Report to Congress on Medicaid and CHIP

MARCH 2022





About MACPAC

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

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

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

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

Report to Congress on Medicaid and CHIP

MARCH 2022





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March 15, 2022

The Honorable Kamala Harris President of the Senate The Capitol Washington, DC 20510 The Honorable Nancy Pelosi Speaker of the House The Capitol Washington, DC 20515

Dear Madam Vice President and Madam Speaker:

On behalf of the Medicaid and CHIP Payment and Access Commission (MACPAC), I am pleased to submit the March 2022 *Report to Congress on Medicaid and CHIP.* This report includes three chapters that address: transitioning Medicaid beneficiaries out of institutions and back into the community under the Money Follows the Person (MFP) program; improving vaccination rates and access for adults enrolled in Medicaid; and improving hospital payment policy for the nation's safety net hospitals.

Chapter 1 fulfills a congressionally mandated study on MFP, which has provided participating states with flexibility and enhanced funding to support transitions to the community. Specifically, Congress asked the Commission to compare the MFP residence criteria, which requires participants to be transitioned into specific settings, to the more expansive set of settings that are permitted under the home- and community-based services (HCBS) settings rule. Congress directed MACPAC to identify settings that are available to MFP participants and the settings that qualify for HCBS payment under the settings rule. This directive also asked the Commission to consider whether the MFP residence criteria should be harmonized with the HCBS settings rule. The Commission discussed varying views on aligning MFP residence criteria with the HCBS settings, but concluded that there was not enough empirical data to support a recommendation to harmonize the MFP residence criteria with the HCBS settings rule. The chapter outlines the advantages and disadvantages of the current criteria as informed by stakeholder perspectives.

The COVD-19 pandemic has highlighted the importance of vaccinations in preventing illness and death. In Chapter 2, we focus on vaccine access for adults enrolled in Medicaid. Adult Medicaid beneficiaries have lower vaccination rates than those covered by private insurance across nearly all vaccines, in large part, due to limited coverage. While mandatory coverage for all vaccines is a necessary first step to ensuring vaccine access and preventing illness, hospitalization, and death from vaccine-preventable diseases, coverage alone may not be sufficient to improve vaccination rates significantly. The chapter highlights several policy considerations to improve vaccine access for Medicaid beneficiaries. The Commission

intends to continue evaluating these options with an eye towards publishing additional findings and recommendations in our June 2022 report.

The final chapter of the March report continues the Commission's work on our annual, statutorily mandated obligation to report on Medicaid disproportionate share hospital (DSH) allotments to states. As in prior years, the Commission continues to find little meaningful relationship between state 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. The COVID-19 pandemic has had substantial effects on hospital finances, but the full effects on safety-net and DSH hospitals may not be clear until after the public health emergency has ended. We summarize the limited information available about the early effects of the COVID-19 pandemic on safety-net hospitals.

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

Sincerely,

Melanie Bella, MBA

Melanie Belle

Chair



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Executive Summary: March 2022 Report to Congress on Medicaid and CHIP

MACPAC's March 2022 Report to Congress on Medicaid and CHIP contains three chapters of interest to Congress: (1) transitioning Medicaid beneficiaries out of institutions and back into the community under the Money Follows the Person (MFP) demonstration program, (2) improving access to vaccines and vaccination rates for adults enrolled in Medicaid, and (3) our statutorily required review of hospital payment policy for the nation's safety-net hospitals.

CHAPTER 1: Revisiting the Money Follows the Person Qualified Residence Criteria

Chapter 1 fulfills a congressionally mandated study on MFP, which has provided participating states with flexibility and enhanced funding to support more than 100,000 Medicaid beneficiaries in transitioning from institutional settings back into the community.

MFP, which was first authorized by the Deficit Reduction Act of 2005 (DRA, P.L. 109-171), is one of numerous federal and state efforts to serve more people with disabilities in the community. The program affirms their civil rights as set forth in the Americans with Disabilities Act (ADA, P.L. 110-325, as amended) and the U.S. Supreme Court's 1999 decision in *Olmstead v. L.C.* Under the demonstration, states can help individuals transition from nursing facilities into community settings that meet specific criteria. These so-called qualified residence criteria, defined in the DRA, have not changed since MFP's inception.

