Report to Congress on Medicaid and CHIP

MARCH 2018

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, 42 U.S.C. 1396, 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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MACPAC
Medicaid and CHIP Payment and Access Commission

March 15, 2018

The Honorable Mike Pence
President of the Senate
S-212 The Capitol
Washington, DC 20510

The Honorable Paul Ryan
Speaker of the House
H-232 The Capitol
Washington, DC 20515

Dear Mr. Vice President and Mr. Speaker:

On behalf of the Medicaid and CHIP Payment and Access Commission (MACPAC), I am pleased to submit the March 2018 Report to Congress on Medicaid and CHIP.

This report focuses on three aspects of Medicaid of high interest to Congress as it considers opportunities for the program to improve efficiency and impact in the delivery of critical health services to over 80 million low-income beneficiaries:

- streamlining the authorities states can use to run their managed care programs;
- promoting use of telehealth as a strategy for addressing access barriers; and
- understanding how disproportionate share hospitals (DSH) have been affected by changes in insurance coverage.

Our report presents recommendations and analyses backed up by analyses of administrative data and reviews of federal and state policies in each of these areas.

Streamlining Managed Care Authorities. Managed care is now the dominant delivery system in Medicaid, with over 80 percent of beneficiaries receiving their health care through some type of managed care.

States can now use three separate legal authorities to implement a Medicaid managed care program: Section 1115 and Section 1915 waiver authorities, and Section 1932 state plan authority. These authorities differ in a variety of ways, including application requirements and process, the duration of the approval period, and reporting requirements. It is the Commission's view that these processes could be streamlined, reducing administrative burdens without compromising beneficiary protections. Accordingly, the Commission recommends that Congress should:

- amend Section 1932(a)(2) to allow states to require all beneficiaries to enroll in comprehensive Medicaid managed care programs under state plan authority;

- extend approval and renewal periods for all Section 1915(b) waivers from two to five years; and
- revise Section 1915(c) waiver authority to permit Section 1915(c) waivers to waive freedom of choice and selective contracting.

Allowing states to have a more streamlined mechanism to select managed care as their delivery system and to require beneficiaries to enroll in such systems is appropriate at this time, based on the number and types of beneficiaries already enrolled in such systems and their experiences; the value of managed care in promoting effective integration and coordination of care; the current federal regulatory framework and the protections and assurances it provides; the accountability of states to their own constituents and beneficiaries; and the need for states to direct limited resources to activities with proven direct impact on plan performance, beneficiary experience, and costs.

Telehealth. Chapter 2 describes coverage of telehealth in state Medicaid programs, the factors states weigh in designing their policy, and evidence about telehealth in areas of particular importance to Medicaid: oral health, behavioral health, maternity care, and high-cost, high-need populations. Federal policy places few restrictions in terms of adopting or designing telehealth coverage; as a result, states have wide flexibility in defining telehealth as well as in establishing restrictions on coverage.

Although advances in technology offer great hopes for our ability to improve access to services in rural areas as well as to highly specialized services where the supply of providers is limited, evidence on the effectiveness and outcomes of telehealth is mixed. Few published studies address the effects of telehealth in Medicaid specifically; states seeking to implement or expand coverage of telehealth would likely benefit from additional research as well as from the experiences of other states.

Required Analysis of DSH Allotments. The report's final chapter fulfills MACPAC's annual, statutorily mandated obligation to report on Medicaid DSH allotments. The Commission continues to find little meaningful relationship between 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. Total hospital charity care and bad debt continue to fall, especially in states that expanded Medicaid coverage. We also find an uptick in Medicaid shortfall as a result of increased Medicaid enrollment. Now that Congress has delayed DSH allotment reductions for two years, the Commission will explore opportunities to improve the targeting of DSH payments in future reports.

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,

Penny Thompson, MPA
Chair

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Executive Summary: March 2018 Report to Congress on Medicaid and CHIP

In the March 2018 *Report to Congress on Medicaid and CHIP*, MACPAC addresses three aspects of Medicaid—managed care, telehealth, and disproportionate share hospital (DSH) payment—that are of high interest to Congress as it considers opportunities for the program to improve efficiency and impact in the delivery of critical health services to over 80 million low-income beneficiaries.

Medicaid has evolved from a program in which services were primarily delivered under fee for service to one in which 80 percent of beneficiaries receive their health care services through some type of managed care. Now that managed care is commonplace in Medicaid even for populations with complex health needs, and a strong regulatory framework exists that defines standards, processes, and obligations for oversight, the Commission offers recommendations for statutory changes that would provide states with a more streamlined mechanism to select managed care as their delivery system (Chapter 1).

Telehealth is the use of technology, including interactive telecommunication, to deliver medical and other health services to patients. Telehealth has potential to improve access to services in underserved areas as well as facilitate access to services for which there may be relatively few providers. States have substantial flexibility to set policies regarding which services provided via telehealth are covered and the scope of such coverage. But there are also several considerations that go beyond Medicaid, such as reliability of connectivity and provider licensure rules. Chapter 2 describes coverage of telehealth in state Medicaid programs, the factors states weigh in designing their policies, and evidence about telehealth in areas of particular importance to Medicaid: oral health, behavioral health, maternity care, and high-cost, high-need populations.

In Chapter 3, MACPAC fulfills its annual, statutorily mandated obligation to report on DSH allotments. As in previous years, the Commission continues to find no 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. We also continue to find that total hospital charity care and bad debt has continued to fall since the passage of the Patient Protection and Affordable Care Act (ACA, P. L. 111-148, as amended). In this year's analysis, we note an increase in Medicaid shortfall as a result of increased Medicaid enrollment.

A brief summary of each chapter follows.

CHAPTER 1: Streamlining Medicaid Managed Care Authority

Managed care in Medicaid has evolved from a limited pilot program in California in the late 1960s to become the predominant mode of providing coverage to people with Medicaid today. In 2015, 80 percent of Medicaid beneficiaries received health care through some form of managed care. Medicaid managed care program design has evolved over this time, serving new groups of enrollees, including those with high health care needs, and covering new services, such as long-term services and supports.

States can use three separate legal authorities to implement a Medicaid managed care program: Section 1115 waiver authority, Section 1915 waiver authority, and Section 1932 state plan authority. These authorities differ in a variety of ways, including the latitude they give to states to modify their Medicaid programs; which beneficiary populations can be required to enroll in managed care; initial approval and renewal time periods; and reporting requirements. Many states operate more than one managed care program, often under multiple authorities or through multiple waivers.

In Chapter 1, the Commission argues that allowing states a more streamlined mechanism to select managed care as their delivery system and to require beneficiaries to enroll in such systems is appropriate at this time, based on the number and types of beneficiaries already enrolled in such systems and their experiences; the value of managed care in promoting effective integration and coordination of care; the current federal regulatory framework and the protections and assurances it provides; the accountability of states to their own constituents and beneficiaries; and the need for states to direct limited resources to activities with proven direct impact on plan performance, beneficiary experience, and costs.

The Commission proposes three recommendations to update and streamline aspects of current Medicaid managed care authorities:

- Congress should amend Section 1932(a)(2) to allow states to require all beneficiaries to enroll in Medicaid managed care programs under state plan authority.
- Congress should extend approval and renewal periods for all Section 1915(b) waivers from two to five years.
- Congress should revise Section 1915(c) waiver authority to permit Section 1915(c) waivers to waive freedom of choice and selective contracting.

These recommendations would make it easier for states to administer managed care without affecting protections for beneficiaries. Although under current law, states cannot mandatorily enroll certain vulnerable populations in managed care without a waiver, the waivers themselves currently do not provide special protections for these groups. Beneficiary protections are established in statute and regulation and apply consistently across all authorities. Some of these beneficiary protections include network adequacy, marketing, quality improvement, accessible information about the plan, enrollment broker and choice-counseling, and grievances and appeals. The recommendations assume continuation of the essential elements of the current regulatory framework for Medicaid managed care.

In making these recommendations the Commission recognizes that requirements and standards alone are not sufficient. Processes and resources for oversight must also be in place at the federal and state levels; when resources are limited, vulnerable groups may be overlooked. In addition, states may differ in their ability to successfully implement and oversee managed care programs.

CHAPTER 2: Telehealth in Medicaid

Telehealth is the use of technology, including interactive telecommunication, to deliver medical and other health services to patients. Telehealth permits patients at one site to receive care or health education from providers at another site and lets patients, caregivers, and providers in one location consult with providers at a different site.

Due to its potential to improve Medicaid beneficiaries' access and help states address barriers to care, use of telehealth in Medicaid has grown. Medicaid programs currently use telehealth to deliver services for a variety of clinical conditions and populations to mitigate such barriers as an insufficient supply of providers, inadequate transportation options, and long distances and associated travel time, particularly for patients in rural and frontier areas. In the case of behavioral health, because a patient does not need to be physically present at a provider's office, telehealth may help assuage patients' concerns about confidentiality and stigma. But telehealth may also lead to inappropriate use, overuse, or increased costs.

Federal policy places few restrictions on state Medicaid programs in terms of adopting or designing telehealth coverage; it offers little guidance or information about implementation. As a result, states have wide flexibility in defining telehealth as well as in establishing restrictions on coverage. Their coverage decisions vary across multiple dimensions, including the modality they cover—for example, live video, store-and-forward, or

remote patient monitoring, covered specialties and services, providers who are authorized to deliver telehealth services, and the sites of service they allow. State telehealth coverage policies also may differ for fee-for-service and managed care delivery systems.

Chapter 2 discusses the application of telehealth to behavioral health, oral health, and maternity services, as well as to services for high-need populations, such as individuals who use home and community-based services and beneficiaries who are dually eligible for Medicaid and Medicare. The Commission finds that evidence on the effectiveness and outcomes of telehealth is mixed. Few published studies address the effects of telehealth in Medicaid specifically; states seeking to implement or expand coverage of telehealth would likely benefit from additional research as well as from the experiences of other states. Such information would help other states, providers, health plans, and the research community gain a more robust understanding of the effects of telehealth on access to care, quality of care, and cost of care for people with Medicaid.

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

Chapter 3 contains MACPAC's statutorily required annual analysis of DSH policy for making certain supplemental 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, before state DSH allotment levels were established.

The ACA included provisions to reduce DSH allotments under the assumption that increased health care coverage through Medicaid and the exchanges would lead to reductions in hospital uncompensated care and lessen the need for DSH payments. These reductions have been delayed multiple times, most recently by the Bipartisan Budget Act of 2018 (P.L. 115-123). DSH payment reductions are currently scheduled to take effect in fiscal year (FY) 2020.

In this year's analysis, we continue to find no meaningful relationship between states' DSH allotments and the three factors that Congress has asked the Commission to study:

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

We continue to find that since implementation of the ACA's coverage expansions, total hospital charity care and bad debt fell by $8.6 billion (23 percent) between 2013 and 2015, with the largest declines occurring in states that expanded Medicaid. This year, we also report that Medicaid shortfall—that 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—increased by about $3.0 billion (23 percent) because of increased Medicaid enrollment.

Although DSH allotment reductions are still two years in the future and the Centers for Medicare & Medicaid Services must still finalize its methodology for distributing DSH allotment reductions, we project that under the approach proposed in 2017, FY 2020 DSH allotment reductions for 22 states and the District of Columbia will exceed the amount that hospital charity care and bad debt declined in these states between 2013 and 2015.

The Commission plans to continue to monitor the potential effects of DSH allotment reductions on states and hospitals before these reductions take effect. The Commission is also undertaking a broader analysis of Medicaid hospital payment policy that considers all types of Medicaid payments to hospitals.

Chapter 1:

Streamlining Medicaid Managed Care Authority

Streamlining Medicaid Managed Care Authority

Recommendations

1.1 Congress should amend Section 1932(a)(2) to allow states to require all beneficiaries to enroll in Medicaid managed care programs under state plan authority.

1.2 Congress should extend approval and renewal periods for all Section 1915(b) waivers from two to five years.

1.3 Congress should revise Section 1915(c) waiver authority to permit Section 1915(c) waivers to waive freedom of choice and selective contracting.

Key Points

- Managed care is now the dominant delivery system in Medicaid; the share of beneficiaries enrolled in any form of managed care grew from 58 percent in 2002 to 80 percent in 2015.
- Three legal authorities can be used to mandate enrollment in a Medicaid managed care program: Section 1115 waiver authority, Section 1915(b) waiver authority, and Section 1932 state plan authority. These authorities differ in several ways, including scope, who can be required to enroll in managed care, initial approval and renewal time periods, and reporting requirements. Many states operate more than one managed care program, often under multiple authorities or through multiple waivers.
- Federal regulations define beneficiary protections and oversight standards required of state Medicaid agencies and managed care organizations, and these apply across all authorities.
- It is the Commission's view that allowing states a more streamlined mechanism to select managed care as their delivery system and to require beneficiaries to enroll in such systems is appropriate at this time, based on the following:
  - the numbers and types of beneficiaries already enrolled in such systems and their experiences;
  - the value of managed care in promoting effective integration and coordination of care;
  - the current federal regulatory framework and the protections and assurances it provides;
  - the accountability of states to their own constituents and beneficiaries; and
  - the need for states to direct limited resources to activities with proven direct impact on plan performance, beneficiary experience, and costs.
- The Commission also recognizes that requirements and standards alone are not sufficient; the process and resources for oversight must also be in place at the federal and state levels. When resources are limited, vulnerable groups may be overlooked. In addition, states may differ in their ability to successfully implement and oversee managed care programs.

CHAPTER 1: Streamlining Medicaid Managed Care Authority

States' use of managed care to administer the Medicaid program has increased substantially over the years. The share of Medicaid beneficiaries enrolled in any form of managed care grew from 58 percent in 2002 to 80 percent in 2015 (CMS 2016a, CMS 2013). The share of Medicaid beneficiaries enrolled in comprehensive managed care was nearly 65 percent in 2015 (MACPAC 2017a). Medicaid managed care program design has also evolved over this time, serving new groups of enrollees (e.g., low-income adults not eligible on the basis of disability) and covering new services, such as long-term services and supports.

The authorities that states can use to implement managed care in Medicaid have also evolved over time. For many years, Section 1115 of the Social Security Act (the Act) provided the only authority by which states could require individuals to enroll in managed care (P.L. 87-543). In 1981, Congress enacted specific program waiver authority under Section 1915(b) of the Act to implement mandatory managed care (OBRA 1981, P.L. 97-35). Then in 1997, the Balanced Budget Act (BBA, P.L. 105-33) created a new state plan option for managed care available under Section 1932.[1]

In light of the increasing use of and experience with managed care across states, populations and services, CMS issued a broad update to its regulatory framework for such delivery systems in 2016. The standards for states and plans with respect to network adequacy, rate development, quality assurance and performance monitoring, and beneficiary protections in enrollment, disenrollment, grievances and appeals, apply to states and plans regardless of the authority used to implement the managed care program. The changes made in 2016 also placed new requirements on managed care programs that deliver long-term services and supports.

In early 2017, the Commission began an inquiry to consider whether there might be ways to streamline Medicaid managed care authorities, with the goal of reducing administrative burdens for states making delivery system choices while continuing to ensure adequate beneficiary protections. These are goals shared by states and the federal government (CMS 2017a, CMS 2017b). After reviewing current law, the current regulatory framework, and how states have structured their managed care programs and sought federal approvals, the Commission recommends three statutory changes that would streamline managed care authority in three different ways. Specifically:

- Congress should amend Section 1932(a)(2) to allow states to require all beneficiaries to enroll in Medicaid managed care programs under state plan authority.
- Congress should extend approval and renewal periods for all Section 1915(b) waivers from two to five years.
- Congress should revise Section 1915(c) waiver authority to permit Section 1915(c) waivers to waive freedom of choice and selective contracting.

These recommendations should not be considered to be a package. That is, the adoption of any one of the recommendations does not require the adoption of the others.

It is Commission's view that allowing states a more streamlined mechanism to select managed care as their delivery system and to require beneficiaries to enroll in such systems is appropriate at this time, based on the number and types of beneficiaries already enrolled in such systems and their experiences; the value of managed care in promoting effective integration and coordination of care; the current federal regulatory framework and the protections and assurances it provides; the accountability of states to their own constituents

and beneficiaries; and the need for states to direct limited resources to activities with proven direct impact on plan performance, beneficiary experience, and costs. The Commission also recognizes that requirements and standards alone are not sufficient; the process and resources for oversight must also be in place at the federal and state levels. When resources are limited, vulnerable groups may be overlooked. In addition, states may differ in their ability to successfully implement and oversee managed care programs. These concerns will be the focus of the Commission's continuing work on Medicaid managed care.

The chapter begins by describing the current requirements and standards for states to implement Medicaid managed care programs. Next, it provides an overview of the authorities under which states can administer Medicaid managed care programs, including a comparison of those authorities. The chapter then describes three approaches to streamlining Medicaid managed care authorities, and concludes with the Commission's recommendations and its rationale for adopting them.

History of Medicaid Managed Care

The authorities that states can use to implement managed care in Medicaid have evolved over time (Box 1-1). For many years, Section 1115 was the principal authority states used to require individuals to enroll in managed care.

In the 1960s, some states began enrolling Medicaid beneficiaries in managed care programs on a pilot basis, and Medicaid managed care continued to grow in the 1970s. However, concerns were raised that plans did not provide needed care or took advantage of capitated payments by enrolling only people who rarely used care (GAO 1995). Congress passed the Health Maintenance Organization Act of 1973 (HMO Act, P.L. 93-222), which established certain requirements for health maintenance organizations (HMOs). Congress added certain requirements in the Health Maintenance Organization Amendments of 1976 (HMOA, P.L. 94-460), which amended the definition of an HMO to coordinate with the Health Maintenance Organization Act of 1973 (P.L. 93-222). The HMOA mandated that that at least 50 percent of a Medicaid-participating managed care organization's membership be non-Medicaid, non-Medicare enrollees, known as the 50/50 rule. HMOA also established certain requirements for Medicaid managed care organizations, such as standards affecting mandatory health services, and open enrollment periods.

States' use of Medicaid managed care continued to grow. In 1981, Congress enacted specific program waiver authority under Section 1915(b) to implement mandatory managed care, and changed the 50/50 rule to require that at least 25 percent of a plan's total enrollment be private insurance enrollees (the 75/25 rule). Then in 1997, BBA created a new state plan option for managed care available under Section 1932. The BBA also rescinded the 75/25 rule, which greatly expanded the market for managed care and led to more rapid growth in Medicaid.

The regulatory framework governing Medicaid managed care has also evolved over time. In the early days of Medicaid managed care, many of the requirements for states and plans were specified in the terms and conditions of waivers. As states and the federal government acquired more experience, many of these requirements were codified in federal statute. The Centers for Medicare & Medicaid Services (CMS) promulgated the first Medicaid managed care rule in 2001 after the state plan option was added to statute. The Medicaid managed care rules were substantially revised in 2016.

BOX 1-1. History of Medicaid Managed Care Authorities

1962	The Public Welfare Amendments of 1962 (P.L. 87-543) establish Section 1115, which gives broad authority to the Secretary of the U.S. Department of Health and Human Services (the Secretary) to waive compliance with any of the requirements of a number of sections of the Social Security Act for any experimental, pilot, or demonstration project.
1965	Medicaid is enacted as Title XIX of the Social Security Act (P.L. 89-97).
1968	California's Medicaid program begins contracting with comprehensive risk-based managed care plans on a pilot basis (GAO 1995).
1970s	States expand enrollment in Medicaid managed care plans during the 1970s. Controversies arise around marketing practice ethics, network adequacy, delivery system quality, and plan financial stability (Freund and Hurley 1995).
1973	The Health Maintenance Organization Act of 1973 (HMO Act of 1973, P.L. 93-222) establishes requirements for health maintenance organizations (HMOs).
1976	The Health Maintenance Organization Amendments of 1976 (P.L. 94-460) is enacted. • Amends the definition of HMO in the Social Security Act to align with the definition in the HMO Act of 1973. • Redefines basic health services as referring to mandatory Medicaid services. • Requires entities seeking risk-based contracts under Medicaid to meet federal HMO requirements. • Prohibits payments to organizations providing inpatient hospital services or any other mandated Medicaid services on a prepaid risk basis that are not qualified as an HMO.
1981	The Omnibus Budget Reconciliation Act of 1981 (OBRA 1981, P.L. 97-35) is enacted. • Establishes Section 1915(b) freedom-of-choice waivers to allow states to pursue mandatory managed care enrollment of certain Medicaid populations. • Requires Medicaid capitation payments to be actuarially sound.
1997	The Balanced Budget Act of 1997 (BBA, P.L. 105-33) is enacted. • Amends Title XIX by adding Section 1932, which permits states to mandate Medicaid managed care enrollment for most beneficiaries without obtaining a Section 1115 or Section 1915(b) waiver. • Requires states to develop and implement a quality assessment and improvement strategy that does the following: ensures coverage of emergency services, creates a system to address complaints, demonstrates adequate capacity and services, and meets certain quality standards. • Calls for independent performance reviews of Medicaid managed care organizations.

