House of Representatives Committee on Ways and Means, the federal Office of Management and Budget (OMB), and GAO. Mr. Greenfield holds a master of public policy from Georgetown University and a bachelor of arts in economics and political science from the University of Wisconsin, Madison.

Martha Heberlein, MA, is a principal analyst. Prior to joining MACPAC, she was the research manager at the Georgetown University Center for Children and Families, where she oversaw a national survey on Medicaid and CHIP eligibility, enrollment, and renewal procedures. Ms. Heberlein holds a master of arts in public policy with a concentration in philosophy and social policy from The George Washington University and a bachelor of science in psychology from James Madison University.

Kayla Holgash, MPH, is an analyst focusing on payment policy. Prior to joining MACPAC, Ms. Holgash worked as a senior research assistant in the Department of Health Policy and Management at The George Washington University and as a health policy legislative intern for U.S. Senator Charles Grassley. Before that, she served as the executive manager of the Health and Wellness Network for the Homewood Children's Village, a non-profit organization in Pittsburgh, Pennsylvania. Ms. Holgash holds a master of public health from The George Washington University and a bachelor of science in public and community health from the University of Maryland.

Tamara Huson, MSPH, is an analyst. Prior to joining MACPAC, she worked as a research assistant in the Department of Health Policy and Management at The University of North Carolina. She also worked for the American Cancer Society and completed internships with the North Carolina General Assembly and the Foundation for Health Leadership and Innovation. Ms. Huson holds a master of science in public health from The University of North Carolina at Chapel Hill and a bachelor of arts in biology and global studies from Lehigh University.

Joanne Jee, MPH, is the congressional liaison and a principal analyst focusing on CHIP and children's coverage. Prior to joining MACPAC, she was a program director at the National Academy for State Health Policy, where she focused on children's coverage issues. Ms. Jee also has been a senior analyst at GAO, a program manager at The Lewin Group, and a legislative analyst in the HHS Office of Legislation. Ms. Jee has a master of public health from the University of California, Los Angeles, and a bachelor of science in human development from the University of California, Davis.

Allissa Jones, MTA, is the executive assistant. Prior to joining MACPAC, Ms. Jones worked as an intern for Kaiser Permanente, where she helped coordinate health and wellness events in the Washington, DC, area. Ms. Jones holds a master of tourism administration from The George Washington University and a bachelor of science with a concentration in health management from Howard University.

Kate Kirchgraber, MA, is a policy director. Prior to joining MACPAC, she led the private health insurance and Medicaid and CHIP teams at the CMS Office of Legislation. She has held health policy and budget analysis positions on the federal and state levels, including with the U.S. Senate Committee on Finance, OMB, and the New York State Assembly Ways and Means Committee. She also has worked as a private consultant on Medicaid, health coverage, and financing issues. Ms. Kirchgraber has a master of arts in teaching from the State University of New York at Albany and a bachelor of arts in economics and history from Fordham University.

Erin McMullen, MPP, is a principal analyst. Prior to joining MACPAC, she served as the chief of staff in the Office of Health Care Financing at the Maryland Department of Health. Ms. McMullen also has been a senior policy advisor in the Office of Behavioral Health and Disabilities at the Maryland Department of Health and a legislative policy analyst for the Maryland General Assembly's Department of Legislative Services. Ms. McMullen holds a master of public policy from American University and a bachelor's degree in economics and social sciences from Towson University.

Jerry Mi is a research assistant. Prior to joining MACPAC, Mr. Mi interned for the U.S. House of Representatives Committee on Energy and Commerce, the Health Resources and Services Administration, the Food and Drug Administration, and the National Institutes of Health. Mr. Mi recently graduated from the University of Maryland with an undergraduate degree in biological sciences.

Breshay Moore is the communications specialist. Prior to joining MACPAC, Ms. Moore worked as a communications intern for Better Markets, a nonprofit organization in Washington, DC, where she supported press engagement and updated media databases. She also was a junior transcriber at Verb8tm Captioning & Transcription Software and Services, Inc., where she translated audio for company partners and clients. Ms. Moore

graduated from Towson University with a bachelor of arts in mass communications.

Robert Nelb, MPH, is a principal analyst focusing on issues related to Medicaid payment and delivery system reform. Prior to joining MACPAC, he served as a health insurance specialist at CMS, leading projects related to CHIP and Medicaid Section 1115 demonstrations. Mr. Nelb has a master of public health and a bachelor's degree in ethics, politics, and economics from Yale University.