In the most recent bill reauthorizing MFP, the Consolidated Appropriations Act, 2021 (CAA, P.L. 116-260), Congress asked the Commission to compare the MFP residence criteria, which

require participants to be transitioned into specific settings, to the more expansive set of settings that are permitted under the home- and community-based services (HCBS) settings rule. Congress directed MACPAC to identify settings that are available to MFP participants and the settings that qualify for HCBS payment under the settings rule. This directive also asked the Commission to consider whether the MFP residence criteria should be harmonized with the HCBS settings rule.

There are no data to compare costs or outcomes between MFP qualified residences and other settings that are eligible for HCBS payment. To understand the trade-offs of retaining or making changes to the qualified residence criteria, MACPAC interviewed stakeholders to understand the factors beneficiaries, state and federal officials, providers, and researchers considered most important in determining whether the residence criteria should be aligned with the settings rule.

Stakeholders expressed a number of advantages and disadvantages to the current MFP criteria. Some stakeholders said that maintaining the existing MFP qualified residence criteria keeps the demonstration's focus on small and highly integrated community settings, which best support the civil rights and preferences of people with disabilities. Other stakeholders said that aligning the qualified residence criteria with the HCBS settings rule could allow more settings to be eligible for MFP transitions and give states more choices to offer beneficiaries who want to transition to the community. In addition, stakeholders raised other concerns about MFP unrelated to the qualified residence criteria. This included concerns about housing affordability, HCBS workforce issues, length of stay requirements, and uncertainty over MFP funding.

The Commission discussed these varying views on aligning MFP residence criteria with the HCBS settings rule but concluded that there was not enough empirical data to support a recommendation to harmonize the MFP residence

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criteria with the HCBS settings rule. Ultimately, a decision on this issue reflects a value judgment about the most appropriate use of MFP funds.

CHAPTER 2: Vaccine Access for Adults Enrolled in Medicaid

In Chapter 2, we focus on vaccine access for adults enrolled in Medicaid. Adult Medicaid beneficiaries have lower vaccination rates than those covered by private insurance across nearly all vaccines, in large part due to limited coverage. The difference in vaccination rates among pregnant women is particularly stark. The rate for influenza vaccination was almost 21 percentage points lower for pregnant women enrolled in Medicaid than it was for those enrolled in private insurance.

Under current law, Medicaid enrollees in the new adult group have coverage of all vaccines recommended by the Advisory Committee for Immunization Practices (ACIP) without cost sharing, but coverage of vaccines for other adults in Medicaid is optional, and states can determine which to cover and whether to apply cost sharing. These differences in coverage policies among adult eligibility groups have resulted in unequal access to some ACIP-recommended vaccines. For almost two out of every five Medicaid-enrolled adults (38.2 percent), vaccine coverage is optional and varies by state. This includes adults eligible on the basis of disability, those age 65 and older, parents and caretaker relatives, and pregnant women.

In the Commission's view, mandatory coverage for all vaccines is a necessary first step to ensuring vaccine access and preventing illness, hospitalization, and death from vaccine-preventable diseases. However, coverage alone may not be sufficient to improve vaccination rates significantly. The chapter highlights several policy considerations to improve vaccine access for Medicaid beneficiaries. This includes addressing limited provider access and availability and inadequate support and education for beneficiaries.

The Commission will continue evaluating these options with an eye toward publishing additional findings and recommendations in our June 2022 report that could meaningfully address barriers to access and improve adult vaccination rates.

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

Chapter 3 of the March report fulfills MACPAC's annual, statutorily mandated obligation to report on Medicaid disproportionate share hospital (DSH) allotments to states for payments to hospitals that serve a high proportion of Medicaid beneficiaries and other low-income patients.

As in prior years, the Commission continues to find little meaningful relationship between state 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.