Overview of Medicaid Managed Care Authorities

Depending upon their policy goals and the design of their programs, states can implement managed care under multiple federal authorities. Many states operate more than one managed care program, often under multiple authorities or through multiple waivers. The requirements for states and plans are the same regardless of authority, as discussed later in this chapter.

Below we describe the three authorities used by states to mandate managed care enrollment and differences in key structural features.

Section 1115 waiver authority

Section 1115 waiver authority allows states to test an experimental, pilot, or demonstration project likely to assist in promoting the objectives of Medicaid. This was once the primary authority available to states to implement managed care, and states have used it to waive comparability and statewideness requirements related to eligibility, benefits, service delivery, and payment methods used by the state to administer the managed care program.

Twenty-two states implement managed care under Section 1115 waiver authority, as of June 2017. Many of these waivers are complex and used to achieve policy goals beyond managed care. For example, many states have implemented delivery system reform programs, provided enhanced behavioral health services, or introduced managed long-term services and supports (MLTSS) programs.

Application process. States use a CMS-provided template to describe their program: who will be covered, what services and care will be provided under the waiver, and how they will be provided.[2] There is no preprinted application. There is no time frame for approval and the process is often characterized by lengthy negotiations. Most Section 1115 waivers can be approved for up to five years.[3]

Budget neutrality. Many states implement managed care under Section 1115 waivers to finance other program changes. Under Section 1115 authority, states can apply savings generated from the managed care portions (and other portions) of their demonstrations to request federal matching funds for costs that are not otherwise matchable (CNOM) under the state plan, making the demonstration budget neutral (§1115(a)(2) of the Act). These CNOM expenditures have been used to finance 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.

Although many states using Section 1115 authority could operate their managed care programs under Section 1915(b) authority, doing so would limit the ability of states to use managed care savings to support additional spending under Section 1115 expenditure authority. Budget neutrality savings can accumulate over the course of the demonstration; that is, states may carry these savings forward for many years, subject to CMS approval. For example, Hawaii's Section 1115 demonstration to implement managed care was first approved in 1993, and the state continues to use savings attributed to implementing managed care to fund its uncompensated care pool today: the state carried forward more than $2 billion in managed care savings in its 2014 waiver renewal (CMS 2015a).

Transparency requirements. States must provide a public notice and comment period of at least 30 days for Section 1115 waiver proposals, and inform the public by describing the program and its goals, eligibility requirements, an estimate of changes in annual enrollment and expenditures, and the research goal of a proposed waiver. States are also required to consult federally recognized American Indian tribes located within state boundaries and to solicit advice from Indian health providers.

Eligible populations. States can require all Medicaid beneficiaries to enroll in managed care under approved Section 1115 waivers.

Monitoring and reporting. States must submit quarterly reports, which typically provide data on enrollment and information about grievances and other issues arising during the previous quarter. In addition, states must submit annual reports that describe the progress of their demonstration. According to federal regulations, several elements must be included in annual reports:

- early findings about the impact of the demonstration in meeting its objectives, including the effect of the demonstration on insurance coverage, the health care delivery system, and beneficiary outcomes;
- a summary of grievances, appeals, and any feedback received from stakeholders during post-award public forums; and,
- information on various operational aspects of the demonstration, such as the number of people enrolled, the financial performance of the demonstration, and any state legislative developments that may impact the demonstration (42 CFR 431.428).

In addition, CMS requires some states to submit other monitoring reports related to specific components of their demonstration. For example, Indiana is required to submit quarterly data on enrollee use of health savings accounts, and Texas is required to submit annual reports on payments to hospitals under its uncompensated care pool (CMS 2018, 2017d).

Evaluation. Section 1115 waivers typically have evaluation requirements. States must submit an evaluation design plan that describes the intended policy goal and how they will determine whether the waiver has been successful in achieving this goal, including evaluation methods and data sources. After an evaluation is completed by the state and approved by CMS, the evaluation must be posted publicly, either on the CMS website or the state's website.

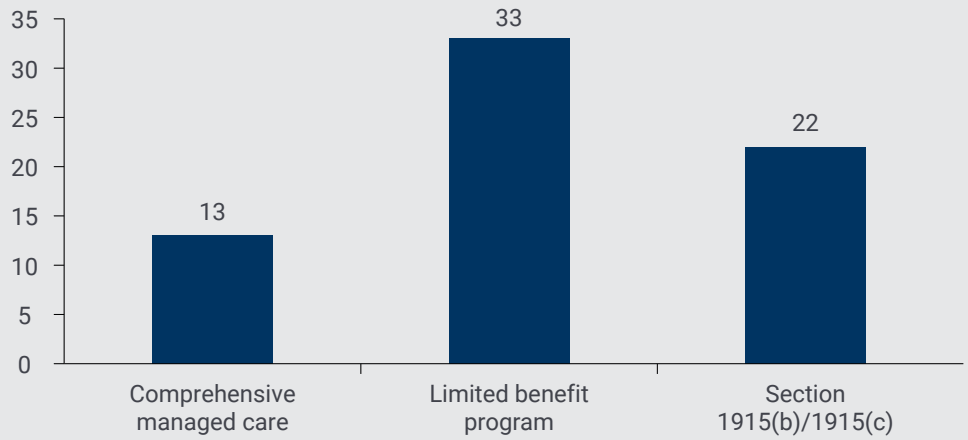
Section 1915(b) waiver authority

Section 1915(b) waiver authority, enacted in 1981as part of OBRA 1981, allows CMS and states to waive state plan requirements under Section 1902 of the Act as necessary to achieve one of four managed care program goals:

- **1915(b)(1)—primary care case management (PCCM) or specialty service arrangement.** This authority allows states to mandate enrollment in a managed care plan or PCCM program. Under both models, freedom of choice must be waived to limit the providers through whom enrollees access services.
- **1915(b)(2)—locality as a central broker.** A state may allow a county or a local government to serve as a broker to help Medicaid enrollees choose among PCCMs or competing managed care plans.
- **1915(b)(3)—sharing of cost savings with enrollees.** This authority allows a state to share the savings resulting from a managed care program with enrollees (by providing additional services) resulting from the use of more cost-effective care.
- **1915(b)(4)—restriction to specified providers.** States may use waivers to limit the number or type of providers who can provide specific Medicaid services—for example, for disease management or transportation. 1915(b)(4) applies to selective contracting by states that pay providers on a fee-for-service (FFS) basis. Freedom of choice cannot be restricted for providers of family planning services and supplies.

Section 1915(b) waivers are often referred to as freedom-of-choice waivers because the program designs limit the enrollee's choice of health care providers to those participating in the waiver (§ 1902(a)(23)(A) of the Act). In other words, Section 1915(b) waivers allow states to mandate enrollment in restricted networks (e.g., a PCCM program or

FIGURE 1-1. Number of Section 1915(b) Waivers, by Type, 2017



Notes: States can use a Section 1915(b) waiver to achieve multiple policy goals, and therefore a waiver may be included in multiple categories in this chart. For example, South Carolina uses a Section 1915(b) waiver to require that pregnant women enroll in comprehensive managed care and to provide prenatal and maternity services to these beneficiaries; this waiver is included in both comprehensive managed care and limited benefit program categories above. The Section 1915(b)/1915(c) program category includes all types of Section 1915(b) authority, including selective contracting under Section 1915(b)(4). There are four MLTSS programs operated using Section 1915(b) waivers in conjunction with 1915(c) waivers.

Source: MACPAC analysis of active Section 1915(b) waiver applications as of October 2017.

an MCO). Section 1915(b) waivers are now used primarily to achieve the following goals:

- to implement comprehensive managed care by requiring beneficiaries to receive services from a managed care plan;[4]
- to create a program that provides a limited set of benefits or services to beneficiaries;[5] or
- to establish a home- and community-based services (HCBS) program in conjunction with Section 1915(c) authority (Figure 1-1).

Application process. States seeking Section 1915(b) waivers complete a preprinted application describing the nature and scope of the proposed waiver and submit it to CMS for approval. Once a waiver application is submitted, the Secretary of the U.S. Department of Health and Human Services (the Secretary) has 90 days to make an approval decision. However, the Secretary (or CMS, operating under the Secretary's delegated authority) can stop the 90-day review period (known as stopping the clock) by writing to request additional information from the state. Once the state submits the requested information, a new 90-day period begins (42 CFR 430.25).

Section 1915(b) waivers are initially approved for two years (or up to five years if individuals dually eligible for Medicaid and Medicare are included) and can be renewed for two-year periods after the initial waiver term (42 CFR 430.25(h)(ii)).[6]

On November 6, 2017, CMS notified states of its intent to make process improvements that improve transparency and efficiency and reduce burden associated with waiver applications. For example, CMS intends to conduct an introductory discussion with states within 15 days of a Section 1915(b) waiver application submission, in which CMS and states can review the intent of the waiver, timelines, and any incomplete information. CMS also intends to make toolkits and other resources available to

states to improve the waiver application process (CMS 2017b).

Cost-effectiveness requirement. States must provide enrollment and financial documentation to demonstrate that the proposed waiver is cost-effective and efficient (42 CFR 431.55(A), 42 CFR 413.55(b)(2)(i)).

Transparency requirements. States must consult federally recognized American Indian tribes located within state boundaries and solicit advice from Indian health providers.

Eligible populations. States can require all Medicaid beneficiaries to enroll in managed care under approved Section 1915(b) waivers.

Monitoring and reporting. Section 1915(b) monitoring, although not formally codified in regulation, is generally carried out by requiring CMS approval for managed care contracting and rate-setting activity, and by specifying in the waiver's terms and conditions the reports or other information that must be submitted to CMS by the state. While reporting requirements vary by waiver type and program, states may be required to complete quarterly and annual reporting on waiver activity. These reports can include elements such as:

- enrollment and disenrollment information;
- beneficiary complaints and grievances;
- waiver spending data;
- consumer satisfaction data (e.g., results from annual Consumer Assessment of Health Care Providers and Systems surveys);
- state quality monitoring activities under the waiver, such as external quality review;
- provider enrollment and termination data; and
- network information (e.g., provider-to-enrollee ratios, number of providers).

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.

Use of Section 1915(b) in combination with Section 1915(c) HCBS waivers. Although states have the option of offering HCBS under state plan authority, Section 1915(c) waivers allow states to limit the number of individuals who can receive these services. In addition, states can use Section 1915(c) authority to waive statewideness and comparability for services provided under the waiver (that is, provide services to waiver enrollees that may not be covered or are limited under the state plan). Forty-seven states and the District of Columbia use Section 1915(c) waivers, primarily to offer HCBS to limited groups of enrollees meeting level-of-care requirements—that is, enrollees who would require institutionalization in the absence of HCBS (42 CFR 1915(c)(1)).[7]

States typically establish an HCBS waiver through Section 1915(c) authority and use Section 1915(b) authority to selectively contract with an entity to administer the program and to mandatorily enroll certain populations.[8] This is because Section 1915(c) waivers do not provide authority for states to waive beneficiaries' freedom of choice or mandatorily enroll these groups. The state must apply for each waiver separately, and meet separate statutory, regulatory, and reporting requirements established under the Act for each waiver. For example, Virginia provides HCBS to individuals who meet the nursing facility, specialized care facility, or hospital level of care under a combined Section 1915(b)-1915(c) waiver. The state designed the program, including the benefit package, through a Section 1915(c) waiver, and mandates enrollment in a managed care plan through a Section 1915(b) waiver (CMS 2017e, 2017f).

Section 1932 state plan authority

In 1997, the BBA created a new state plan option for managed care available under Section 1932. Under this authority, states may implement mandatory managed care for all Medicaid enrollees except individuals dually eligible for Medicaid and Medicare, American Indians and Alaska Natives, and children with special health care needs, including children eligible for Medicaid on the basis of disability or involvement with the child welfare system, or children receiving Supplemental Security Income (SSI).[9] States must generally give enrollees a choice of managed care entities. State plan authority to operate a managed care program does not expire and does not require renewal.

Application process. State Medicaid agencies must submit a preprinted state plan amendment (SPA) to CMS for approval. Like Section 1915(b) waivers, the Secretary has 90 days to make an approval decision, and can stop the clock by requesting additional information. The SPA must describe the proposed managed care plan in similar detail as would be required in a Section 1915(b) waiver application. For example, states must describe which beneficiaries will be enrolled in managed care, the process and requirements for enrollment and disenrollment, the access standards and requirements, and consumer protections such as grievance and appeals processes and limitations around marketing and outreach.

Fiscal impact. States must include a fiscal impact statement in its SPA application that estimates the effect of the SPA on federal spending. Unlike waivers, SPAs are not required to meet budget neutrality or cost-effectiveness requirements.

Transparency requirements. Generally, federal public notice requirements apply to SPAs only when states plan significant changes in payment methods and standards (42 CFR 447.205). The state plan must document public involvement in the design and implementation of the managed care program (42 CFR 438.50(b)(4)). Notwithstanding federal requirements, states may have their own public notice requirements. Transmittals and SPA approvals are posted to the CMS website.

Eligible populations. States can require most beneficiaries, including pregnant women, adults eligible on the basis of disability, and low-income children and families, to enroll in managed care under state plan authority. Section 1932 may not be used to mandatorily enroll members of the following populations: individuals dually eligible for Medicaid and Medicare, American Indians and Alaska Natives, and children with special health care needs (including children eligible for Medicaid on the basis of disability or involvement with the child welfare system, or children receiving SSI) (§ 1932(a)(2)). However, states can enroll individual members of these groups in a managed care program on a voluntary basis.

Monitoring and reporting. As with Section 1915(b) waivers, most monitoring and reporting of managed care under state plan authority is carried out through contract and rate-setting review and external quality review reporting.

Evaluation. Section 1932 SPAs do not include an evaluation requirement.

Comparing Managed Care Authorities

States have flexibility to design a Medicaid managed care program that reflects their policy goals and to select the authority under which to administer that program. As noted above, these authorities have different application processes and requirements, such as reporting or evaluation requirements. For example, a state might choose to implement managed care under Section 1915(b) authority or state plan authority because the application process is more predictable than the Section 1115 waiver application process. Both Section 1915(b) and state plan authority processes feature a preprinted application, and CMS is required to respond to submissions within

90 days (Table 1-1). On the other hand, a state may prefer a Section 1115 waiver to make use of budget neutrality provisions in order to finance other Medicaid policy goals.

Some of the key similarities and differences between these authorities are described below.

Similarities among managed care authorities

States use Section 1915(b), Section 1115, and state plan authority to implement similar programs, even though the underlying requirements for the three authorities may vary. For example, to enroll children and families in a Medicaid managed care program, Pennsylvania uses a Section 1915(b) waiver, Arizona uses a Section 1115 waiver, and the District of Columbia uses Section 1932 state plan authority (CMS 2017h, 2016b, 2010). The structure of these programs are similar, in that they use comprehensive risk-based managed care plans to provide Medicaid coverage to children and families. States have used different authorities to implement MLTSS programs and non-emergency medical transportation programs as well.[10]

Requirements on states and plans apply consistently regardless of authority. Standards and requirements are tied to the type of program (e.g., comprehensive managed care or primary care case management), rather than the authority under

TABLE 1-1. Comparison of Medicaid Managed Care Authorities, by Issue

Issue	Section 1115	Section 1915(b)	Section 1932 state plan
Application process; time to approval	Use of CMS template encouraged; no required time frame for approval	Use of CMS preprinted form recommended; 90-day clock	Use of CMS preprinted form required; 90-day clock
Approval and renewal periods	Up to five years	Two years (up to five if dually eligible individuals are included)	Indefinite approval period; renewal not required
Financial requirements	Budget neutrality	Cost effective	Fiscal impact statement
Transparency requirements	30 day public notice and comment period; tribal consultation	No additional requirements; tribal consultation	No additional requirements; tribal consultation
Eligible populations	Any beneficiary	Any beneficiary	Certain populations are exempt
Monitoring and reporting requirements	Quarterly and annual reports (requirements vary based on STCs)	No additional requirements	No additional requirements
Evaluation requirements	States must submit evaluation design plan, and complete an evaluation at the end of the demonstration	Independent assessment required after initial two-year approval and first renewal	None required
Managed care requirements	Managed care standards and requirements, including oversight, are same under managed care regulation		

Note: STCs are special terms and conditions.

Source: For Section 1115: 42 CFR 438.400, CMS 2017g. For Section 1915(b): CMS 2012a, 2012b. For Section 1932 state plan: MACPAC 2017b.

which it is implemented. Similarly, state and federal oversight responsibilities also are similar.

Although states cannot mandatorily enroll certain vulnerable populations in managed care without a waiver, the waivers themselves currently do not provide special protections for these groups. Beneficiary protections are established in statute and regulation and apply across all authorities. Some of these beneficiary protections include:

- **Access standards.** States are required to develop and enforce network adequacy standards, including time and distance requirements, and must assure CMS that providers for contracted plans have the capacity to meet the needs of Medicaid beneficiaries. Time and distance standards will also be required for LTSS providers, with alternate standards for those who travel to enrollees.
- **Monitoring standards.** States are required to establish a monitoring system for all managed care programs. These plans must address several areas, including: enrollee materials and customer services, marketing, medical management, availability and accessibility of services, provider oversight including network adequacy and provider capacity, and quality improvement.
- **State quality strategy.** States must establish a quality strategy and require the Medicaid MCOs they contract with to report data in support of the quality strategy. The quality strategy focuses on many areas that relate to all Medicaid populations, but must include mechanisms to assess the quality and appropriateness of care furnished to enrollees with special health care needs and those receiving LTSS.
- **Care coordination.** Managed care plans must ensure that beneficiaries have an ongoing source of care appropriate to their needs, including primary and specialty care. In addition, plans must coordinate services between care settings and must coordinate plan services with services provided outside of the plan, including services provided by other plans, by FFS Medicaid, and by community and social support organizations. States must also develop a transition policy that ensures that beneficiaries have access to services without which they would experience serious detriment to their health. This transition requirement covers transitions from FFS to managed care and from one plan to another. Beyond these standards, states must identify beneficiaries who need LTSS and beneficiaries with special health care needs, and identify any ongoing special conditions in beneficiaries that require a course of treatment or regular care monitoring.
- **Communication.** Medicaid regulation requires that managed care plans and states make information accessible and available to all beneficiaries, including the populations exempted from mandatory Medicaid managed care. There are requirements around language and cultural competency. Plans may use electronic communication, including email, text, and website postings. Plans are required to publish and routinely update provider directories, including website and physical accessibility information.
- **Enrollment broker and choice-counseling requirements.** States must establish an independent beneficiary support system to provide enrollment choice counseling and assist enrollees post-enrollment.[11] There are also standards around enrollment communication to mandatory and optional managed care beneficiaries. If states use passive enrollment, then enrollment brokers must consider beneficiaries' current source of care.
- **Grievances and appeals.** Medicaid managed care plans must establish a process for beneficiaries to submit grievances and appeal benefit determinations. Managed care plans

must perform one level of internal appeal before enrollees proceed to a state fair hearing. Other standards for grievances and appeals include plan communication to the beneficiary, time frames, recordkeeping, and continuation of benefits while a state fair hearing is pending.

Although there are no population-specific oversight requirements in the statute, Section 1932(b)(5) requires that MCOs have the capacity to provide access to care for the entire population expected to be enrolled (which would include any specific populations), and Section 1932(c)(1) requires that states have procedures for monitoring and evaluating the quality and appropriateness of care and services for the full spectrum of populations enrolled in managed care. That is, instead of naming specific subpopulations, the statute requires MCOs and states to address the needs of all enrolled populations.

Differences among managed care authorities

There are several key differences among these authorities. To determine which authority best meets their needs, states weigh the differences with the policy goals.

Scope of authority. These authorities exist along a spectrum where, on the one hand, state plan authority allows a state to implement a discrete program within Medicaid rules and requirements (generally, those outlined in Section 1902), and on the other hand, Section 1115 waivers provide broad flexibility to waive statutory requirements. In practice, this means that states generally use Section 1115 waiver authority to implement broad program changes, in which comprehensive managed care is one component of a larger waiver. For example, New Jersey uses Section 1115 waiver authority to enroll some beneficiaries in managed care, but also to implement MLTSS and a delivery system reform incentive program. The scope of Section 1915(b) waivers and state plan authority are more limited relative to authority provided to states under Section 1115.

Mandatory enrollment in managed care. These authorities differ in terms of who can be required to enroll in Medicaid managed care. As noted above, under state plan authority states can require almost all beneficiaries to enroll in Medicaid managed care, with the exception of individuals dually eligible for Medicaid and Medicare, American Indians and Alaska Natives, and children with special health care needs (including children eligible for Medicaid on the basis of disability or involvement with the child welfare system, or children receiving SSI). States can, however, require these excepted populations to enroll in managed care under Section 1915(b) authority and Section 1115 authority. For example, Kentucky mandates managed care enrollment for low-income parents and children, individuals with disabilities, individuals dually eligible for Medicaid and Medicare, and children eligible for Medicaid on the basis of involvement with the child welfare system under a Section 1915(b) waiver (CMS 2015e).