Kevin Ochieng is an IT specialist. Before joining MACPAC, Mr. Ochieng was a systems analyst and desk-side support specialist at American Institutes for Research, and prior to that, an IT consultant at Robert Half Technology, where he focused on IT system administration, user support, network support, and PC deployment. Previously, he served as an academic program specialist at the University of Maryland University College. Mr. Ochieng has a bachelor of science in computer science and mathematics from Washington Adventist University.

Chris Park, MS, is a principal analyst. He focuses on issues related to managed care payment and Medicaid drug policy and has lead responsibility for MACStats. Prior to joining MACPAC, he was a senior consultant at The Lewin Group, where he provided quantitative analysis and technical assistance on Medicaid policy issues, including managed care capitation rate setting, pharmacy reimbursement, and cost-containment initiatives. Mr. Park holds a master of science in health policy and management from the Harvard School of Public Health and a bachelor of science in chemistry from the University of Virginia.

Aaron Pervin, MPH, is a senior analyst. Prior to joining MACPAC, Mr. Pervin worked for Results for Development, an international consulting firm that advises foreign governments on health finance and provider payment issues related to insurance coverage for low-income and vulnerable populations. Earlier, Mr. Pervin worked for the Commonwealth of Massachusetts at the Health Policy Commission, where his work focused on alternative payment arrangements and delivery system reform. Mr. Pervin holds a master of public health from Harvard University and a bachelor of arts in political science from Reed College.

Ken Pezzella, CGFM, is the chief financial officer. He has more than 15 years of federal financial management and accounting experience in both the public and private sectors. Mr. Pezzella also has broad operations and business experience, and is a proud veteran of the U.S. Coast Guard. He holds a bachelor of science in accounting from Strayer University and is a certified government financial manager.

Kimberley Pringle is the administrative assistant. Prior to joining MACPAC, she was the executive assistant to the executive director of the NOVA Foundation for Northern Virginia Community College in Annandale, Virginia. Ms. Pringle attended Atlantic Community College where she received a certificate in computer technology.

Sameer Rao is a research assistant. Prior to joining MACPAC, Mr. Rao held internships at the U.S. Senate Committee on Finance, the Better Medicare Alliance, and the Alliance for Community Health Plans. Mr. Rao holds a bachelor of science in public health from The George Washington University where he is also completing a master of public health with a concentration in health policy.

Brian Robinson is a financial analyst. Prior to joining MACPAC, he worked as a business intern at the Joint Global Climate Change Research Institute, a partnership between the University of Maryland and Pacific Northwest National Laboratory. Mr. Robinson holds a bachelor of science in accounting from the University of Maryland.

Anne L. Schwartz, PhD, is the executive director. She previously served as deputy editor at *Health Affairs*; vice president at Grantmakers In Health, a national organization providing strategic advice and educational programs for foundations and corporate giving programs working on health issues; and special assistant to the executive director and senior analyst at the Physician Payment Review Commission, a precursor to the Medicare Payment

Advisory Commission. Earlier, she held positions on committee and personal staff for the U.S. House of Representatives. Dr. Schwartz earned a doctorate in health policy from the School of Hygiene and Public Health at Johns Hopkins University.

Kristal Vardaman, PhD, MSPH, is a principal analyst focusing on long-term services and supports and on high-cost, high-need populations. Previously, she was a senior analyst at GAO and a consultant at Avalere Health. Dr. Vardaman earned a doctorate in public policy and administration from The George Washington University. She also holds a master of science in public health from The University of North Carolina at Chapel Hill and a bachelor of science from the University of Michigan.

Ricardo Villeta, MBA, is the deputy director of operations, finance, and management with overall responsibility for operations related to financial management and budget, procurement, human resources, and IT. Previously, he was the senior vice president and chief management officer for the Academy for Educational Development, a private non-profit educational organization that provides training, education, and technical assistance throughout the United States and in more than 50 countries. Mr. Villeta holds a master of business administration from The George Washington University and a bachelor of science from Georgetown University.

John Wedeles, DrPH, is a principal analyst. Prior to joining MACPAC, Dr. Wedeles served as associate director of the division of analytics and policy research for the District of Columbia Department of Health Care Finance (DHCF), where he directed research activities to support policy and budget development for the District of Columbia's Medicaid agency. Previously, Dr. Wedeles served as a data analyst for DHCF, a researcher for Westat, and program manager for the Manhattan Tobacco Cessation Program at New York University. Dr. Wedeles holds a doctor of public health in health behavior from the Milken Institute School of Public Health at The George Washington University and a master of public health policy from the Mailman School of Public Health at Columbia University.

Eileen Wilkie is the administrative officer and is responsible for coordinating human resources, office maintenance, travel, and Commission meetings. Previously, she held similar roles at National Public Radio and the National Endowment for Democracy. Ms. Wilkie has a bachelor's degree in political science from the University of Notre Dame.

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