In 2020, 28 million people were uninsured. The uninsured rate increased in spring 2020 during the early stages of the COVID-19 pandemic. Starting in August 2020 until July 2021, the monthly uninsured rate declined, and Medicaid enrollment increased. The decline in the uninsured rate and increase in Medicaid enrollment are partially attributable to the Families First Coronavirus Response Act (FFCRA, P.L. 116-127), which required states to provide continuous coverage to Medicaid enrollees until the end of the public health emergency to receive a 6.2 percentage point increase in the federal medical assistance percentage (FMAP).

The COVID-19 pandemic has had substantial effects on hospital finances, but the full effects on safety-net and DSH hospitals may not be clear until after the public health emergency has ended. The Medicaid shortfall, the difference between the Medicaid base payments a hospital receives and its costs of providing services to Medicaid-



enrolled patients, decreased \$700 million (4 percent) between 2018 and 2019, according to the American Hospital Association annual survey. In 2019, total Medicaid shortfall for all U.S. hospitals was \$19 billion.

To help address financial challenges related to the pandemic, Congress authorized relief funding to support providers. But provider relief funds mostly targeted hospitals with high patient revenue, and there was no relationship between total hospital relief funding and the number of uninsured in the area. The American Rescue Plan Act of 2021 (ARPA, P.L. 117-2) increased DSH allotments for the remainder of the public health emergency by applying an enhanced FMAP to the total DSH

funds available to states. We estimate that ARPA increased federal allotments by \$1.5 billion for fiscal year 2022. The Commission will continue to monitor the effects of the pandemic on safety-net providers as more data become available.

The Consolidated Appropriations Act, 2021 (P.L. 116-260) partially implemented a prior MACPAC recommendation requiring the Secretary of the U.S. Department of Health and Human Services (HHS) to report Medicaid supplemental payments. Beginning in October 2021, HHS started collecting hospital-level data on non-DSH supplemental payments. MACPAC will use these data to analyze Medicaid shortfall for DSH and non-DSH hospitals.

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Chapter 1:

Revisiting the Money Follows the Person Qualified Residence Criteria



Revisiting the Money Follows the Person Qualified Residence Criteria

Key Points

- The Money Follows the Person (MFP) demonstration, first authorized by the Deficit Reduction Act of 2005 (DRA, P.L. 109-171), has provided participating states with flexibility and enhanced funding to support over 100,000 Medicaid beneficiaries in transitioning from institutions to the community.
- MFP is one of numerous federal and state efforts to serve more people with disabilities in the community, which affirms their civil rights as set forth in the Americans with Disabilities Act (P.L. 101-336, as amended) and the U.S. Supreme Court's decision in *Olmstead v. L.C.*, 119 S. Ct. 2176 (1999).
- Under the demonstration, states can help individuals transition into community settings that
 meet specific criteria. These so-called qualified residence criteria, defined in the DRA, have not
 changed since MFP's inception.
- The MFP qualified residence criteria differ from standards governing settings that receive Medicaid home- and community-based services (HCBS) payment, which were defined in the HCBS settings rule, published in 2014. Although MFP qualified residences must meet the requirements of the rule, a broader range of settings are eligible for Medicaid HCBS payment.
- In the Consolidated Appropriations Act, 2021 (P.L. 116-260), Congress directed MACPAC to submit a report identifying settings available to beneficiaries in MFP and sites in compliance with the HCBS settings rule. This chapter represents MACPAC's response to this mandate.
- To understand the trade-offs of maintaining the current criteria, we reviewed data on MFP transitions, conducted a survey of state MFP program directors, and conducted stakeholder interviews. We heard strong arguments on both sides of the issue.
 - Maintaining the existing MFP qualified residence criteria keeps the demonstration's focus on small and highly integrated community settings, which best support the civil rights and preferences of people with disabilities.
 - Aligning the qualified residence criteria with the HCBS settings rule could open up more settings to be eligible for MFP transitions and give states more choices to offer beneficiaries who want to transition to the community.
- After lengthy discussion of the advantages and disadvantages of the existing MFP qualified
 residence criteria and potential implications of changes, the Commission concluded that there
 was not enough empirical data to guide a decision on whether MFP qualified residence criteria
 should be aligned with the HCBS settings rule. Ultimately, a decision on this issue reflects a
 value judgment about the most appropriate use of MFP funds.