Initial approval and renewal time periods. Medicaid managed care programs can be authorized for different periods of time, depending on the authority used to implement the program and who is enrolled. SPAs are not required to be renewed, so managed care programs implemented under such authority can be implemented indefinitely. Section 1115 waivers can be approved for initial and renewal periods of up to five years, or longer in certain limited circumstances. Section 1915(b) waivers can be approved for initial and renewal periods of two years, or for periods of up to five years if the waiver includes dually eligible individuals.

Administrative burden associated with implementing programs under each authority. Because of the variation in scope, the administrative burden and expertise required to exercise each authority varies. Each authority varies in terms of the application requirements and process, how long they are approved for, and the reporting requirements associated with each authority.[12] For

example, each authority requires a different budget or financial test; states provide a budget estimate with a state plan amendment, but must meet a cost effectiveness test under Section 1915(b) authority and a budget neutrality test under Section 1115 authority. These financial tests generally require specialized resources to complete.

Streamlining Managed Care Authorities

Given the available authorities and the evolution of managed care in Medicaid, Medicaid managed care authorities should be streamlined to make it easier for states to administer managed care without affecting protections for beneficiaries. Since the inception of managed care in Medicaid, states and the federal government have gained more experience in administering these programs to meet the diverse needs of Medicaid beneficiaries, including subgroups with complex or high needs for care. Managed care standards and requirements are tied to the type of program a state administers, rather than the authority under which the program is administered. In light of this evolution, there are three areas in which Medicaid managed care could be streamlined.

Mandatory managed care enrollment

Under current law, states cannot require the following beneficiaries to enroll in comprehensive managed care programs except with a waiver: individuals dually eligible for Medicaid and Medicare, American Indians and Alaska Natives, and children with special health care needs (including children eligible for Medicaid on the basis of disability or involvement with the child welfare system, or children receiving SSI).[13] This policy reflects concerns common two decades ago that managed care arrangements for these groups should be entered into under special conditions; that is, waivers were seen as necessary to ensure adequate oversight that the needs of these beneficiaries were met.

Enrollment of these populations in comprehensive Medicaid managed care is now commonplace

BOX 1-2. Medicaid Managed Care Coverage for Dually Eligible Beneficiaries

Many dually eligible beneficiaries are enrolled in both a comprehensive Medicaid managed care plan for most medical services and a limited-benefit plan that provides oral health, behavioral health (including mental health and substance use services), long-term services and supports, or transportation services. For full-benefit dually eligible beneficiaries, comprehensive Medicaid managed care plans must cover:

- Medicare premiums and cost sharing;
- acute care services in excess of Medicare coverage limits; and
- Medicaid services not covered by Medicare, such as behavioral health care, oral health care, vision and hearing services, home- and community-based services described in the Medicaid state plan, and non-emergent medical transportation.

There is considerable variation across states in the optional Medicaid services covered. This variation results in different benefits for dually eligible beneficiaries depending on where they live (MACPAC 2016).

(Figure 1-2). This includes 27 percent of American Indian and Alaska Native Medicaid beneficiaries (about 235,000 beneficiaries); 62 percent of children enrolled in Medicaid based on a determination of a disability (about 829,000 beneficiaries); and 44 percent of children eligible for Medicaid on the basis of involvement in the child welfare system (about 406,000 beneficiaries) (MACPAC 2018).

About 16 percent of Medicaid beneficiaries (about 1.8 million) who were dually eligible for Medicaid and Medicare were enrolled in comprehensive Medicaid managed care in fiscal year 2013, including over half of dually eligible beneficiaries enrolled in comprehensive managed care in Arizona, Hawaii, Minnesota, New Jersey, and Tennessee (MACPAC 2018). Seven states mandated partial-

TABLE 1-2. Mandatory or Excluded Enrollment in Section 1915(b) Comprehensive Managed Care Waivers, by State and Population, 2015

State	Individuals dually eligible for Medicaid and Medicare	Children with special health care needs	American Indian or Alaska Native	Children eligible on the basis of involvement with the child welfare system
Total states mandating enrollment	**5**	**8**	**6**	**8**
Indiana	Not found	Not found	Voluntary	Voluntary
Iowa	Mandatory	Mandatory	Voluntary	Mandatory
Kentucky	Mandatory	Mandatory	Excluded	Mandatory
Michigan (comprehensive health care program)	Voluntary	Voluntary	Voluntary	Mandatory
Missouri	Not found	Mandatory	Mandatory	Mandatory
Nebraska	Mandatory	Mandatory	Mandatory	Mandatory
New Hampshire[1]	Mandatory	Mandatory	Mandatory	Mandatory
North Dakota[2]	Not found	Not found	Mandatory	Mandatory
Pennsylvania	Mandatory	Mandatory	Mandatory	Not found
Virginia	Not found	Mandatory	Excluded	Mandatory
West Virginia	Not found	Mandatory	Mandatory	Excluded

Notes: Individuals dually eligible for Medicaid and Medicare includes individuals who are eligible for Medicare and either (1) they are eligible to receive all state Medicaid benefits or (2) the Medicaid agency pays only for Medicare premiums and cost sharing. This table excludes South Carolina's Enhanced Prenatal and Postpartum Home Visitation Pilot Project and Managed Care program, which allows South Carolina to require pregnant women to enroll in comprehensive managed care under Section 1915(b) authority.

[1] New Hampshire operates a comprehensive managed care program for most populations under Section 1932 state plan authority and uses Section 1915(b) authority to require populations explicitly exempted under Section 1932 authority to enroll in Medicaid managed care.
[2] North Dakota enrolls the new adult group made eligible by the Medicaid expansion in the Patient Protection and Affordable Care Act (P.L. 111-148, as amended) in Medicaid managed care under Section 1915(b) waiver authority. Individuals dually eligible for Medicaid and Medicare are by definition exempt from this waiver.

Source: CMS 2016a, 2016c, 2015f.

benefit dual-eligible enrollment in comprehensive Medicaid managed care plans in 2015 (CMS 2016a). Together, the two programs provide a comprehensive set of benefits, although coverage may vary by state (Box 1-2).

Currently, 5 of the 11 states that administer a comprehensive managed care program under Section 1915(b) authority require at least one of these populations to enroll in managed care (Table 1-2). Few states explicitly exclude these populations from enrollment in managed care.

States may opt to mandate managed care enrollment for beneficiaries with complex health needs for a variety of reasons, including:

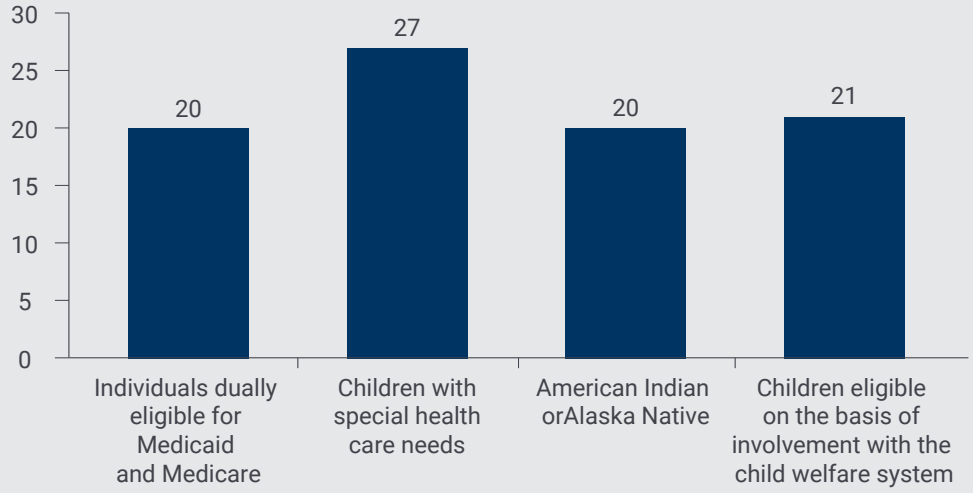
- the state has developed a robust Medicaid managed care delivery system, and has few FFS providers;
- moving to managed care may slow the rate of growth in program spending or provide more predictable cost growth; and
- managed care offers improvements in care management and coordination relative to FFS.

Historically, waivers were also viewed as necessary because they were used to ensure that beneficiaries had access to benefit packages that met their needs. Some were concerned that Medicaid managed care plans had financial incentives to limit benefits, either by excluding benefits from coverage or by imposing benefit limits, and that managed care coverage would differ substantially from coverage available under FFS.

Today, however, benefits available under Section 1915(b) programs are generally the same as those available under the state plan. In their waiver applications, states indicate what benefits are available, but they are not required to provide information on utilization management tools, such as benefit limits or prior authorization requirements.

Requiring waivers to mandatorily enroll these populations increases administrative burden for states and CMS in three ways. First, states must

FIGURE 1-2. Number of States That Require Medicaid Managed Care Enrollment, by Population, 2015



Notes: Individuals dually eligible for Medicaid and Medicare includes individuals who are eligible for Medicare and either (1) they are eligible to receive all state Medicaid benefits or (2) the Medicaid agency pays only for Medicare premiums and cost sharing.

Source: CMS 2016a.

complete the application process, and renew their programs every two to five years (depending on the authority and populations enrolled). Second, these applications require states to meet cost effectiveness or budget neutrality requirements. CMS and states must devote resources to each of these tasks. Finally, many states are operating managed care programs under multiple authorities. For example, New Hampshire mandates managed care enrollment for most state beneficiaries under Section 1932 state plan authority and has a Section 1915(b) waiver for the explicit purpose of mandating managed care enrollment for populations exempted under Section 1932. This increases administrative burden because a state would have to submit a SPA and an amendment to its Section 1915(b) waiver to make any coverage changes.

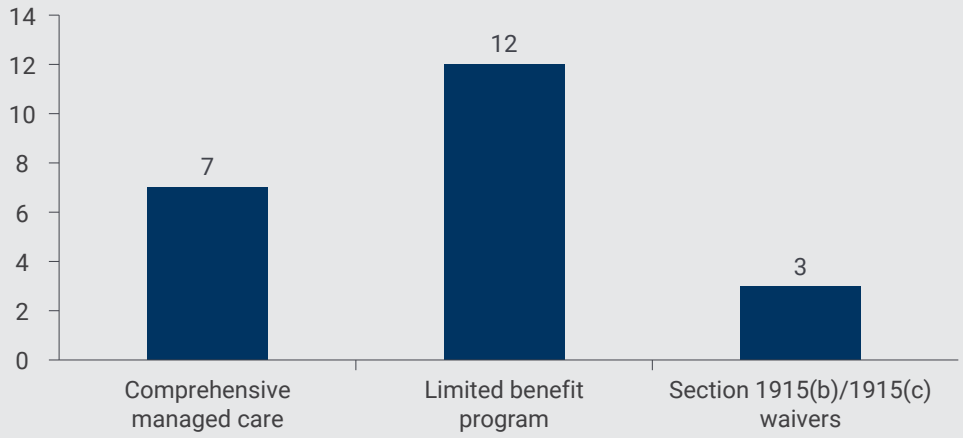
Section 1915(b) waiver approval periods

The two-year authorization period for Section 1915(b) waivers is shorter than for the other authorities: Section 1115 waivers can be approved for up to five years (or longer in certain circumstances) and state plan authority does not expire.

The short authorization period increases the administrative burden for states operating Medicaid managed care programs under Section 1915(b) waivers relative to other authorities. For example, Pennsylvania has operated most of its comprehensive managed care program under a Section 1915(b) program since 1996. Since then, the state has submitted nine renewal applications to continue to offer comprehensive managed care (CMS 2016b). Pennsylvania is not alone; Missouri and Virginia have operated comprehensive Medicaid managed care programs under Section 1915(b) waivers since the 1990s, renewing their programs multiple times (CMS 2017e, 2017i).

Other Medicaid waiver authorities can be approved for longer time periods. For example, any waiver that includes individuals dually eligible for Medicaid and Medicare can be approved for up to five years. These include Section 1115 waivers, demonstrations implemented by the CMS Federal Coordinated Health Care Office, and Section 1915(b) waivers that include dually eligible individuals. CMS may approve routine, successful,

FIGURE 1-3. Section 1915(b) Waivers with Two-Year Approval Periods, by Type, 2017



Source: MACPAC analysis of active Section 1915(b) waiver applications as of October 2017.

non-complex Section 1115(a) waivers extensions for up to 10 years (CMS 2017a).

Twenty-two of the 64 Section 1915(b) waivers that were active as of October 2017 were approved for two-year periods (Figure 1-3). Forty Section 1915(b) waivers were authorized for more than two years, including 36 approved for five-year periods.

Concurrent Section 1915(b) and Section 1915(c) waivers

States use Section 1915(b) waivers to deliver HCBS authorized separately under Section 1915(c) authority through a managed care delivery system. Section 1915(c) waivers allow states to limit the number of individuals who can receive these services. In addition, states can use Section 1915(c) authority to waive statewideness and comparability of those services. States use Section 1915(b) authority in conjunction with Section 1915(c) authority to waive freedom of choice or to selectively contract with an entity to administer the program. States must apply for each waiver separately and meet separate reporting requirements established in each waiver's special terms and conditions.

Commission Recommendations for Streamlining Medicaid Managed Care Authorities

In this report, the Commission makes three recommendations to streamline Medicaid managed care authorities. Although much of the Commission's conversation focused on recommendation 1.1, the two other recommendations focus on streamlining other features of existing waivers. These should not be considered to be a package of recommendations; that is, the adoption of any one of the recommendations does not require the adoption of the others. In addition, it is important to note that these recommendations, if adopted, would not eliminate use of Section 1915(b) waivers altogether as states seek Section 1915(b) waiver authority for purposes other than mandatory enrollment in managed care plans. For example, many states seek Section 1915(b) waiver authority to implement limited benefit plans.[14]

Recommendation 1.1

Congress should amend Section 1932(a)(2) to allow states to require all beneficiaries to enroll in Medicaid managed care programs under state plan authority.

Rationale

This recommendation would allow states to require any or all categories of Medicaid beneficiaries to enroll in managed care programs under state plan authority, including individuals dually eligible for Medicaid and Medicare, American Indians and Alaska Natives, and children with special health care needs (including children eligible for Medicaid on the basis of disability or involvement with the child welfare system, or children receiving SSI).

Under current law, states that want to require these beneficiaries to enroll in managed care programs must seek waiver authority. To do so, states must complete a waiver application and apply for renewal of such programs every two years (or five, if the waiver includes individuals dually eligible for Medicaid and Medicare). As well, states must comply with mandatory quarterly and annual reporting requirements in addition to the monitoring requirements established in managed care regulations.

Medicaid beneficiaries in groups exempt from mandatory enrollment under state plan authority typically have complex health needs that require attention to provider networks and coordination across providers and settings.

At a time when the regulatory framework for states to monitor plans and for CMS to provide oversight was less developed than now, waivers provided a structure and process to ensure accountability of managed care organizations, states, and the federal government for covering the needs of complex populations. Today, states and plans are experienced in serving these populations under managed care and the standards and oversight requirements are the same across all authorities.

The Commission had a robust discussion about whether the process of applying for and renewing waivers provides additional protections for the populations with complex health needs, with some Commissioners noting the importance of public input in a state's decision to implement Medicaid managed care and in the program's design. Commissioners also noted that many important beneficiary protections are described in regulation, rather than statute, and thus may be easier to change.

Commissioners noted that the statute requires MCOs and states to address the needs of all enrolled populations. States must document the process used to involve the public in design and implementation, and states must ensure ongoing public involvement even when such programs are implemented under the state plan. Several Commissioners noted that beneficiary advocate groups play an important role in state decisions about how managed care is implemented and administered, regardless of whether that happens in the context of a SPA or a waiver application. Commissioners also noted that the recommendation rests on the existence of the current regulatory framework that provides important beneficiary protections. Moreover, it is desirable to have a legal framework that spells out responsibilities for states and plans as well as oversight mechanisms at the state and federal level that applies regardless of the individual authorities.

The Commission's discussion of beneficiary protections raised questions about the extent to which states and the federal government provide adequate oversight of Medicaid managed care programs. The current legal framework creates obligations for states and MCOs to ensure that beneficiaries receive care appropriate to their needs. In practice, states and MCOs have varying levels of capacity and competency that affect implementation and oversight of managed care. In the months ahead, the Commission will continue to explore oversight and administration of Medicaid managed care to better understand factors that affect the care beneficiaries receive, such as program structure and design.

It is the Commission's view that the current legal framework for Medicaid managed care includes detailed requirements for states and Medicaid MCOs that help ensure that Medicaid managed plans meet the complex health needs of individuals dually eligible for Medicaid and Medicare, American Indians and Alaska Natives, and children with special health care needs (including children eligible for Medicaid on the basis of disability or involvement with the child welfare system, or children receiving SSI). These standards and requirements have been codified over time and reflect state and federal experience in providing Medicaid coverage to all populations through managed care. In addition, states and plans have obligations that are specific to the populations enrolled in their managed care programs. For example, states must develop network adequacy standards that ensure that Medicaid beneficiaries have access to needed care, including primary care providers and other specialists. Managed care plans must ensure that beneficiaries have an ongoing source of care that is appropriate to their needs and must coordinate services between settings as well as with services provided outside the managed care plan. States and plans must ensure that beneficiary communication is accessible and available to all populations, including requirements around language and cultural competency. In addition, states are required to develop not only a monitoring program that addresses many of these obligations and other aspects of the beneficiary experience in managed care, but also a state quality strategy

that assesses the quality and appropriateness of the care furnished to enrollees on an ongoing basis. Thus, the regulatory framework now in place extends to all Medicaid beneficiaries, including those with complex health needs, regardless of which authority the state uses to enroll beneficiaries in managed care.

This recommendation would streamline program management, allowing states that administer managed care under multiple authorities to consolidate their programs under a single authority, without changes to beneficiary protection or oversight. It would reduce the administrative burden associated with waiver renewals and the burden associated with waiver reporting requirements. By reducing this burden, states could redirect staff efforts toward other priorities, such as program oversight and contract management.

It is the Commission's view that, given all the considerations delineated above, states should be able to seek federal approval for mandatory enrollment of all populations through state plan authority. The recommendation assumes continuation of the essential elements of the current regulatory framework for Medicaid managed care.

Implications

Federal spending. The Congressional Budget Office has estimated that this recommendation will not affect federal Medicaid spending.

States. The implication of this recommendation varies for each state, depending on how the state operates its managed care program. Some states may prefer to maintain their current managed care arrangements. For example, a state may choose to continue to operate comprehensive managed care under Section 1115 waiver authority to preserve budget neutrality savings.

On the other hand, this recommendation could simplify administration for some states. Some states operate a single comprehensive managed care program under different authorities. For example, a state may use Section 1915(b) waiver authority to require dually eligible individuals, American Indian and Alaska Natives, and children with special health care needs in managed care and use Section 1932 state plan authority to require all other beneficiaries to enroll in managed care. States could consolidate their program under state plan authority, and would not be required to seek renewals or complete waiver-required quarterly and annual reporting requirements. States may continue to seek Section 1915(b) waivers for other reasons. For example, states may seek authority to selectively contract with prepaid inpatient health plans, prepaid ambulatory health plans, or other entities to establish a limited benefit program under Section 1915(b) authority.

This recommendation would have no effect on states choosing to initiate a managed care program. States choose to implement mandatory managed care for a number of reasons, including promoting care management and coordination; providing greater control and predictability over Medicaid spending; and improving program accountability for performance, access, and quality. Moreover, states must meet a number of requirements to initiate a managed care program regardless of the authority under which it is implemented. For example, states must meet public input requirements in implementation and design, and contract review, which includes an assessment of the MCO's financial ability to provide coverage for Medicaid beneficiaries. This recommendation does not affect a state's decision to initiate a managed care program, but rather is intended to address the efficiency and administrative burden associated with that decision.

Enrollees. The effect of this recommendation on enrollees will vary, depending on which state they live in. Many dually eligible enrollees, American Indians and Alaska Natives, and children with special health care needs are already enrolled in comprehensive Medicaid managed care plans, either voluntarily or by state mandate under a waiver. The recommendation provides states with

another option under which to enroll beneficiaries in managed care.

Plans and providers. This recommendation is not likely to have a direct effect on Medicaid MCOs or Medicaid providers.

Recommendation 1.2

Congress should extend approval and renewal periods for all Section 1915(b) waivers from two to five years.

Rationale

This recommendation would simplify program management for states and for CMS. The two-year authorization period for Section 1915(b) waivers is shorter than the other authorities: Section 1115 waivers can be approved for up to five years and state plan authority does not expire. Extending the approval period would allow states to operate their Section 1915(b) waiver programs for a longer period of time without having to complete the renewal process. Reducing the burden associated with renewal applications could allow states and the federal government to focus their efforts on managing and monitoring waivers. There is also a precedent for a longer approval period: Section 1915(b) waivers that include individuals dually eligible for Medicaid and Medicare can be approved for up to five years.