CHAPTER 1: Revisiting the Money Follows the Person Qualified Residence Criteria

Rebalancing, the shift in Medicaid spending on long-term services and supports (LTSS) from institutional services to home- and communitybased services (HCBS), has been a federal and state policy goal for several decades. Rebalancing is a component of decades-long efforts to serve more people with disabilities in the community, where most people prefer to receive services. Rebalancing also affirms the civil rights of people with disabilities as set forth in the Americans with Disabilities Act (ADA, P.L. 101-336, as amended) and the U.S. Supreme Court's decision in Olmstead v. L.C., 119 S. Ct. 2176 (1999). The federal government has supported rebalancing through several initiatives, including the Money Follows the Person (MFP) demonstration. First authorized by the Deficit Reduction Act of 2005 (DRA, P.L. 109-171), MFP has provided participating states with flexibility and enhanced funding to support over 100,000 Medicaid beneficiaries in transitioning from institutions to the community (Liao and Peebles 2020).

MFP supports participant transitions from institutions into specific settings as defined in the DRA. These qualified residence criteria have not changed since the demonstration's inception. MFP qualified residence criteria are narrower than those permitted for payment of Medicaid HCBS more generally. As described in the HCBS settings rule, finalized by the Centers for Medicare & Medicaid Services (CMS) in 2014, eligible HCBS settings are distinct from institutional settings and facilitate community integration, and are defined by the nature and quality of individuals' experiences rather than solely by the physical location (CMS 2014a). Thus, although MFP qualified residences must meet the requirements of the rule, a broader range of settings are eligible for Medicaid HCBS payment.1

In the most recent bill reauthorizing MFP, the Consolidated Appropriations Act, 2021 (CAA, P.L. 116-260), Congress directed MACPAC to submit a report that does the following:

- "identifies the types of home and communitybased settings and associated services that are available to eligible individuals in both the MFP demonstration program and sites in compliance with the HCBS final rule; and
- if determined appropriate by the Commission, recommends policies to align the criteria for a qualified residence under subsection (b)(6) (as in effect on October 1, 2017) with the criteria in the HCBS final rule."

This chapter represents MACPAC's response to this mandate. Our analysis and conclusions are based on the following:

- review of data on MFP transitions, including the settings into which participants transitioned;
- a survey of state MFP program directors regarding their views on whether the MFP qualified residence criteria have been a barrier to transitions and whether they should be aligned with the settings rule; and
- interviews with stakeholders, including states, beneficiary advocates, provider organizations, and researchers, to understand the trade-offs of changing the MFP qualified residence criteria.

After lengthy discussion of the advantages and disadvantages of the existing MFP qualified residence criteria and potential implications of changes, the Commission concluded that there was not enough empirical data to guide a decision on whether MFP qualified residence criteria should be aligned with the HCBS settings rule. While our review revealed trade-offs of maintaining the current criteria, ultimately a decision regarding the criteria for qualified residences reflects a value judgment about the most appropriate use of MFP funds.



This chapter begins with background on MFP, including data on the settings into which participants transition, and the HCBS settings rule. It then reviews the differences between MFP qualified residences and settings eligible for Medicaid HCBS payment under the settings rule.

We then discuss stakeholder perspectives on the existing criteria, incorporating our survey results and themes from stakeholder interviews. Many advocates and a few states supported maintaining the existing criteria, saying they set a high bar by supporting transitions into the most integrated settings possible and avoid some of their concerns about settings that may be permitted under the HCBS settings rule. Others, however, said that changing the criteria would allow for more transitions, and it would be easier to administer compared with having two sets of criteria. We end the chapter by highlighting several additional concerns we heard from stakeholders about MFP operations and describing the type of information that would support future assessments of MFP.

Historical Context for MFP

In considering the role and design of MFP, it is useful to understand how it fits into decadeslong efforts to change how people receive LTSS. Deinstitutionalization, the shift to serving individuals with disabilities in the community rather than in institutions, began in the 1950s due to concerns about the high rates of individuals with severe mental illness living in public mental health facilities, the poor living conditions in such institutions, and the civil rights of individuals who are institutionalized (Parks and Radke 2014). In the 1960s, new funding was provided to increase mental health resources and services in the community, and the movement to deinstitutionalize expanded to include individuals with intellectual or developmental disabilities (ID/DD).

From the early 1970s until the 1990s, statutory changes, court decisions, and advocacy efforts to

support community-based care for individuals with mental illness and ID/DD led to the closure of large state mental hospitals and large state facilities for people with ID/DD, reducing the number of individuals receiving care in large institutions (ACL 2017, Bagenstos 2012, Frontline 2005). The enactment of the ADA on July 26, 1990, marked a noteworthy change in civil rights law by prohibiting discrimination against individuals with disabilities in employment and public accommodations.

After the passage of the ADA, cases involving the institutionalization of individuals with disabilities who could be served in the community became a major area of litigation against states (Butler 2000). One of these cases, Olmstead v. L.C., reached the Supreme Court, which ruled in 1999 that the unjustified institutionalization of individuals with disabilities violated the ADA. The ruling was based on two conclusions. First, the institutionalization of individuals with disabilities who can live in community settings perpetuates the unwarranted assumption that such persons are not able to live in a community. Second, the ruling noted that "confinement in an institution severely diminishes the everyday life activities of individuals, including family relations, social contacts, work options, economic independence, educational advancement, and cultural enrichment." In Olmstead, the court concluded that states must provide treatment for individuals with disabilities in the most integrated setting possible if the individuals are not opposed, and such placement is appropriate and can be reasonably accommodated by the state.

Since then, rebalancing efforts in Medicaid have worked to uphold the *Olmstead* decision by providing beneficiaries with services in the community. These efforts have also included support for HCBS infrastructure such as the Real Choice Systems Change grant program, Balancing Incentive Program, nursing facility diversion programs, and investments in transitions out of institutions to the community such as through MFP.



MFP demonstration

It is in the context of deinstitutionalization and federal efforts to support rebalancing that MFP was to assist beneficiaries who want to move out of institutions into their own homes or small community-based settings by providing states with incentives to assist with their transitions. The DRA authorized MFP through fiscal year (FY) 2011, and it has since been extended through FY 2023 by a series of legislative actions.² Funds that go unspent in their award year can be used for four additional fiscal years. The most recent MFP funds provided in the CAA must be awarded to grantees by September 30, 2023; therefore, these funds are available through FY 2027.

The DRA specified the goals of the MFP demonstration as the following:

- rebalancing—that is, increasing the use of HCBS relative to institutional LTSS;
- eliminating barriers or mechanisms that prevent Medicaid beneficiaries from receiving LTSS in the settings of their choice;
- assuring continuity of service for beneficiaries who transition from institutional to community settings; and
- providing for quality assurance for services received through the demonstration.

State participation in the MFP demonstration is voluntary, and to participate, states must submit an application to CMS describing how they will implement the two primary program components: (1) a program to assist in transitioning qualified beneficiaries residing in institutions back to the community; and (2) a rebalancing strategy aimed at strengthening the state's overall ability to provide HCBS, in line with the goals specified in the DRA. As part of the application process, states project the number of beneficiaries to be transitioned annually and describe the services available as part of the demonstration.

From 2007 to 2012, CMS awarded MFP grants to 44 states and the District of Columbia that went

on to launch transition programs (CMS 2019a).³ MFP awards for these states ranged from \$7.4 million in South Dakota to \$398 million in Texas.⁴ Two additional states (Florida and New Mexico) withdrew from the demonstration before serving any beneficiaries (CMS 2019a). In recent years, some states have phased out their programs given uncertainty about funding; as of 2021, 33 states and the District of Columbia were still participating (MACPAC 2022).