This recommendation would not affect CMS' responsibility for reviewing managed care contracts or capitation rate determinations every year, which may or may not be aligned with the two-year approval period. Requirements for states to establish a monitoring program and any periodic reporting requirements would still be in place for states.

Implications

Federal spending. The Congressional Budget Office has estimated that this recommendation will not affect federal Medicaid spending.

States. This recommendation would simplify waiver administration and reduce administrative burden of renewal applications for states that operate Section 1915(b) waivers.

Enrollees. This recommendation is not likely to affect waiver enrollees because states can submit amendments to a waiver at any time during waiver implementation.

Plans and providers. Extending approval periods for Section 1915(b) waivers would ensure that plans and providers currently participating in a Section 1915(b) waiver could continue to provide services to waiver enrollees without disruption.

Recommendation 1.3

Congress should revise Section 1915(c) waiver authority to permit Section 1915(c) waivers to waive freedom of choice and selective contracting.

Rationale

Under current law, states must complete two separate waiver applications to operate a single HCBS waiver program if the state selectively contracts with a single entity to operate the program or if the state wishes to waive statewideness or comparability. Each waiver (§§ 1915(b) and 1915(c)) has separate reporting requirements. Moreover, the separate waiver authorities may not always be aligned in terms of their timing; waivers may have different effective dates or different due dates for quarterly and annual reports.

This recommendation would add the two Section 1915(b) authorities that are not already included in the Section 1915(c) authority (as noted above, two other Section 1915(b) authorities, statewideness and comparability, are already also included in Section 1915(c) authority). States interested in operating a home- and community-based program under Section 1915 authority would be required to complete a single application or renewal. This recommendation would simplify reporting requirements for states by requiring one set of quarterly and annual reports rather than multiple

sets. This recommendation also calls for CMS to consolidate program rules such that beneficiaries retain the protections currently assured under both waivers. For example, states would be required to detail how they would help ensure beneficiary access to timely care and how they would measure and maintain quality of care, as well as how their managed care plans would be marketed to beneficiaries. In addition, CMS can use regulatory authority put in place under managed care rules to require states to operate a monitoring system to mitigate access and quality concerns associated with limiting beneficiaries' choice of providers.

Implementation of this recommendation would result in simplified program administration for states and the federal government. Section 1915(b) and Section 1915(c) waivers are a key approach to delivering HCBS to Medicaid beneficiaries with complex health needs. The assurances made by states regarding beneficiary rights and protections are a vital part of these waiver authorities. On the other hand, requiring separate waivers to operate a single program increases complexity and reduces states' administrative capacity, limiting states' ability to manage the program or pursue other Medicaid program priorities.

This recommendation does not preclude states' ability to pursue home- and community-based programs under Section 1115 waiver authority. Rather, there are distinct features of each waiver authority that allow states to pursue different policy goals. For example, states may view the application process for Section 1915 waivers as more predictable given the 90-day time frame for CMS response. On the other hand, states may seek Section 1115 authority to finance other program changes. This recommendation maintains both waiver options to preserve states' flexibility to design programs that address the needs of their beneficiaries.

Implications

Federal spending. The Congressional Budget Office has estimated that this recommendation will not affect federal Medicaid spending.

States. This recommendation would simplify waiver administration and reduce administrative burden of renewal applications for states that operate concurrent Section 1915(b) and Section 1915(c) waivers.

Enrollees. Simplifying the application process could create incentive for some states to pursue home- and community-based programs. However, it is more likely that permitting states to waive freedom of choice and selective contracting under Section 1915(c) waivers would not have a direct effect on Medicaid enrollees. Moreover, this recommendation calls for CMS to consolidate all program rules without reducing or eliminating assurances of access and quality made under each authority.

Plans and providers. Permitting states to waive freedom of choice and selective contracting under Section 1915(c) waivers would not have a direct effect on Medicaid managed care plans or health care providers.

Endnotes

[1] This chapter focuses on authorities used to mandate managed care enrollment for Medicaid beneficiaries. States can implement a voluntary managed care program under a Section 1915(a) waiver by executing a contract with companies that the state has procured using a competitive procurement process. These voluntary managed care programs under Section 1915(a) waivers are beyond the scope of this chapter and its recommendations.

[2] CMS has indicated that it plans to review the Section 1115 waiver application process to reduce the administrative burden for states. Specifically, CMS plans to revise and simplify the application template, work with states to develop a timeline for the approval process, and apply several strategies for each waiver's special terms and conditions (CMS 2017a).

[3] Some waivers may be extended for periods of 10 years. CMS indicated that it will approve routine, successful, non-complex Section 1115(a) waiver extensions for up to 10 years (CMS 2017a). In December 2017, CMS approved the Mississippi family planning waiver for 10 years (CMS 2017c).

[4] For this paper, a comprehensive managed care program is defined as an arrangement in which a state contracts with a managed care plan to provide all acute, primary, and specialty medical services, and plans that cover long-term services and supports are included under this definition.

[5] States use Section 1915(b) waivers to create a specialized or targeted program. Some states seek waivers to provide a certain benefit or array of services to beneficiaries through a state-developed network of specialty providers because no other network exists, or through selective contracting. For example, Colorado and California contract with behavioral health organizations to provide behavioral and mental health services to beneficiaries across each state (CMS 2015b, 2015c). In Alabama, the state contracts with 14 administrative entities throughout the state to provide maternity services to beneficiaries (CMS 2015d). In other circumstances, states selectively contract with an organization because there is only one option with which to contract. As of December 1, 2017, 22 states have 33 approved Section 1915(b) waivers that allow states to operate specialized programs.

[6] Section 2601 of the Patient Protection and Affordable Care Act (P.L. 111-148, as amended) authorized CMS to approve Section 1915(b) waivers that include individuals dually eligible for Medicaid and Medicare for up to five years. This provision aligned waivers' approval periods with the approval periods available under demonstrations and initiatives implemented by the Federal Coordinated Health Care Office at CMS.

[7] The three states without a Section 1915(c) waiver (Arizona, Rhode Island, and Vermont) use their Section 1115 waivers to accomplish the same goals. Some states have implemented separate waivers for different populations under both authorities.

[8] States can establish HCBS programs under other Medicaid authorities as well. For example, two states (Kansas and New Jersey) use Section 1115 waiver authority in conjunction with Section 1915(c) waivers.

[9] In this chapter, children eligible for Medicaid on the basis of involvement with the child welfare system are defined as children receiving foster care or adoption assistance under Part E of Title IV of the Act, and children in foster care or otherwise in an out-of-home placement.

[10] For example, compare Illinois, which uses Section 1932 state plan authority and a Section 1915(b) waiver to implement an MLTSS program, with New Jersey, which uses a Section 1115 waiver to implement an MLTSS program.

[11] Choice counseling is a service for Medicaid beneficiaries that provides them with unbiased information about their options for managed care plans and providers and answers related questions.

[12] Section 1115 waivers generally require quarterly and annual reporting, including monitoring calls with CMS. These requirements are outlined in the STCs of each waiver. Reporting requirements for Section 1915(b) waivers and Section 1932 state plan authority vary in terms of timelines and reporting formats, but content is the same as outlined in statute and regulations.

[13] Different types of dually eligible beneficiaries receive different levels of Medicaid assistance. Partial benefit dually eligible beneficiaries qualify for Medicaid under mandatory pathways referred to as Medicare Savings Programs (MSPs), and receive assistance with payment of both Medicare premiums and cost sharing. People who qualify for the full range of services offered by state Medicaid programs under separate non-MSP pathways are referred to as full-benefit dually eligible beneficiaries.

[14] Some states seek Section 1915(b) waiver authority to selectively contract with prepaid inpatient health plans, prepaid ambulatory health plans, or other entities in order to establish a limited benefit plan.

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Commission Vote on Recommendations

In its authorizing language in the Social Security Act (42 U.S.C. 1396), Congress requires MACPAC to review Medicaid and CHIP program policies and make recommendations related to those policies to Congress, the Secretary of the U.S. Department of Health and Human Services, and the states in its reports to Congress, which are due by March 15 and June 15 of each year. Each Commissioner must vote on each recommendation, and the votes for each recommendation must be published in the reports. The recommendations included in this report, and the corresponding voting record below, fulfill this mandate.

Per the Commission's policies regarding conflicts of interest, the Commission's conflict of interest committee convened prior to the vote to review and discuss whether any conflicts existed relevant to the recommendations on streamlining Medicaid managed care authorities. It determined that, under the particularly, directly, predictably, and significantly standard that governs its deliberations, no Commissioner has an interest that presents a potential or actual conflict of interest.

The Commission voted on Recommendation 1.1 on January 26, 2018. The Commission voted on Recommendation 1.2 and Recommendation 1.3 on December 14, 2017.

Streamlining Medicaid Managed Care Authority

1.1 Congress should amend Section 1932(a)(2) to allow states to require all beneficiaries to enroll in Medicaid managed care programs under state plan authority.

Yes:	Burwell, Carter, Cerise, Cruz, Douglas, George, Gordon, Gorton, Milligan, Szilagyi, Thompson, Weil
Abstain:	Gold, Scanlon
Not Present:	Davis, Lampkin, Retchin

12	Yes
2	Abstain
3	Not Present

1.2 Congress should extend approval and renewal periods for all Section 1915(b) waivers from two to five years.

Yes:	Burwell, Carter, Cerise, Davis, Douglas, George, Gold, Gordon, Gorton, Lampkin, Milligan, Retchin, Scanlon, Szilagyi, Thompson, Weil
Not Present:	Cruz

16	Yes
1	Not Present

1.3 Congress should revise Section 1915(c) waiver authority to permit Section 1915(c) waivers to waive freedom of choice and selective contracting.

Yes:	Burwell, Carter, Cerise, Davis, Douglas, George, Gold, Gordon, Gorton, Lampkin, Milligan, Retchin, Scanlon, Szilagyi, Thompson, Weil
Not Present:	Cruz

16	Yes
1	Not Present

Chapter 2:

Telehealth in Medicaid

Telehealth in Medicaid

Key Points

- Telehealth is the use of technology, including interactive telecommunication, to deliver medical and other health services to patients. Telehealth permits patients at one site to receive care or health education from providers at another site and lets patients, caregivers, and providers in one location consult with providers at a different site.
- Use of telehealth in Medicaid may help states address barriers to care, such as insufficient supply of providers, inadequate transportation options, and long distances between patient and provider and associated travel times. It may be particularly helpful to patients in rural and frontier areas and for patients who need behavioral health services but have concerns about confidentiality or stigma.
- In 2017, nearly all states and the District of Columbia provided some coverage of telehealth in fee-for-service Medicaid.
- Because there are few federal requirements for Medicaid coverage of telehealth, states have flexibility in defining telehealth and establishing limitations on coverage. As a result, Medicaid policies for coverage of telehealth vary from state to state including in the following areas: modalities, specialties and services, providers authorized to deliver services, and sites of service. State telehealth coverage policies may differ for fee-for-service and managed care delivery systems.
- Medicaid programs are using telehealth in a variety of clinical practice areas, including behavioral health, oral health, and maternity care, and for providing services to certain populations, such as individuals with chronic illness and beneficiaries who are dually eligible for Medicaid and Medicare.
- When adopting telehealth coverage in Medicaid, states weigh the costs and resource requirements against the potential for improvements in access to care, and they also consider factors beyond the scope of Medicaid, such as connectivity, technology, and provider licensure.
- The evidence on the effectiveness and outcomes of telehealth is mixed. Few published studies address the effects of telehealth in Medicaid specifically; states seeking to implement or expand coverage of telehealth would likely benefit from additional research as well as from the experiences of other states. Such information would help other states, providers, health plans, and the research community gain a more robust understanding of the effects of telehealth on access to care, quality of care, and cost of care for the Medicaid population.

CHAPTER 2: Telehealth in Medicaid

Telehealth has the potential to improve access to services in underserved areas, as well as facilitate access to services for which there may be relatively few providers (ASPE 2016, Bashshur et al. 2014, NCSL 2015, ONC 2015). It can also encourage appropriate use of underutilized services, such as oral health and behavioral health services, by making it easier or more convenient to access them (Bashshur et al. 2014, Mehrotra 2014, Rudin et al. 2014). Telehealth can make regular checkups and follow-up visits easier for people who have difficulties traveling (e.g., individuals with disabilities or special health care needs) by enabling access to providers and services at home or at locations closer to home.

Telehealth is the use of technology and interactive telecommunication to deliver medical and health services and to conduct programs in related fields, such as patient education. It can also facilitate educational and consultative opportunities for health professionals. This mode of service delivery permits patients at one site to receive care from providers at another site, or patients, caregivers, and providers to consult with providers at a different site (CCHP 2017a, CMS 2017a, ONC 2017, CRS 2016). The terms telehealth and telemedicine are sometimes used interchangeably, but historically, the term telemedicine has focused more narrowly on the provision of clinical services while the term telehealth encompasses a broader range of services that address health care needs (ASPE 2016). This chapter uses the term telehealth because of its more inclusive definition; however, some state Medicaid programs use the term telemedicine and some use both terms.[1]

In 1996, the Institute of Medicine described the potential benefits of telehealth in rural and urban settings, highlighted the factors affecting adoption of telehealth, and noted the need for evaluating its effectiveness (IOM 1996). Since then, technology has improved, the use of telehealth by public and private payers has grown, delivery systems have begun evolving toward value-based purchasing, and more research on the use and outcomes of telehealth has been conducted (AHRQ 2016). In 2015, the Office of the National Coordinator for Health Information Technology (ONC) recommended increasing the use of telehealth in federal health care delivery systems and in programs to advance person-centered and self-managed health care (ONC 2015). Currently, 10 federal agencies, including the Departments of Health and Human Services (HHS), Defense, Veterans Affairs, and Justice, run programs aimed at increasing the use of telehealth by addressing issues such as technology innovation, broadband access, and policy development and implementation (ONC 2016). The Federal Telemedicine Working Group (FedTel), established in 2011 with participants from 26 federal agencies and departments, conducts telehealth education and facilitates information-sharing among its members (ASPE 2016).

The use of telehealth in Medicaid has grown (ATA 2017). Telehealth may help states address barriers to care such as insufficient numbers of providers, inadequate transportation options, long distances and associated travel time required to get to health care providers—particularly for patients in rural and frontier areas—and concerns about confidentiality and stigma for patients needing behavioral health services (CRS 2016). Federal policy does not place many restrictions on state Medicaid programs in terms of adopting or designing telehealth coverage but it also offers little guidance or information about implementation (CMS 2017a). Thus, state Medicaid coverage of telehealth varies across multiple dimensions, such as the telehealth modality, specialties and services, providers authorized to deliver services through telehealth, and sites of service (ATA 2017, CCHP 2017a).

State decisions to cover telehealth are driven by factors such as the following:

- interest in balancing increased access to care with state budgetary limitations;
- their policy goals and expectations for providing coverage;
- provider and patient acceptance;
- payment policies for fee-for-service (FFS) and managed care delivery systems;
- consistency with other delivery system or payment reforms;
- the evidence base for the effectiveness and quality of telehealth services; and
- concerns about the potential for fraud and abuse.

States considering expanding coverage of telehealth may find lessons learned in other states instructive to their planning and policy development. The Centers for Medicare & Medicaid Services (CMS) could do more to facilitate state-to-state learning, data collection, and analyses of the effects of telehealth on access, cost, and quality; and how Medicaid programs could work with and educate plans, providers, and enrollees. CMS could extend existing mechanisms for supporting program planning and implementation, such as planning grants and learning collaboratives, to telehealth. The Center for Medicare and Medicaid Innovation (CMMI) supports the testing of innovative approaches for service delivery and payment; models now being tested by CMMI that include telehealth components in the Medicare population could be considered for testing in Medicaid programs.

This chapter provides an overview of telehealth in Medicaid. It starts with a description of telehealth modalities, federal Medicaid guidelines for telehealth, and the policy choices states make in establishing coverage. Next, the chapter describes specific applications of telehealth in behavioral health, oral health, and maternity care, as well as how some states use telehealth to provide health care services to certain high-need populations. It then provides an overview of the evidence for telehealth. The chapter ends with a discussion of the issues states face in implementation and use of telehealth.

Medicaid Coverage of Telehealth Modalities

A variety of telehealth modalities are used in different health care settings; they generally allow patients to engage with providers—often specialists not available in their communities—in real time, or to share health data with their providers (CCHP 2017a, CRS 2016, IOM 2012). Providers also use various telehealth modalities to consult with other clinicians who are located elsewhere. The site where patients are located is referred to as the originating site and the location of the provider they interact with is referred to as the distant site (ATA 2017, CMS 2016b). Technologies used in telehealth range from smart phones, medical devices, tablets, and computers in patients' homes, to audio, video, and imaging equipment in clinical settings such as hospitals, physician offices, and clinics (NCSL 2015).[2] Much of the technology requires broadband Internet access to enable patient-to-provider interaction or the transmission of images and medical data for evaluation (ASPE 2016, NCSL 2015).

Key modalities covered by Medicaid include the following:

Live video (synchronous telehealth) refers to real-time interaction, both audio and visual, between participants located at two different sites, to connect a patient, caregiver, or provider at the originating site with a provider at a distant site. Technologies used for live video include videoconferencing units, peripheral or web cameras, computer monitors, televisions, and projectors (ASPE 2016, NCSL 2015, CMS 2017a, CCHP 2017a).

Store-and-forward (asynchronous telehealth) involves the secure transmission of data, images (e.g., X-rays, photos), sound, or video that are captured at the originating site and sent to specialists at a distant site for evaluation (ASPE 2016, NCSL 2015, CMS 2017a, CCHP 2017a). Store-and-forward is commonly used for dermatology, radiology, pathology, and ophthalmology, but also has applications in obstetrics and gynecology, cardiology, and orthopedics (CCHP 2017b).

Remote patient monitoring (RPM) refers to the secure transmission of patient health and medical data collected at the originating site to a provider who will assess them at a distant site. RPM is often used for chronic disease management; examples of patient data collected and transmitted for RPM include vital signs, blood glucose levels, weight, and blood pressure (ASPE 2016, NCSL 2015, CMS 2017a, CCHP 2017c).

Modalities that are less likely to be covered by state Medicaid programs include mobile health and electronic consults (NCSL 2015).

Mobile Health (mHealth) refers to the use of devices and smartphone apps to capture vital signs, provide health education, send text messages to encourage healthy behavior, or generate reminders to take medications (NCSL 2015).

Electronic consults (e-consults) refers to provider-to-provider consultation. One example of this modality is the Project Extension for Community Healthcare Outcomes (Project ECHO) model. Project ECHO does not connect patients with providers; rather, it uses videoconferencing to link primary care providers in the community (such as those in rural areas) to teams of specialists in academic hubs who can offer the community providers education and training about the management of specific diseases, including chronic diseases; discuss individual patient cases with them; and make patient treatment recommendations (AHRQ 2017, UNM 2017a).

Federal Guidelines

According to the CMS telemedicine web page, there are few federal requirements or restrictions for Medicaid coverage of telehealth; states have flexibility in defining telehealth as well as in establishing limitations or restrictions on coverage. The federal Medicaid statute does not identify telehealth as a specific service and CMS has not issued regulations or other formal guidance on its coverage. Broad CMS guidelines require providers to practice within the scope of their state practice law and to comply with pertinent state licensing rules. Additionally, payment for telehealth must satisfy federal Medicaid requirements for efficiency, economy, and quality of care. CMS encourages states "to use the flexibility inherent in federal law to create innovative payment methodologies for services that incorporate telemedicine technologies" (CMS 2017a).

Medicaid requirements for comparability, statewideness, and freedom of choice do not apply to telehealth-provided services; however, states limiting telehealth to certain providers or regions must assure access to and cover face-to-face visits in regions where telehealth is not available. States are not required to submit a Medicaid state plan amendment to cover and pay for services provided via telehealth if telehealth services are covered and paid for in the same way or amount as those provided face-to-face (CMS 2017a).

Recent CMS rules acknowledge the role of telehealth in enabling access to care; for instance, the 2016 final Medicaid managed care regulation required states to consider use of telehealth in setting network adequacy standards (42 CFR 438.68(c)(1)(ix)). In another 2016 final rule, which implemented requirements for documenting face-to-face encounters within certain timeframes before ordering home health services, CMS permitted face-to-face encounters to be performed via telehealth (42 CFR 440.70(f)(6)).[3] In its analysis of and responses to public comments to the home health rule, CMS acknowledged the need for updated Medicaid telehealth guidance and indicated that it

would be forthcoming; in the meantime the agency would be available to provide technical assistance to states (CMS 2016a). Thus far, no further guidance has been issued.

State Policy Design Choices

State Medicaid programs must make a number of design choices when establishing the scope of telehealth coverage (ATA 2017, CCHP 2017a). Most states have defined telemedicine or telehealth in state laws, regulations, or other guidance (CCHP 2017a). Although not required, some

BOX 2-1. Medicare Coverage of Telehealth

Whereas states have flexibility to determine the parameters for Medicaid coverage of telehealth, Medicare's telehealth coverage parameters are clearly defined and more restrictive. Medicare policy has included the following limitations:

Geography. The originating site must be in a rural location that meets the definition of a non-metropolitan statistical area or a rural health professional shortage area (CMS 2016b).

Modality. An encounter must be a live, interactive, two-way audio and video telecommunication. Coverage for store-and-forward is allowed only in federal telehealth demonstrations in Alaska and Hawaii (CMS 2016b). In the 2018 Medicare Physician Fee Schedule final rule, CMS approved coverage for remote patient monitoring for chronic disease management and for provider-to-provider consultations via telehealth in the collaborative care model for behavioral health (CMS 2017c, 2016b).

Originating sites. Permitted originating sites are hospitals, critical access hospitals, physician offices, federally qualified health centers (FQHCs), rural health centers, tribal facilities and urban Indian clinics, skilled nursing facilities, community mental health centers, and hospital-based dialysis centers (CMS 2016b, CMS 2009).

Distant site providers. Permitted distant site providers are physicians, nurse practitioners, physician assistants, nurse-midwives, clinical nurse specialists, certified registered nurse anesthetists, clinical psychologists, clinical social workers, and registered dieticians and nutrition professionals (CMS 2016b).

Covered services. Medicare covers specific procedure codes via telehealth. Although the allowable procedure codes might change from year to year, covered services generally include annual wellness visits, general consultations, services to treat kidney disease, treatment for mental health and substance use disorders, nutrition therapy, pharmacological management, cardiovascular disease behavioral therapy, and obesity counseling (CMS 2016b).

The recently enacted Bipartisan Budget Act of 2018 (P.L. 115-123) expands Medicare coverage of telehealth in several ways. It permits Medicare Advantage plans to provide services via telehealth that otherwise would not be covered by Medicare. It expands the ability of certain accountable care organizations to use telehealth and relaxes originating-site limitations. In addition, Medicare now will cover telehealth services for individuals with stroke in urban and rural areas.

state Medicaid programs model their telehealth coverage policies, or parts of them, on Medicare's policies and limitations (ATA 2014). For example, West Virginia's Medicaid telehealth policy is based on Medicare policy, including the prohibition on federally qualified health centers (FQHCs) from serving as distant sites (WV DHHR 2017). Some states initially adopted Medicare standards (for instance, enforcing minimum distance requirements or restricting coverage of telehealth to use in rural areas or health professional shortage areas), then changed their policies over time as they gained more experience and understanding of the implications for access, cost, and quality (ATA 2017, CCHP 2017a).[4] States may also impose other restrictions or limitations to control utilization or costs.

Key telehealth policy design features include:

- covered modalities;
- eligible specialties and services;
- eligible providers; and
- payment for covered services, which must be within federal upper limits (ATA 2017, CCHP 2017a, CMS 2017a).

Policy design may also address differences, if any, in telehealth coverage in FFS delivery systems and coverage in managed care.

Modalities

In 2017, nearly all states and the District of Columbia provided some coverage of telehealth in Medicaid FFS; however, the definition of and scope of coverage of telehealth differs from state to state. Some states define telehealth narrowly and limit coverage to live, two-way interactions or interactions using both audio and visual telecommunications, while other states use broader definitions or have established more inclusive policies (ATA 2017, CCHP 2017a). The most commonly covered form of telehealth is live video (synchronous telehealth), followed by RPM and store-and-forward (Table 2-1).

Eligible specialties and services

Below, we discuss the specialties and services that states have determined to be eligible for Medicaid coverage.

Specialties. State Medicaid programs vary widely in terms of the specialties that can be provided

TABLE 2-1. State Coverage of Telehealth Modalities in Medicaid, October 2017

Modality	Number of states	States
Live video	50	All states and the District of Columbia, except Massachusetts, cover live video.
Remote patient monitoring	21	Alabama, Alaska, Arizona, Colorado, Illinois, Indiana, Kansas, Louisiana, Maine, Minnesota, Mississippi, Missouri, Nebraska, New York, Oklahoma, South Carolina, Texas, Utah, Vermont, Virginia, and Washington
Store-and-forward	15	Alaska, Arizona, Connecticut, California, Hawaii, Illinois, Maryland, Minnesota, Mississippi, Missouri, New Mexico, Nevada, Oklahoma, Virginia, and Washington

Note: Reflects state coverage of telehealth modalities in fee-for-service Medicaid as of October 2017. Massachusetts covers some telehealth services under managed care, but telehealth services are not covered in fee for service (ATA 2017).

Source: ATA 2017, CCHP 2017a.

through telehealth. For example, Idaho's Medicaid program covers live video telehealth for mental health, developmental disabilities services, primary care, physical therapy, occupational therapy, and speech therapy (ID DHW 2016). Arizona's Medicaid coverage of live video is more expansive, covering cardiology, dermatology, endocrinology, pediatric subspecialties, hematology-oncology, home health, infectious diseases, neurology, obstetrics and gynecology, oncology and radiation, ophthalmology, orthopedics, pain clinic, pathology, pediatrics, radiology, rheumatology, and surgery follow-up and consultation (CCHP 2017a). Many states have adopted more inclusive live video telehealth policies and some also cover dentistry: Arizona, California, Hawaii, Minnesota, Missouri, Montana, and New York began covering telehealth for dentistry in 2016 and 2017 (CCHP 2017a).

Some states providing Medicaid coverage for store-and-forward limit coverage to certain specialties. California covers store-and-forward for dermatology, ophthalmology, and dentistry (CCHP 2017a). Minnesota Medicaid covers store-and-forward for dentistry and for reading or interpretation of diagnostic tests, such as X-rays or laboratory tests (CCHP 2017a).

Services. State Medicaid policies also vary with respect to specific services covered when delivered by telehealth and the scope of coverage. For example, Kentucky covers several classes of services provided via live video: consultation; mental health evaluation and management services; individual and group psychotherapy; pharmacological management; psychiatric, psychological, and mental health diagnostic interview examinations; individual medical nutrition; individual diabetes self-management training; occupational, physical, or speech therapy evaluation or treatment; neurobehavioral status examination; and end stage renal disease monitoring, assessment, or counseling (07 Ky. Admin. Regs. 3:170. (2018)). Georgia covers office visits, pharmacological management, limited office psychiatric services, limited radiological services, and a limited number of other physician services (CCHP 2017a). Behavioral health services commonly covered include mental health assessments, individual therapy, psychiatric diagnostic interview examination, and medication management (ATA 2017).

States direct providers to use the applicable procedure or service codes when submitting claims for services provided via telehealth; some states and plans may also require the use of a modifier code that specifically indicates a telehealth encounter.[5] These modifier codes can also help track which services were provided using synchronous or asynchronous telehealth modalities. However, it is unclear how consistently or accurately providers use them, even when required to by the state Medicaid agency or plan (Roddy 2017, IOM 2012). Providers may lack incentives to use modifier codes if payment is not dependent on reporting or if the policy is unclear (Roddy 2017).

A Center for Connected Health Policy paper reports that some states restrict or limit covered services, for instance, limiting the number of telehealth visits or requiring prior authorization. For example, Arkansas limits coverage for live video telehealth to two visits per patient per year, although additional visits can be requested. Several states, including Indiana, Kansas, and Minnesota, require prior authorization for services, particularly RPM. States requiring prior authorization for live video include Maryland (for some behavioral health services), Michigan, and Nevada (CCHP 2017a).

Eligible providers

State Medicaid policies vary with regard to the types of providers that are eligible for payment for services delivered through telehealth; at a minimum, states must ensure that providers are practicing within their scope of practice (ATA 2017, CMS 2017a). State policies also differ in which providers can be originating or distant sites or both.

Provider types. Nineteen states do not specify which providers are eligible to provide services through telehealth, and are therefore presumed

to have the most inclusive provider policies.[6] In general, state telehealth policies are expanding to include more providers, but 14 states allow fewer than nine provider types to deliver telehealth services (ATA 2017).

Although telehealth has the potential to overcome barriers to care, including barriers created by state lines, many state Medicaid programs continue to require providers of telehealth services to be licensed in and enrolled as Medicaid providers in their states. Some state policies describe circumstances in which out-of-state providers can provide telehealth services, for example, Arizona requires both originating and distant site providers to be registered with the state's Medicaid program and providers to be licensed in the state from which they are providing the service, unless they are Indian Health Service providers (AHCCCS 2016).[7] The state's policy also allows out-of-state providers to be either originating or distant sites (AHCCCS 2016). Arkansas requires providers delivering services via telehealth to be licensed or certified in Arkansas unless they provide only episodic consultation services (CCHP 2017a).

Some states require the presence of a telepresenter—a provider present at the originating site during the telehealth visit—to facilitate the patient's interaction with the provider at the distant site (CCHP 2017a, Ahn et al. 2016). Some require providers to be on the premises during a telehealth visit, even if not physically with the patient. Such requirements preclude the use of telehealth modalities like RPM. Currently 34 states do not require the presence of a telepresenter (ATA 2017).

Originating site. An originating site is where the patient is located during the telehealth encounter. Traditionally, approved originating sites have been restricted to settings such as physician offices and hospitals. However, with technological advancements, states are increasingly allowing other locations, such as homes, workplaces, and schools to serve as originating sites (ATA 2017). More expansive policies on originating sites could support greater availability of telehealth, improved convenience for patients and use of modalities such as remote patient monitoring.

Twenty-three state Medicaid programs specify eligible originating sites; others do not explicitly require patients to be at specific sites (ATA 2017, CCHP 2017a). For example, in West Virginia, authorized originating sites include physician or other practitioner offices, private psychological offices, hospitals, rural health centers, FQHCs, hospital-based renal dialysis centers (including those in critical access hospitals), skilled nursing facilities, and community mental health centers (CCHP 2017a). Colorado identifies specific providers that are eligible to receive originating site fees; although other facilities are not prohibited from serving as originating sites, they will not be paid a facility fee for the service (CCHP 2017a). In Washington, beneficiaries may choose the location where they would like to receive services (WA HCA 2018).

Distant site. A review of state Medicaid telehealth policies identified 32 provider types allowed by states to serve as distant site providers (ATA 2017). These include physicians, nurses with varying types of certification, behavioral health care providers (e.g., psychologists, social workers, behavioral analysts, and substance use disorder clinicians), clinical sites (e.g., FQHCs, community mental health centers, skilled nursing facilities), and therapists (e.g., physical therapists and speech therapists) (ATA 2017).

Payment

States set Medicaid payment levels for telehealth services. Payment rates for telehealth may be lower than rates for services provided in person, particularly in FFS payment arrangements, (NCSL 2015, Rudin et al. 2104) and lower telehealth rates may limit provider willingness to participate in such programs. State policies also vary as to coverage of facility fees and transmission fees, which help providers cover telecommunications costs. Thirty-two states pay one or both of these fees (CCHP 2017a). In states where facility or transmission

fees are not covered, providers may be less willing to participate (Rudin et al. 2014). Conversely, if facility and transmission fees are paid to encourage providers to participate and these providers replace services previously provided in person with services provided using telehealth, then the fees in combination with the cost of the services themselves could lead to increases in the overall cost of the service.

Managed care versus fee for service

Medicaid coverage policies for telehealth may differ between managed care and FFS. In some states, Medicaid managed care plans are not required, but do provide, services through telehealth. For example, in Florida, live video telehealth is covered under FFS and is optional for managed care plans (TAC 2017, ATA 2017). The state's model contract for managed care plans explicitly notes this and, for plans choosing to use telehealth, the contract describes the conditions for payment (AHCA 2017). Differences between FFS and managed care may also have operational implications for states and managed care plans seeking to cover telehealth (Mehrotra 2014, Rudin et al. 2014). For example, some managed care plans use telehealth or may want to expand its use beyond what is covered in FFS but may face challenges submitting claims or receiving payment. On the other hand, Massachusetts does not cover telemedicine-provided services under its FFS plan but does have some coverage under at least one of their managed care plans (ATA 2017). Finally, the different incentives associated with FFS and managed care payment policies could affect states' decisions to cover telehealth as well as use and spending.

Applications of Telehealth in Medicaid

Medicaid programs are using telehealth for a variety of clinical conditions and populations. This section describes the application of telehealth in behavioral health, oral health, maternity care, and services for certain high-need populations. We focus on these areas because Medicaid plays a significant role as a payer for these services; there are known barriers to accessing the services; or because the use of telehealth for these services is becoming more common.[8] For each application, we discuss how telehealth can be used, relevant state policies and practices, and, if available, evidence on the effectiveness of these interventions.

Behavioral health

Non-institutionalized adult Medicaid enrollees have a higher rate of behavioral health disorders than privately insured individuals. Children and adolescents covered by Medicaid are also more likely to have a mental health condition than peers with private insurance (MACPAC 2017, 2015). Barriers to care include fragmented delivery systems, an insufficient supply and geographic maldistribution of behavioral health providers, and on the patient side, concerns about confidentiality and fear of stigma attached to acknowledging the need for and seeking treatment (MACPAC 2017, SAMHSA 2016, Tummala and Weiss Roberts 2009).

Telehealth has the potential to increase access to evidence-based care for mental health and substance use disorders (SUDs) for individuals in underserved areas (Bashshur et al. 2016, SAMHSA 2016, NCSL 2015, Hilty et al. 2013). Applications for behavioral health span the continuum of care, from patient screening, assessment, and diagnosis; to treatment and medication management; and promotion of compliance, engagement, and retention. Videoconferencing may be used in medication-assisted treatment for opioid

use disorder for delivering psychotherapy and counseling as well as assessment and medication management. Telehealth can facilitate provider consultation and collaboration as well as enable more confidential delivery of services. For example, a patient could use a primary care office as an originating site and receive psychotherapy from a distant site, thereby avoiding the perceived stigma of visiting a mental health provider's office (Eibl et al. 2017; SAMHSA 2016, 2015; King et al. 2009).

Medicaid policies. All states that cover telehealth-provided services provide some coverage for behavioral health services via videoconferencing, but the scope of coverage varies (CCHP 2017a). The most commonly covered services are mental health assessments, individual therapy, psychiatric diagnostic interview exams, and medication management (ATA 2017). In 2015, 38 states and the District of Columbia covered mental health services via telehealth, and 30 states and the District of Columbia either explicitly covered certain SUD-related treatments delivered via telehealth or did not differentiate between mental health and SUD coverage in their policies (MACPAC 2016c).

Behavioral health services delivered via telehealth are more likely to be covered if provided by psychiatrists, advanced practice nurses with clinical specialization, and psychologists than if they are delivered by social workers or counselors. Medicaid programs in 23 states and the District of Columbia cover behavioral health services delivered via telehealth by licensed social workers, and programs in 18 states and the District of Columbia cover these services when provided by a licensed professional counselor. Only four states specifically allow behavioral health analysts to bill Medicaid for telehealth-provided services (ATA 2017). State Medicaid programs may exclude the home as an eligible originating site although some studies suggest the home can be an effective originating site for certain behavioral health care services (CCHP 2017a, SAMHSA 2015).

There are other consultative modalities for behavioral telehealth that are rarely covered by Medicaid; however, some research suggests their utility and there are indications of some interest by states and stakeholders in their use. These modalities include telephonic consultation, provider-to-provider e-consults, and the collaborative care model.

- **Telephonic consultation.** Few states consider telephone-only care to be telehealth and few states cover it. Oregon, however, permits patient consultations via telephone when they comply with specific practice guidelines (OR HA 2017).[9] Maine also covers services delivered by telephone if videoconferencing is unavailable and if the services are delivered in a clinically appropriate manner (CCHP 2017, OMS 2016).

- **Provider-to-provider e-consults.** Providers in different locations can use provider-to-provider e-consults to seek and receive advice and education (Waugh et al. 2015). For example, a state-funded child telepsychiatry system in Wyoming facilitates consultation between community providers in state and child psychiatrists at Seattle Children's Hospital; this initiative not only helped to reduce the use of psychotropic medications in some children but it also led to program savings—Wyoming Medicaid experienced an estimated 1.82:1 return on investment (Hilt 2015).[10] Project ECHO, another model for provider-to-provider e-consults and education, addresses a wide range of behavioral health care topics, including SUDs, developmental disabilities, and psychiatric medication management (UNM 2017b). Medicaid programs in four states—California, Colorado, New Mexico, and Oregon—support Project ECHO activities (CHCS 2017).

- **Collaborative care model.** In this model, primary care providers (PCPs), behavioral health care coordinators embedded in the PCP practice, and psychiatric specialists work as a team to care for patients with behavioral health conditions. The psychiatric specialist

helps the PCP practice develop and implement treatment plans and track patient progress. In cases where the specialists are not located at the same site as the rest of the care team, they can connect via videoconference. Few states currently pay for this model under Medicaid; however, in light of robust evidence about its effectiveness, there is increasing interest in supporting its adoption and payment in both FFS and managed care arrangements (AIMS 2017, MD DHMH 2017, Townley and Yalowich 2015).[11] For example, the Washington State Mental Health Integration Program's use of this model reduced the median time to improvement for Medicaid enrollee depression to half of what it was before implementation (Unützer et al. 2013).[12]

Evidence on effectiveness of telehealth in behavioral health. A growing body of research supports the use of telehealth in behavioral health care. Psychotherapy delivered via telehealth has been shown to be effective, and research generally supports the use of interactive videoconferencing for assessment and treatment of conditions such as depression, post-traumatic stress disorder, SUD, and developmental disabilities (AHRQ 2016, Hilty et al. 2013). Psychiatric assessments via videoconferencing are generally as reliable as face-to-face assessments, although reliability can be a concern if limited bandwidth diminishes video and audio quality. Medication management for psychotropic drugs via telehealth can also be on par with face-to-face treatment. Studies to date generally show high patient and provider satisfaction with care delivered via videoconferencing, although some providers express concern that telehealth may affect the therapeutic alliance between patient and provider. There is also some resistance to adopting a new mode of care delivery (APA 2017, Hubley et al. 2016, Hilty et al. 2013).

There are few studies focused solely on Medicaid enrollees and the generalizability, availability, and quality of research on feasibility and effectiveness of telehealth for behavioral health varies depending on the type of telehealth application, specific intervention, patient condition, outcome metric, or population being studied (SAMHSA 2015). For example, studies focused on specific populations, such as individuals over age 65 or children, or specific settings, such as emergency departments, are more limited. Available research thus far, however, suggests high rates of patient satisfaction, reliability, and potential for positive outcomes (APA 2017, Saeed 2017, Myers and Comer 2016, Hilty 2013). While more research is needed, studies on telehealth use in opioid use disorder treatment also report favorable outcomes, patient satisfaction, and retention that are similar to face-to-face care (Zheng at al. 2017, SAMHSA 2016, Hilty et al. 2013, Young 2012).

Oral health

Use of oral health services among individuals with Medicaid coverage is relatively low despite some increases in recent years (MACPAC 2016a, 2016b).[13] Appropriate use of such services is important for prevention and treatment of dental disease, which if left untreated, can lead to pain, other health problems, and missed school or work days (KCMU 2016, MACPAC 2016a). Barriers to oral health care for Medicaid beneficiaries include cost, trouble finding a dentist that accepts Medicaid, fear of the dentist, and inconvenience of location or time (ADA 2017).

The use of telehealth in dentistry has been recognized for its potential to improve access to primary and specialty oral health care services in communities and settings where provider capacity is limited, for instance remote rural areas and nursing facilities (OHWRC 2016, ADA 2015). In a live video interaction, a patient in an originating site is typically joined by an oral health professional for a real-time video consultation with a general dentist or specialty dentist for diagnosis and development of a treatment plan (Glassman 2016, OHWRC 2016). Use of the store-and-forward modality allows a provider at the originating site (often a dental hygienist or dental therapist) to send images or

records such as X-rays, photographs, or lab results generated at that site to a general or specialty dentist for review at a later time (Glassman 2016, OHWRC 2016, Friction and Chen 2009). RPM includes the use of devices to collect and transmit data pertinent to patient oral health (e.g., measuring the pH of saliva over a period of time) to a dentist for review and treatment planning (Glassman 2016, OHWRC 2016).

Two recent scans of state policies identified 11 states providing some Medicaid coverage for teledentistry: Arizona, California, Colorado, Florida, Hawaii, Minnesota, Missouri, Montana, New Mexico, New York, and Washington (ATA 2017, CCHP 2017a). Policies vary in terms of modalities covered and conditions for payment. Arizona and California provide two examples:

- Arizona's Medicaid program, the Arizona Health Care Cost Containment System (AHCCCS), covers interactive audio, video, and data communications for triage, dental treatment planning, and referral. AHCCCS covers real-time teledentistry for enrollees under age 21 when provided by registered dental providers.[14] Consultation by a provider not licensed in Arizona may be permitted if such consultation is for an AHCCCS patient, the provider is registered with AHCCCS, and the provider is licensed in the state the service is provided from or employed by a tribe or by the Indian Health Service (AHCCCS 2016).

- California's Medi-Cal program covers live, synchronous telehealth only if the beneficiary requests it, and transmissions may not exceed 90 minutes per beneficiary per provider per day. Medi-Cal also covers teledentistry services by store-and-forward of periodontal charts or X-rays (CA DHCS 2016). The distant provider must review the information within 48 hours without the beneficiary being present. Beneficiaries may also request real-time communication with the distant dentist at the time of the consultation or within 30 days. Allied dental professionals are not permitted to bill for teledentistry (CA DHCS 2017).

Although available literature on teledentistry generally shows it to be effective, few studies focus specifically on the Medicaid population, and many cite the need for additional research on outcomes, use, and costs (Martin et al. 2016, ORWRC 2016, Daniel et al. 2013, Friction and Chen 2009, Kopycka-Kedzierawski et al. 2007). Teledentistry appears to be as effective as in-person visits for screening of childhood dental caries and orthodontic referrals (Daniel et al. 2013). One study found that teledentistry exams identified more dental caries in children than in-person visits did, possibly because of the high sensitivity of cameras used in teledentistry visits (Kopycka-Kedzierawski et al. 2007). Both patients and providers report high satisfaction with teledentistry (Daniel et al. 2013, Friction and Chen 2009). Patients expressing satisfaction cited greater convenience and improved access to care due to reduced driving time to appointments (Friction and Chen 2009).

A survey of dentists found that many dentists had limited knowledge about telehealth but were interested in its use to improve access to dental services (Martin et al. 2016). Respondents with Medicaid-enrolled individuals making up more than 10 percent of their patient pool were likely to cite a need for orthodontic consults; those with a smaller percentage of Medicaid-enrolled patients cited a need for periodontics consultations. A majority of respondents reported that they would seek a teledental consult for populations with special needs, for example, individuals with medically complex conditions, including children with special health care needs (Martin et al. 2016). Friction and Chen (2009) note that teledentistry can be particularly helpful in improving access to specialists for treating conditions that general dentists feel they lack training in, such as orofacial disorders.[15]

Maternity care

In 2010, Medicaid covered nearly half of all births in the United States (MACPAC 2013). Yet, in the same year, nearly 50 percent of U.S. counties had no obstetrician-gynecologists providing direct patient care, including those specializing in maternal-fetal medicine (MFM) to manage high-risk pregnancies (MACPAC 2013). Telehealth could help alleviate the geographic shortage of these providers by allowing them to help other providers manage pregnancies during the prenatal, perinatal, and postpartum period.[16]

Telehealth can be used to manage pregnancies in a number of ways. Videoconferencing can connect an MFM specialist with a patient and her regular maternity care provider in real time or enable the two providers to confer, even during labor and delivery (Marcin et al. 2016). This modality can also be used for genetic counseling (Hilgart et al. 2012). Another emerging use is for neonatal resuscitation: live videoconferencing enables experienced providers to guide resuscitation efforts in sites where low volumes of such events make it difficult for regular providers to maintain their proficiency in the procedure (Marcin et al. 2016). Pilot studies and initiatives have also tried videoconferencing for prenatal care visits, group prenatal care, and breastfeeding support, which include women with both high-risk and low-risk pregnancies (Pflugeisen et al. 2016, Haas 2014, Odibo et al. 2013, Macnab et al. 2012). To the extent a state Medicaid program covers specialty physician consults via live videoconferencing generally, patient consultations with MFM specialists are also covered. As of 2014, seven states explicitly stated that similar services would also be covered when performed by a licensed midwife (ATA 2014).

Store-and-forward technology can be used by specialists to receive and read ultrasounds as well as to oversee in real time, from a distant site, the administration of ultrasounds by a sonographer at the originating site. Several studies have demonstrated store-and-forward technology's feasibility for diagnosis of fetal anomalies and high-risk pregnancy management (Burke and Hall 2015, Odibo et al. 2013). Another emerging practice is the use of telehealth to diagnose congenital heart defects, either through live videoconferencing between a radiographer and fetal cardiologist, or by using store-and-forward to allow a specialist to review echocardiograms post hoc (Odibo et al. 2013, McCrossan et al. 2011). As of 2014, the only Medicaid programs covering telehealth interpretation of fetal echocardiograms were those in Arkansas and Virginia. Virginia was the sole state to pay for remote interpretation of ultrasound. Arkansas paid for the interpretation only if it was conducted during real-time videoconferencing while the ultrasound was being performed (ATA 2014).

Remote monitoring has also been used in the treatment of pregnant women. For example, women with diabetes can send blood glucose values to the provider via RPM, potentially reducing the frequency of in-person visits (Polsky and Garcetti 2017, Odibo et al. 2013). Home uterine activity monitoring, which uses a device to transmit data recordings to a provider to assess risk of preterm labor onset based in part on uterine contractions, however, has not been shown to affect maternal and perinatal outcomes. It is therefore not covered by many Medicaid programs (Urquhart et al. 2017, ATA 2014).

Arkansas Medicaid provides support to a telehealth initiative in high-risk obstetrics via the Antenatal and Neonatal Guidelines, Education and Learning System (ANGELS) program, directed by the University of Arkansas for Medical Sciences (UAMS). Most of the state's MFM specialists are located at UAMS only, so ANGELS uses videoconferencing to enable weekly real-time telehealth consultations between these specialists and participating patients and their local physicians, as well as real-time ultrasound readings.[17] Over a nine-month period in which this initiative was in place, Medicaid deliveries of very low birthweight infants in hospitals without neonatal intensive care

units (NICUs) decreased from 13.1 percent to 7.0 percent, and there was an associated small, but statistically significant, reduction in infant mortality. Separate studies found that there was also a 50 percent reduction in the need for women to travel to the tertiary care center at UAMS for specialist visits, and more women with high-risk pregnancies in Medicaid received a comprehensive ultrasound (Marcin et al. 2016, Long et al. 2014, Kim et al. 2013).

In a similar initiative at the University of Virginia Center for Telehealth, live videoconferencing connects women with high-risk pregnancies and their community providers to specialists at the university. This effort, too, has reported positive results among patients, some of whom were Medicaid enrollees. There was a 39 percent reduction in NICU hospital days, a 62 percent reduction in patient appointment no-shows, and a reduction in patient travel (Rheuban 2017).

Other high-need populations

Below we discuss how states have incorporated telehealth into efforts to improve and coordinate care for certain high-need populations, such as those enrolled in Medicaid health homes, individuals using home and community-based services, and beneficiaries who are dually eligible for Medicaid and Medicare.

Individuals enrolled in Medicaid health homes. Health homes are an optional state plan benefit to coordinate care for Medicaid beneficiaries with certain chronic conditions: mental illness, SUDs, asthma, diabetes, heart disease, and obesity. Through health homes, states provide comprehensive care management, care coordination, health promotion, comprehensive transitional care and follow-up, patient and family support, and referrals to community and social support services (CMS 2017b).[18]

Some states cover the use of telehealth to deliver health home services, for example, Ohio's health home provides services to adults with serious and persistent mental illness and children with serious emotional disturbances. Health home providers may deliver services face to face, by telephone, or by videoconferencing (CMS 2016d). Similarly, in West Virginia's statewide health home for individuals with bipolar disease who are also at risk for hepatitis B and C, providers can opt to deliver services face to face or through telehealth modalities (CMS 2017d). West Virginia's Medicaid program covers the live interactive modality (WV DHHR 2017).

Individuals using home and community-based services. Some states also use telehealth to provide home- and community-based services (HCBS); for example, under a Section 1915(c) waiver, Kansas provides telehealth-delivered services to individuals age 65 and older who need an institutional level of care but who are living in the community (CMS 2016e). These individuals must also need disease management consultation and education (e.g., for chronic obstructive pulmonary disease, congestive heart failure, hypertension, or diabetes), have had two or more hospitalizations within the previous year related to one or more diseases, or be participating in the Money Follows the Person demonstration (CMS 2016e). Providers engage in RPM or disease management, including educating enrollees on the use of equipment; they provide ongoing health education, counseling, and nursing supervision (CMS 2016e). Providers have access to enrollees' baseline health data and vital sign measurements. Nurses monitor enrollee health status, send monthly status reports to their physician supervisors, and contact enrollees at least once a month about pertinent healthful behaviors. Nurses are responsible for determining whether a follow-up with a provider is needed. A 2010 tracking study of the Kansas frail elderly HCBS waiver found that RPM helped reduce emergency department use, inpatient hospitalizations, nursing facility placements, and health care costs (CGA 2015).

Under its HCBS waiver for individuals age 60 and over, Pennsylvania provides TeleCare to individuals over age 60 in need of a nursing level of care, and who meet other conditions, such as having been hospitalized in the past year, diagnosed with

depression or other mental health issues, and having used the emergency department in the past year. TeleCare can use wireless technology or a phone line for communication between the participant and provider for education and consultation, and collection of health-related data to help the provider assess the participant's health status (PA DOA 2009).[19]

Individuals who are dually eligible for Medicaid and Medicare. A few states—Michigan, New York, and Virginia— that participate in capitated models under the Financial Alignment Initiative have incorporated telehealth (ATA 2017). In Michigan's demonstration, an entity referred to as the Integrated Care Organization (ICO) is responsible for providing integrated benefits for dually eligible enrollees. ICOs must ensure that enrollees have access to all Medicaid and Medicare services, and they may contract with prepaid inpatient health plans for behavioral health services. The plans must provide for care delivered through telehealth and must ensure coordination with the ICO (CMS 2014a).

In New York, fully integrated duals advantage (FIDA) plans cover telehealth or telemonitoring and web- or phone-based technology for enrollees with conditions that require frequent monitoring and frequent services, and where the provision of telehealth services can appropriately reduce the need for on-site or in-office visits or acute long-term care facility admissions. Examples of eligible conditions include congestive heart failure, diabetes, chronic pulmonary obstructive disease, wound care, polypharmacy, behavioral health issues that limit self-management, and technology-dependent care such as continuous oxygen, ventilator care, total parenteral nutrition, or enteral feeding (CMS 2014b).

Considerations for the Adoption of Telehealth

The use of telehealth in Medicaid has grown over the years as states have sought to reduce barriers to accessing care from providers who are in short supply or to eliminate the need to travel long distances for services. States may view telehealth as a strategy for reducing costs by eliminating the need for in-person encounters or to reduce the need for and use of more expensive services (e.g., inpatient hospital stays). States' ability to implement telehealth may also be affected by circumstances exogenous to Medicaid such as connectivity, technology, and provider licensure.

Expected effects of using telehealth

Commonly cited benefits of telehealth are its potential to expand access to services in areas that might otherwise be underserved and to better integrate care. However, states will need to weigh the costs and resource requirements of using or implementing telehealth against their goals of improving access (Ahn et al. 2016). Easier patient access to services through telehealth delivery might lead to greater and more appropriate use of services, but it could also lead to inappropriate use or overuse of services (Rudin et al. 2014). For example, if a telehealth service replaces what would have been an in-person encounter and the state pays a facility or transmission fee, then the overall cost of the service could be greater with telehealth than it was when delivered face to face. States expanding or implementing new telehealth modalities must also develop payment rates and program rules. States must also consider effects on quality of care, such as the potential for fragmented care from different providers, duplication of services, patient safety concerns if telehealth providers are unable to obtain sufficient medical information, and preservation of patient-provider relationships (Ahn et al. 2016).

Evidence on the effectiveness and outcomes of telehealth is somewhat mixed, depending on factors

such as the modality, condition, clinical setting, or population studied. Some studies have found that telehealth is as effective as in-person care, while others have found that it does not always lead to improved health outcomes (Bashshur et al. 2014, Mehrotra 2014).

Few published studies address the effects of telehealth in Medicaid specifically. Some included Medicaid beneficiaries in their overall study population but did not distinguish them from those with other coverage (Daugherty Douglas et al. 2017). We identified only one study that used Medicaid claims data to look at utilization and the characteristics of telehealth users (Daugherty Douglas et al. 2017). The study found that telehealth was predominantly being used to treat individuals with mental health conditions, specifically bipolar and attention deficit or attention deficit hyperactivity disorders. Individuals living in rural areas were 17 times more likely to use telehealth compared to individuals in large metropolitan areas. The same study found that aged, blind, or disabled enrollees were four to six times more likely to use telehealth than adults or children who were not aged, blind, or disabled (Daugherty Douglas et al. 2017).

Some state-specific analyses suggest that telehealth programs in Medicaid reduce use of expensive services and provide cost savings (CGA 2015, ICCC 2012). For example, in addition to the evaluation of Kansas's use of RPM in its frail elderly HCBS waiver program noted above, an evaluation of Iowa's congestive heart failure disease management program that used remote patient monitoring found that overall costs to the Medicaid program shrank (ICCC 2012). The cost reductions were attributed to reductions in the number and length of hospital stays and payments for prescription drugs (ICCC 2012).

Findings from other research on RPM also suggest that the modality can be effective in reducing hospitalizations or length of stay, as well as in reducing spending (Bashshur et al. 2014, Baker et al. 2011). However, one systematic review suggested that, on measures such as quality and cost effectiveness, findings were mixed, with some studies showing positive effects and others showing no impact (Bashshur et al. 2014).

A June 2016 review by the federal Agency for Healthcare Research and Quality (AHRQ) provides the most up-to-date assessment of systematic reviews of telehealth. AHRQ researchers assessed 58 systematic reviews on a range of modalities, settings, populations, and conditions to identify and describe the body of research evidence on telehealth, areas where research is insufficient, and suggested areas for future research.[20] The review concluded that RPM for patients with chronic diseases, communication and counseling for patients with chronic conditions, and psychotherapy are effective (AHRQ 2016).

AHRQ also reported on areas where there is promising evidence on telehealth's effectiveness, but for which they recommended systematic reviews: clinical consultation, use in intensive care units, and maternal and child health (AHRQ 2016). AHRQ noted that there is a need for more research in the following areas: triage for urgent and primary care, management of serious and chronic pediatric conditions, integration of behavioral and physical health, clinical outcomes for dermatology, and impact on cost and utilization (AHRQ 2016).

Research on telehealth can be challenging to interpret and findings of specific studies are not necessarily generalizable to other settings or populations (Mehrotra 2014). Studies have focused on a range of modalities, settings, populations, health conditions and severity levels, or outcome measures (AHRQ 2016, Bashshur et al. 2014, IOM 2012). Moreover, many of the available studies predate the implementation of delivery system reforms such as value-based purchasing and use of accountable care organizations. Given the movement toward these reforms, it would be worthwhile to understand the use of telehealth in these models as well as any effects on outcomes.

Connectivity and technology

Because telehealth relies on the electronic transmission of data, video, and images, reliable and affordable broadband connectivity is crucial. However, some areas—such as rural areas and Indian reservations where access to care could be improved through use of telehealth—lack such connectivity (ASPE 2016). An estimated 53 percent of individuals living in rural areas lack access to broadband speeds needed to support telehealth (ASPE 2016). Moreover, when broadband is available in rural areas, its cost can be three times that in urban areas (ASPE 2016). Although the Federal Communications Commission and the U.S. Department of Agriculture have programs to facilitate expansion of broadband to rural areas, the required application, cost sharing, and process for obtaining the funds may prevent health care providers from accessing them (ASPE 2016). In addition, there are likely to be costs associated with the acquisition, installation, maintenance, repair, and replacement of front-end technology needed to establish telehealth as a way of delivering services. However, not all states provide payment for these costs, which may be prohibitive and thus affect providers' ability or willingness to adopt telehealth.

Licensure

Provider licensure is the purview of states. Policies vary and may pose barriers to telehealth adoption and use (CCHP 2017a, ASPE 2016). For example, 48 states and the District of Columbia require that physicians providing telehealth be licensed in the state in which the patient lives (FSMB 2017). Although some providers are licensed in more than one state, those that are not may find the cost and administrative burden related to obtaining multiple state licenses prohibitive, and they may be deterred from using telehealth (ASPE 2016, CCHP 2016b). Some states allow telehealth providers to obtain a temporary license; others have licenses specific to telehealth or have reciprocity agreements with other states (CCHP 2017a, NCSL 2015).

Multistate compacts for physicians, psychologists, physical therapists, and nurses enable providers in participating states to practice across state lines more easily, by creating expedited state licensing pathways (IMLC 2017, NCSL 2015). These compacts are intended to facilitate use of telehealth as well as more broadly increase access to care.[21] The agreement applicable to physicians is called the Interstate Medical Licensure Compact. To date, 22 states have enacted a physician compact, and 4 more have introduced model compact legislation (IMLC 2017).

Other considerations

There are numerous other considerations associated with the use of telehealth in Medicaid and its use generally. Some are described below.

Privacy rules. The Health Insurance Portability and Accountability Act of 1996 (HIPAA, P.L. 104-191) and the confidentiality regulations governing SUD treatment information (42 CFR Part 2) do not have telehealth-specific requirements; thus telehealth providers must adhere to the same privacy requirements and standards that would have applied if the services were provided in person (CCHP 2016b, NCSL 2015, Molfenter et al. 2015). However, there may be additional privacy considerations when care is delivered via telehealth that could impede use of telehealth (CCHP 2016b). For example, providers may require technological support services during a visit using telehealth, which could mean that such support staff may be exposed to patients' personal health information. The use of mobile technologies for sending health information can also pose confidentiality concerns.

Prescribing. State rules on prescribing via telehealth vary, ranging from more to less specific to silent (CCHP 2017a, NCSL 2015). One patient safety concern related to prescribing is whether the interaction via telehealth is enough to ensure that providers have sufficient medical history or information to safely prescribe medication (CCHP 2016b, NCSL 2015). There is some agreement that providers should be able to prescribe via telehealth

just as they would prescribe during a face-to-face visit, provided that the provider-patient relationship has been established (NCSL 2015).

States generally determine how medications are prescribed via telehealth. In the case of controlled substances, however, there is a federal floor for requirements and limitations established by the Ryan Haight Online Pharmacy Consumer Protection Act of 2008 (P.L. 110–425).[22] The law generally prohibits prescribing of controlled substances through the Internet without a valid prescription, which requires the prescriber to have conducted at least one in-person medical evaluation of the patient. It exempts telehealth providers from this requirement under a limited set of circumstances. This includes situations when the patient's originating site is a Drug Enforcement Administration (DEA)-registered clinic or hospital (21 CFR Part 1300).[23] Some observers have raised concerns that this requirement can restrict the physician's ability to deliver appropriate care if, for example, a psychiatrist has a teleconsulting relationship with a clinic that is not DEA-registered, or the patient being seen via telehealth is located at home (ATA 2015, Baney 2015).

In 2015, the DEA announced plans to issue regulations to establish a telehealth registration process that could potentially enable more providers to prescribe medications via telehealth encounters, without needing to meet the in-person evaluation prerequisite (DEA 2015). As of December 2017, no such regulation had been issued. On October 26, 2017, the HHS Acting Secretary, at the request of the President, declared a nationwide public health emergency to address the opioid crisis, and stated the intent to work with the DEA to expand access for certain patients to SUD treatment via telemedicine (HHS 2017). However, no additional details on these efforts were released. The original declaration was set to expire on January 23, 2018 but has since been extended through April (HHS 2018).

States and licensing boards may also limit the circumstances under which a provider can prescribe a controlled substance via telehealth; they may restrict the types of controlled substances that can be prescribed or require an initial in-person assessment or treatment plan (Yood and Krauss, 2017).

Informed consent. Although there is no federal requirement for informed consent for telehealth, 28 states and the District of Columbia do have such requirements (CCHP 2017a). Requirements vary by state, including whether they are applicable to Medicaid or to telehealth in the state generally, if they apply to certain specialty services only, and whether consent must be provided in writing or if oral consent is acceptable (CCHP 2017a). With informed consent, providers explain to patients what telehealth is; how it is used; its benefits, risks, and limitations; and alternatives to telehealth. Examples of risks and alternatives include technological glitches or delays in care and the need for in-person visits in addition to telehealth, depending on the specific circumstances of the patient's condition (NCSL 2015).

Operational challenges for providers. Providers, too, may face challenges in implementing telehealth. For example, providers may not understand what it is or how to use the technologies (Martin et al. 2016, Glassman 2012, Friction and Chen 2009). Such problems can be resolved with education and experience. Close coordination between providers at originating and distant sites (e.g., correctly scheduling appointments at both sites) and development of trust and rapport is important for smooth telehealth encounters (Friction and Chen 2009).

Looking Ahead

This chapter highlights the growing use of telehealth by states in delivering Medicaid-covered services to beneficiaries. With few federal restrictions, states have flexibility in design and adoption of telehealth coverage. As a result, use of telehealth in Medicaid varies across states, but there are some common themes.

First, state coverage of telehealth in Medicaid is dynamic. Over time, states have expanded coverage for telehealth and further expansions of coverage to new modalities, services, or specialties are likely. In addition, ongoing advances in technology could lead to new opportunities for telehealth. As states consider how to improve access to care, they may consider a greater role for telehealth particularly in areas such as behavioral health or chronic disease management where the evidence of its effectiveness is relatively strong.

Second, there is much still to be learned about beneficiary, provider, and state experience with telehealth in Medicaid. For example, there is little information about outcomes and effectiveness, cost, or program integrity issues related to Medicaid coverage of telehealth-provided services. Existing research and data on the use of some telehealth modalities for different health or clinical conditions or populations has not focused on Medicaid populations or programs. Moreover, findings have been inconclusive concerning telehealth's effectiveness.

Third, there are few federal Medicaid barriers to the use of telehealth; however, numerous other factors may play into policies adopted by states or their ability to leverage telehealth. These factors affect use of telehealth by other payers as well. For example, access to technology and the broadband services required for telehealth can pose a challenge to some of the communities for which telehealth might be most beneficial. Examples of other commonly cited barriers to telehealth include licensure and ensuring privacy and security of personal information.

Fourth, although telehealth might address some of the access issues in Medicaid, it will not address all of them. For example, telehealth can address geographic access barriers and make it easier or more convenient for beneficiaries to see a provider who already cares for Medicaid enrollees, but it will not guarantee a change in overall provider willingness to participate in Medicaid or issues such as the lack of convenient office hours and available appointment times.

Finally, states seeking to implement or expand coverage of telehealth would likely benefit from additional research as well as from the experiences of other states. Shared state insights can also help other states, providers, health plans, and the research community gain a more robust understanding of the effects of telehealth on access to care, quality, and cost of care for the Medicaid population.

Endnotes

[1] For the purpose of Medicaid, the Centers for Medicare & Medicaid Services (CMS) describes telemedicine as "a cost-effective method of providing medical care through use of two-way, real-time interactive telecommunication, including the use of at least audio and video equipment, between Medicaid enrollees and a provider at a distant site" (CMS 2017a).

[2] Additionally, technologies may be supported by digital diagnostic medical device peripherals including otoscopes, pulse oximeters, glucometers, stethoscopes, and blood pressure cuffs.

[3] The rule was issued in 2016 to implement requirements made by the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) and the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA, P.L. 114-10). Under the requirements, physicians and other practitioners must document the occurrence of a face-to-face encounter with the Medicaid beneficiary within a reasonable timeframe (CMS 2016a).

[4] Distance standards require a minimum distance between the originating and distant sites as a condition of coverage.

[5] Historically, the telehealth modifiers used by Medicare and some states were the GT modifier to indicate "via interactive audio and video telecommunications systems" and the GQ modifier to indicate "via an asynchronous telecommunications system," such as for remote patient monitoring (CMS 2016b). Effective January 2017, CMS developed a new place of service (POS) code, 02, for

providers providing telehealth at the distant site. POS codes are used for claiming in Medicare and Medicaid (CMS 2016c). In addition, some state Medicaid programs are adopting the American Medical Association's new 95 modifier that other payers use with certain Current Procedural Terminology® codes to indicate real time, synchronous telehealth (CCHP 2017a).

[6] These states are Connecticut, Florida, Hawaii, Iowa, Kansas, Louisiana, Maine, Massachusetts, Mississippi, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Tennessee, Utah, and Vermont (ATA 2017).

[7] The state's policy refers to hub and spoke sites, with the hub being the distant site, and the spoke being the originating site.

[8] In addition to the applications described in this section, there are numerous other applications for telehealth in Medicaid, such as telestroke and teleintensive care units.

[9] Patient telephone consultations must comply with Oregon's Health Evidence Review Commission practice guidelines (OR HA 2017).

[10] Over a 26-month period, the Wyoming initiative substantially reduced the number of preschool-age children using psychotropic medications (Hilt 2015).

[11] In 2017, Medicare began paying for this care model using a code to cover the initial patient assessment and a second bundled code for ongoing monthly collaborative care management, with the possibility of a third add-on for more time-intensive management. It is billed by the primary care provider, and covers both the care manager and psychiatric specialist engagement (CMS 2017c).

[12] Washington implemented the model in a network of FQHCs and community behavioral health centers. Washington has submitted a state plan amendment seeking approval to pay broadly for this model's services under the new collaborative care model codes beginning in 2018 (WA HCA 2017).

[13] In Medicaid, states must provide comprehensive dental services to children; such services are optional for adults.

[14] Arizona's policy manual on telehealth says that the state covers teledentistry for individuals covered by early and periodic screening, diagnostic, and treatment (EPSDT) services (AHCCCS 2016).

[15] Examples of conditions that general dentists may not feel adequately trained to treat include orofacial disorders such as oral cancer, temporomandibular disorders, and oromucosal disease (Friction and Chen 2009).

[16] High-risk pregnancies can occur for a number of reasons; for example, when a woman has diabetes, hypertensive disorders, or cervical insufficiency; a previous history of preterm birth; is pregnant with multiples; or her fetus has suspected anomalies. Women with such conditions usually need to be seen by an obstetrician-gynecologist more frequently than those with low-risk pregnancies and may require the expertise of an MFM specialist (Marcin et al. 2016, Stover 2015). Complications during and immediately after birth can also occur unexpectedly, potentially necessitating the involvement of a specialist.

[17] ANGELS also includes a 24-hour call center service for provider access to obstetrical and neonatal telehealth consultations, specialist participation via videoconference in neonatal and obstetrical rounds in other hospitals, and interactive video education conferences for obstetrics and pediatrics (UAMS 2017).

[18] The extent to which telehealth services are being used in health homes is unclear. The federal annual evaluation reports, which focus on required core quality measures and other outcome measures, do not specifically address the use of telehealth.

[19] TeleCare services are specified by the service plan and may include the following: (1) health status measuring and monitoring for collecting vital signs information, such as blood oxygen levels and blood pressure; (2) activity and sensor monitoring for passively tracking participants' daily routines, such as wake up times, overnight bathroom usage, bathroom falls, medication usage, meal preparation, and room temperature; and (3) medication dispensing and monitoring, which utilizes a remote monitoring system personally pre-programmed for each participant to dispense, monitor compliance, and provide notification to the provider or family caregiver of missed doses or non-compliance with medication therapy (PA DOA 2017).

[20] Half of studies looked at more than one telehealth technology, 29 percent at asynchronous technology (including RPM), 17 percent at videoconferencing, and 4 percent at mobile technologies. Studies looked at clinical outcomes, and to a lesser extent, use of services or cost (AHRQ 2016).

[21] The Federation of State Medical Boards has developed a model interstate licensure compact that would allow states to offer a streamlined licensure process for physicians seeking to practice in multiple states. Although it is not specific to telehealth, increasing access to telehealth was a goal in its development (NCSL 2015). Under the Nurse Licensure Compact, the nurse license from one state is recognized in compact member states (CCHP 2016b, NCSL 2015). The Association of State and Provincial Psychology Boards, in 2015, approved a similar approach for psychologists called PSYPACT. The compact will become operational once seven states enact legislation to enter into it. As of September 2017, three states have passed such legislation (ASPPB 2017). The Federation of State Boards of Physical Therapy developed an interstate licensure compact for physical therapy and as of January 9, 2018, 14 states have enacted compact legislation (FSBPT 2018).

[22] The Ryan Haight Online Pharmacy Consumer Protection Act of 2008 (P.L. 110–425) was passed to eliminate illegitimate online pharmacies selling controlled substances without any patient contact or physician oversight.

[23] DEA registration requirements are described in 21 CFR Part 1301.

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Chapter 3:

Annual Analysis of Disproportionate Share Hospital Allotments to States

Annual Analysis of Disproportionate Share Hospital Allotments to States

Key Points

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

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

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

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

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

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

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

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

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

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

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

– Dash indicates that data are not available.

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

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

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

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

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

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

Background

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

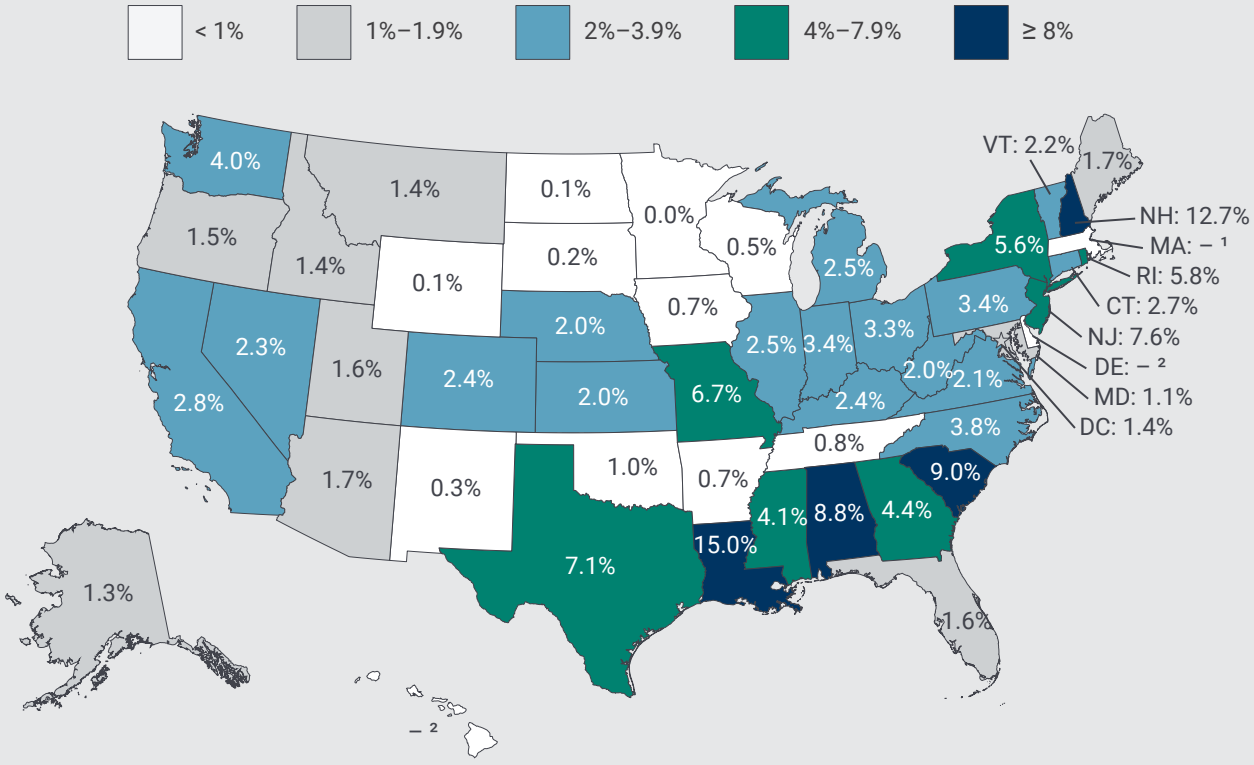
BOX 3-1. Glossary of Key Medicaid Disproportionate Share Hospital Terminology

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

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

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

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



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

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

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

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

In FY 2016, federal funds allotted to states for DSH payments totaled $11.9 billion, of which states spent $11.2 billion. (States spent $19.7 billion in state and federal funds combined.) DSH allotments that year ranged from less than $15 million in six states (Delaware, Hawaii, Montana, North Dakota, South Dakota, and Wyoming) to more than $1 billion in three states (California, New York, and Texas).

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

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

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

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

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

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

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

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

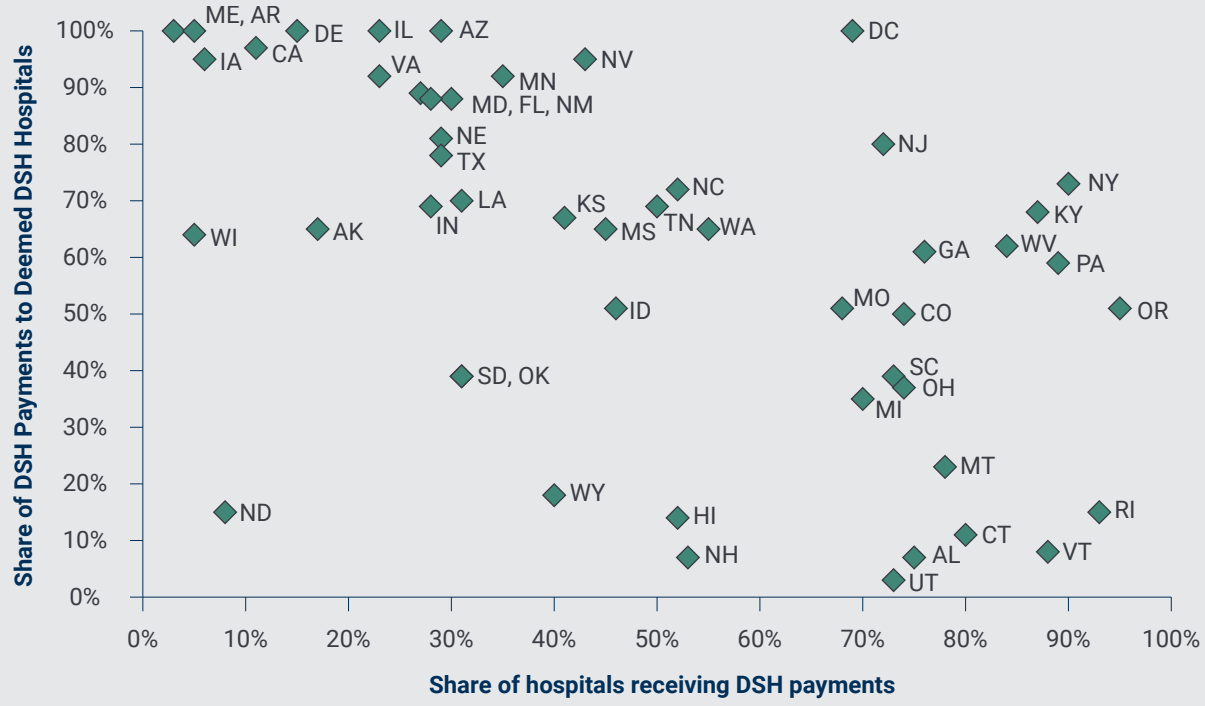
Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. Low-teaching hospitals have an intern-and-resident-to-bed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

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

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

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

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



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

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

Changes in the Number of Uninsured Individuals

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

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

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

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

Changes in the Amount of Hospital Uncompensated Care

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

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

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

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

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

Data Sources

- **American Hospital Association (AHA) annual survey.** An annual survey of hospital finances that provides aggregated national estimates of uncompensated care for community hospitals.
- **Medicare cost report.** An annual report on hospital finances that must be submitted by all hospitals that receive Medicare payments (that is, most U.S. hospitals). Medicare cost reports define hospital uncompensated care as bad debt and charity care.
- **Medicaid disproportionate share hospital (DSH) audit.** A statutorily required audit of a DSH hospital's uncompensated care. The audit ensures that Medicaid DSH payments do not exceed the hospital-specific DSH limit, which is equal to the sum of Medicaid shortfall and the unpaid costs of care for uninsured individuals for allowable inpatient and outpatient costs. Forty-four percent of U.S. hospitals were included on DSH audits in 2013, the latest year for which data are available.

Medicare cost report components of uncompensated care

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

Medicaid DSH audit components of uncompensated care

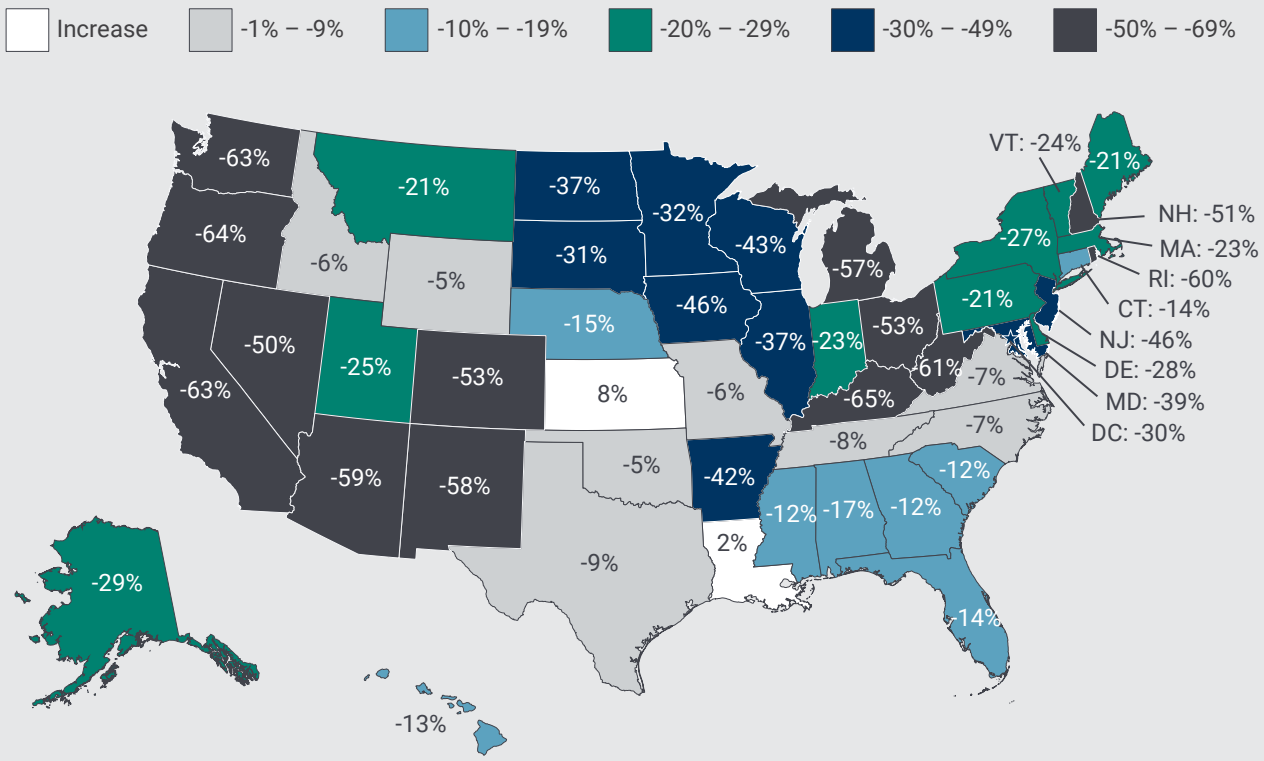
- **Unpaid costs of care for uninsured individuals.** The difference between a hospital's costs of providing services to individuals without health coverage and the total amount of payment received for those services. This includes charity care and bad debt for individuals without health coverage and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

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

Unpaid costs of care for uninsured individuals

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

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



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

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

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

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

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

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

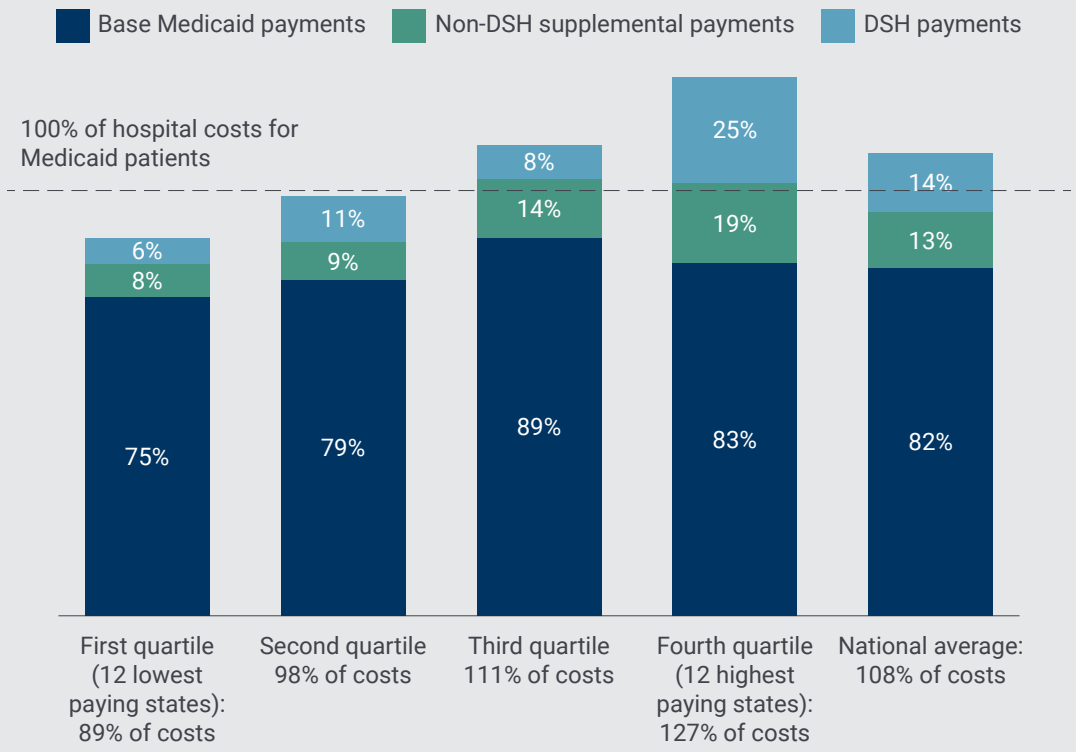
Medicaid shortfall

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

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

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

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



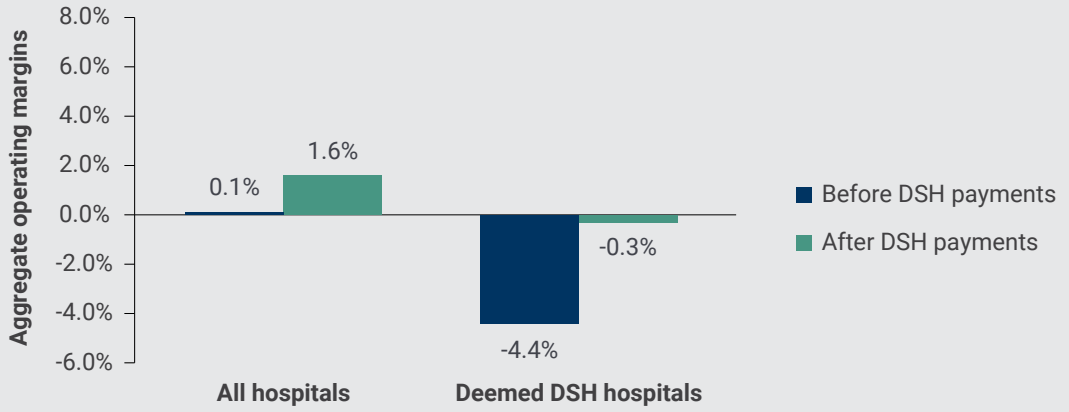
Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. Institutions for mental diseases were excluded from this analysis. Base Medicaid payments include fee-for-service as well as managed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

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

Effect on hospital margins

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

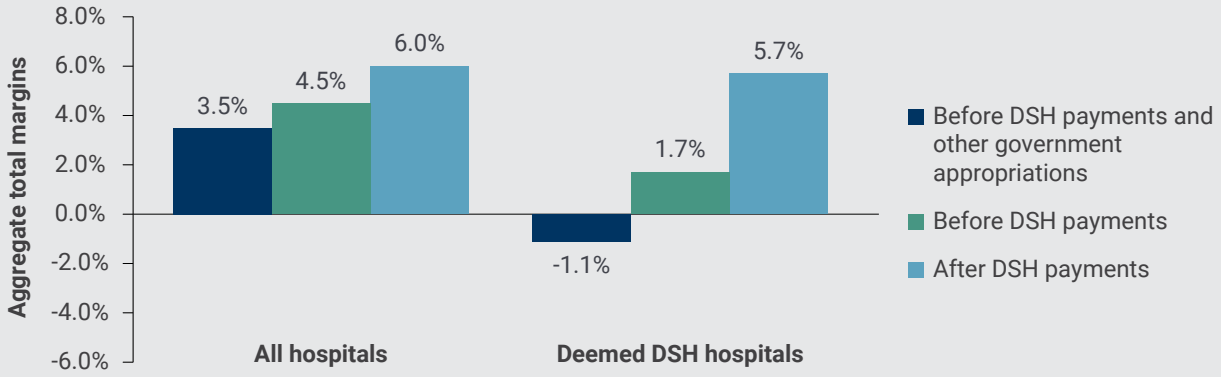
FIGURE 3-5. Aggregate Hospital Operating Margins Before and After DSH Payments, All Hospitals versus Deemed DSH Hospitals, 2015



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

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

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



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

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

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

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

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

BOX 3-3. Identifying Hospitals with High Levels of Uncompensated Care That Provide Essential Community Services for Low-Income, Uninsured, and Other Vulnerable Populations

The statute requires that MACPAC provide data identifying hospitals with high levels of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations, such as graduate medical education, and the continuum of primary through quaternary care, including the provision of trauma care and public health services. Based on the types of services suggested in the statute and the limits of available data, we included the following services in our working definition of essential community services in this report:

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

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

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

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

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

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

DSH Allotment Reductions

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

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

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

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

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

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

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

- **Low-DSH factor.** Allocates a smaller proportion of the total DSH allotment reductions to low-DSH states based on the size of these states' DSH allotments relative to their total Medicaid expenditures. Low-DSH states are defined in statute as states with FY 2000 DSH expenditures that were less than 3 percent of total state Medicaid medical assistance expenditures for FY 2000. There are 17 low-DSH states, a number that includes Hawaii, whose eligibility is based on a special statutory exception (§§ 1923(f)(5) and 1923(f)(6) of the Social Security Act).
- **Uninsured percentage factor.** Imposes larger DSH allotment reductions on states with lower uninsured rates relative to other states. One-half of DSH reductions are based on this factor.
- **High volume of Medicaid inpatients factor.** Imposes larger DSH allotment reductions on states that do not target DSH payments to hospitals with high Medicaid volume. The proportion of a state's DSH payments made to hospitals with Medicaid inpatient utilization that is one standard deviation above the mean (the same criteria used to determine deemed DSH hospitals) is compared among states. One-quarter of DSH reductions are based on this factor.
- **High level of uncompensated care factor.** Imposes larger reductions on states that do not target DSH payments to hospitals with high levels of uncompensated care. The proportion of a state's DSH payments made to hospitals with above-average uncompensated care as a proportion of total hospital costs is compared among states. This factor is calculated using DSH audit data, which defines uncompensated care costs as the sum of Medicaid shortfall and unpaid costs of care for uninsured individuals. One-quarter of DSH reductions are based on this factor.
- **Budget neutrality factor.** An adjustment to the high Medicaid and high uncompensated care factors that accounts for DSH allotments that were used as part of the budget neutrality calculations for coverage expansions under Section 1115 waivers in four states and the District of Columbia. (Four states—Indiana, Maine, Massachusetts, and Wisconsin—and the District of Columbia meet the statutory criteria for the budget neutrality factor.) Specifically, funding for these coverage expansions is excluded from the calculation of whether DSH payments were targeted to high Medicaid or high uncompensated care hospitals.

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

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

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

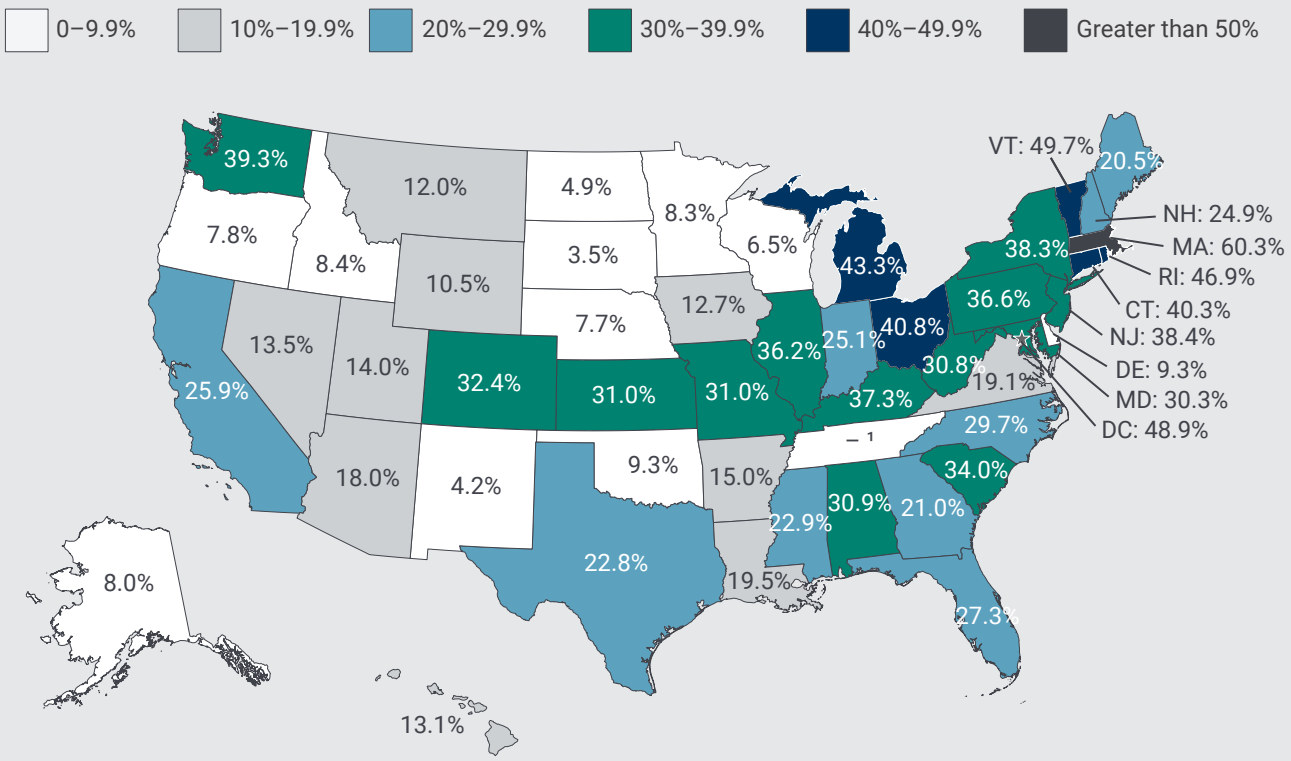
Reduced allotments compared to unreduced DSH allotments

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

Relationship of DSH allotments to the statutorily required factors

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

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

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

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

Next Steps

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

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

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

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

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

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

Endnotes

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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APPENDIX 3A: State-Level Data

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

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

TABLE 3A-1. (continued)

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

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

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

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

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

TABLE 3A-2. (continued)

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

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

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

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

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

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

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

TABLE 3A-3. (continued)

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

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

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

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

TABLE 3A-4. (continued)

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

TABLE 3A-4. (continued)

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

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

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

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

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

TABLE 3A-5. (continued)

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

TABLE 3A-5. (continued)

Notes: DSH is disproportionate share hospital. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. Deemed DSH hospitals are statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. Our working definition of essential community services includes the following services: burn services, dental services, graduate medical education, HIV/AIDS care, inpatient psychiatric services (through psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, primary care services, substance use disorder services, and trauma services. For further discussion of the methodology and limitations, see Appendix 3B.

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

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

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

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

TABLE 3A-6. (continued)

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

TABLE 3A-6. (continued)

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

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

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

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

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

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

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

TABLE 3A-7. (continued)

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

TABLE 3A-7. (continued)

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

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

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

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

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

TABLE 3A-8. (continued)

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

TABLE 3A-8. (continued)

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

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

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

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

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

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

TABLE 3A-9. (continued)

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

TABLE 3A-9. (continued)

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

Notes: FY is fiscal year. DSH is disproportionate share hospital. Excludes 127 DSH hospitals that did not submit a 2015 Medicare cost report. DSH allotment estimates are based on the DSH allotment reduction methodology that CMS proposed in July 2017 and may change if CMS changes this methodology when it finalizes this DSH allotment reduction rule. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. Our working definition of essential community services includes the following services: burn services, dental services, graduate medical education, HIV/AIDS care, inpatient psychiatric services (through psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, primary care services, substance use disorder services, and trauma services. For further discussion of the methodology and limitations, see Appendix 3B.

N/A indicates that the category is not applicable.

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

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

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

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

TABLE 3A-10. (continued)

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

TABLE 3A-10. (continued)

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

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

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

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

APPENDIX 3B: Methodology and Data Limitations

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

Primary Data Sources

DSH audit data

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

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

Medicare cost reports

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

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

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

Working Definition of Essential Community Services

The statute requires that MACPAC's analysis include data identifying hospitals with high levels

of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations, such as graduate medical education, and the continuum of primary through quaternary care, including the provision of trauma care and public health services.

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

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

Deemed DSH hospital status

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

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

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

Provision of essential community services

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

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

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

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

Projections of DSH Allotments and DSH Spending

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

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

References

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2017. Medicaid program: State disproportionate share hospital allotment reductions. Proposed rule. Federal Register 82, no. 144 (July 28): 33155–35171.

Congressional Budget Office (CBO). 2017. *The budget and economic outlook: 2017 to 2027*. Washington, DC: CBO. https://www.cbo.gov/publication/52370.

Appendix

Authorizing Language from the Social Security Act (42 USC 1396)

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

Penny Thompson, MPA (Chair), is principal of Penny Thompson Consulting, LLC, and provides strategic advice and solutioning services in the areas of health care delivery and payment, information technology development, and program integrity. Previously, she served as deputy director of the Center for Medicaid and CHIP Services at the Centers for Medicare & Medicaid Services (CMS). Ms. Thompson previously was director of health care strategy and planning for Hewlett Packard's health care business unit. In addition, she served as CMS's director of program integrity and as chief of the health care branch within the Office of Inspector General at the U.S. Department of Health and Human Services. Ms. Thompson received her master of public administration from The George Washington University.

Marsha Gold, ScD (Vice Chair), is an independent consultant and senior fellow emerita at Mathematica Policy Research, where she previously served as a lead investigator and project director on research in the areas of Medicare, Medicaid, managed care design, delivery system reform in both public and private health insurance, and access to care. Other prior positions include director of research and analysis at the Group Health Association of America, assistant professor with the Department of Health Policy and Administration at The University of North Carolina, and director of policy analysis and program evaluation at the Maryland Department of Health and Mental Hygiene. Dr. Gold is on the editorial board of Health Affairs and Health Services Research. She received her doctorate of science in health services and evaluation research from the Harvard School of Public Health.

Brian Burwell is senior executive, government health and human services, at IBM Watson Health in Cambridge, Massachusetts. Mr. Burwell conducts research and provides consulting services, policy analysis, 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. He has been with IBM Watson Health and its predecessor companies for 30 years. Mr. Burwell received his bachelor of arts degree from Dartmouth College.

Martha Carter, DHSc, MBA, APRN, CNM, is founder and CEO of FamilyCare Health Centers, a community health center serving four counties in south-central West Virginia. Dr. Carter practiced as a certified nurse-midwife in Kentucky, Ohio, and West Virginia for 20 years. She is a member of the West Virginia Alliance for Creative Health Solutions, a practice-led research and advocacy network, and she serves as the chair of the Quality Leadership Committee of the West Virginia Primary Care Association. 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 chief executive officer 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.

Gustavo Cruz, DMD, MPH, is an oral health policy consultant and senior advisor to Health Equity Initiative, a professional membership organization in New York City that brings together community leaders and professionals in diverse fields to promote innovations in health equity. Dr. Cruz was a Robert

Wood Johnson Foundation Health Policy Fellow in 2009–2010, working in the office of the Secretary of the U.S. Department of Health and Human Services. Subsequently, he served as chief of the Oral Health Branch, Bureau of Health Professions, at the Health Resources and Services Administration. He previously served as director of public health and health promotion at New York University College of Dentistry and as governing faculty of New York University's master's degree program in global public health. Dr. Cruz has conducted numerous research studies on the oral health of U.S. immigrants, oral health disparities, oral and pharyngeal cancers, and access to oral health care among underserved populations, as well as on the effects of race, ethnicity, acculturation, and culturally influenced behaviors on oral health outcomes and health services utilization. He received his degree in dentistry from the University of Puerto Rico and his master of public health from Columbia University's School of Public Health. He is a diplomate of the American Board of Dental Public Health.

Kisha Davis, MD, MPH, is a family physician at CHI Health Care in Rockville, Maryland, and is also program manager at the Center for Applied Research in Philadelphia, Pennsylvania, where she supports projects for family physicians focused on payment reform and practice transformation to promote health system change. Previously, Dr. Davis was medical director and director of community health at CHI and was also 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 for Medicaid solutions at Centene Corporation. Previously, Mr. Douglas was 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 State Children's Health Insurance Program (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 chief executive officer 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, is the former president of public plans at Tufts Health Plan, a non-profit health plan in Massachusetts, Rhode Island, and New Hampshire. Previously, Dr. Gorton was chief executive officer (CEO) of a regional health plan that was acquired by the Inova Health System of Falls Church, Virginia. Other positions have included 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 in the Society of Actuaries and a member of the AAA. She received her master of public administration from Florida State University.

Charles Milligan, JD, MPH, is CEO of UnitedHealthcare Community Plan of New Mexico, a Medicaid managed care organization with enrolled members in all Medicaid eligibility categories (including dually eligible beneficiaries and adults in Medicaid expansion programs) that provides somatic, behavioral, and managed long-term services and supports. 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.

Sheldon Retchin, MD, MSPH, is professor of internal medicine at The Ohio State University Wexner Medical Center 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 (MedPAC). 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.

Alan Weil, JD, MPP, is editor-in-chief of *Health Affairs*, a multidisciplinary peer-reviewed health policy journal, in Bethesda, Maryland. He is an elected member of the National Academy of Medicine and served six years on its Board on Health Care Services. He is a trustee of the Consumer Health Foundation and is the director of the Aspen Health Strategy Group. He previously served as executive director of the National Academy for State Health Policy, director of the Urban Institute's Assessing the New Federalism Project, executive director of the Colorado Department of Health Care Policy and Financing, and assistant general counsel in the Massachusetts Department of Medical Security. He received a master's degree from Harvard University's John F. Kennedy School of Government and a law degree from Harvard Law School.

Biographies of Staff

Annie Andrianasolo, MBA, is the executive administrator. She previously held the position of special assistant for global health at the Public Health Institute and was a program assistant for the World Bank. Ms. Andrianasolo has a bachelor of science in economics and a master of business administration from Johns Hopkins Carey Business School.

Kirstin Blom, MIPA, is 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.

Madeline Britvec is a research assistant. Prior to joining MACPAC, she held internships at the U.S. Chamber of Commerce, International Bridges to Justice, and CBS Detroit. Ms. Britvec holds a bachelor of arts in economics and applied statistics from Smith College.

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.

Benjamin Finder, MPH, is a senior analyst. His work focuses on benefits and payment policy. Prior to joining MACPAC, he served as an associate director in the Health Care Policy and Research Administration at the District of Columbia Department of Health Care Finance and as an analyst at the Henry J. Kaiser Family Foundation. Mr. Finder holds a master of public health from The George Washington University, where he concentrated in health policy and health economics.

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.

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.

Angelica Hill, MA, is the communications and graphics manager. Prior to joining MACPAC, she worked as the membership and programming coordinator for the Public Access Corporation of the District of Columbia (DCTV) and held a similar position at Women in Film and Video. Ms. Hill holds a master of arts in producing for film and video from American University and a bachelor of arts in communications from Howard 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.

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 is the administrative assistant. Prior to joining MACPAC, she worked as an intern for Kaiser Permanente, where she helped coordinate health and wellness events in the Washington, DC, area. Ms. Jones holds 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, Office of Management and Budget, 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.

Nisha Kurani, MPP, is an analyst. Prior to joining MACPAC, Ms. Kurani was a policy associate at the Henry J. Kaiser Family Foundation. She also has held research and policy analysis positions at the University of California's Berkeley School of Public Health, the Public Policy Institute of California, and Housing and Economic Rights Advocates. Ms. Kurani holds a master of public policy from the University of California, Berkeley, and a bachelor of science in physiology and neuroscience from the University of California, San Diego.

Daniel Marthey is a research assistant. He is a master of public health candidate in health policy analysis and evaluation at the University of Maryland School of Public Health. Prior to joining MACPAC, he was a research assistant in the University of Maryland's Department of Health Services Administration, where he worked on the evaluation of a Delaware state plan to increase the use of long-acting reversible contraceptives. Mr. Marthey also served from 2013 to 2015 in the Peace Corps, where he was a community health advisor in Malawi. He

holds a bachelor of science in public health from Kent State 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.

Nevena Minor, MPP, is a senior analyst. Prior to joining MACPAC, Ms. Minor was deputy director of the American Psychiatric Association's Department of Reimbursement Policy, focusing on Medicaid and Medicare policies affecting access to care for mental health and substance use disorders. She was also head of the federal affairs division of the American Congress of Obstetricians and Gynecologists, leading its work on physician payment and reproductive, maternal, and child health. Before that, Ms. Minor held several positions at the Heart Rhythm Society. She has a master's degree in public policy with a concentration in health policy from The George Washington University and a bachelor of arts in sociology from Dickinson College.

Jessica Morris, MPA, is a principal analyst focusing on Medicaid data and program integrity. Previously, she was a senior analyst at GAO with a focus on Medicaid data systems. She also was a management analyst at the U.S. Department of Veterans Affairs (VA), a presidential management fellow at the Pittsburgh VA Medical Center, and a legislative correspondent in the U.S. Senate. Ms. Morris has a master of public administration from The George Washington University and a bachelor of arts in political science and communications from the State University of New York at Cortland.

Robert Nelb, MPH, is a senior 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 MACPAC's 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 and 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.

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.

Brian Robinson is MACPAC's 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 (MedPAC). 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.

Rick Van Buren, JD, is a senior analyst. Prior to joining MACPAC, he was a health insurance specialist in the CMS Office of Legislation, where he served as the lead analyst on the Medicaid drug rebate program and Medicaid managed care. Mr. Van Buren has a juris doctor from Georgetown University and a bachelor's degree in English and political science from the University of Pittsburgh.

Kristal Vardaman, MSPH, is a principal analyst focused 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. Ms. Vardaman 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. She currently is pursuing a doctorate in public policy from The George Washington University.

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 provided 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.

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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