For a one-year period after their last day of institutionalization, MFP participants receive services designed to support their transition to the community. Some of these services are beyond what would have been available in the state's existing waiver or state plan programs (Table 1-1). MFP services fall into three categories:

- qualified HCBS are services that states already provide in their HCBS waiver programs;
- demonstration HCBS are those that states do not provide under their existing waiver programs but that are allowable Medicaid services or are existing services that states choose to expand only for MFP participants; and
- supplemental services are one-time or limited-duration services that help facilitate transitions to the community (e.g., a security deposit) (Lipson and Williams 2009).

As participants use HCBS, states earn an MFP-enhanced federal medical assistance percentage (FMAP) for some services. The difference between what the state receives at the higher matching rate and its regular rate must be invested into a state rebalancing strategy that is intended to increase use of HCBS relative to institutional care, and states must set benchmarks for how progress will be measured. States may also use awards to cover MFP administrative costs, including IT infrastructure investments needed to meet MFP reporting requirements (Irvin et al. 2017). As noted earlier, funds that go unspent in their award year can be used for four additional fiscal years.



| TABLE 1-1. Money Follows the Person Demonstration Transition Service | TABLE 1-1. Mone | v Follows the Person | Demonstration | Transition Services |
|---|-----------------|----------------------|---------------|---------------------|
|---|-----------------|----------------------|---------------|---------------------|

| Service type | Definition | Service examples | Funding |
|-----------------------|--|--|--|
| Qualified HCBS | Services that beneficiaries would receive regardless of participation in MFP because they are covered under existing HCBS waivers or in the state plan | Personal assistance services | MFP-enhanced FMAP |
| Demonstration HCBS | Allowable Medicaid services not currently included in the state's HCBS programs HCBS above what is available to non-MFP participants in the state | Assistive technologies 24-hour personal care | MFP-enhanced FMAP |
| Supplemental services | One-time or limited-duration services that facilitate an easier transition to the community | Beneficiary trial visit to the proposed community residence Security deposit payment | Grant funded at a rate commensurate with a state's FMAP |

Notes: HCBS is home- and community-based services. MFP is Money Follows the Person. FMAP is federal medical assistance percentage. The amount of the increased FMAP varies by state and is equal to the state's regular FMAP plus 50 percent of the difference between the regular FMAP and 100 percent (not to exceed 90 percent).

Source: MACPAC analysis of Irvin et al. 2017, O'Malley Watts et al. 2015, and Lipson and Williams 2009.

Eligible beneficiaries and residences

For a transition to be eligible for MFP, beneficiaries must have been residents of an institution for at least 60 consecutive days. Requests and referrals for such assistance may be prompted by anyone acting on the beneficiary's behalf, including but not limited to beneficiaries, their families, advocates, case managers, and nursing facility social workers (Irvin et al. 2017). Some states use the Minimum Data Set, an assessment provided to all nursing home residents, to identify residents who want counseling on how to transition to the community, which may include participation in MFP (Irvin et al. 2017).

Transition coordinators and other staff identified by the state work with the beneficiary to develop a plan for the services they will need to successfully live in the community and to identify a qualified community residence. By statute, an MFP qualified residence is defined as the following:

- "(A) a home owned or leased by the individual or the individual's family member;
- (B) an apartment with an individual lease, with lockable access and egress, and which includes living, sleeping, bathing, and cooking areas over which the individual or the individual's family has domain and control; and
- (C) a residence, in a community-based residential setting in which no more than 4 unrelated individuals reside."

The definition of a home owned or leased by the individual or a family member is straightforward, but the definition of an apartment has required further clarification as it relates to assisted living. In 2009, CMS released guidance describing conditions that apartments in assisted living settings must meet to be MFP qualified residences (CMS 2009). For example, the guidance clarifies that to qualify for MFP, apartments must have living, sleeping, bathing, and cooking areas. The guidance also describes



certain terms that must be included in the lease and a requirement that MFP participants have a choice of providers for authorized Medicaid services that are not included in the service rate to the assisted living setting (CMS 2009).

As one advocate who was active in the discussions leading to the creation of MFP told us, the demonstration's specific, concrete criteria were designed to allow beneficiary rather than provider control. Living in one's own home provides individuals with the most privacy and dignity, as it provides them with the most control over their lives. Those living in their own homes have the most choice in terms of who provides their care, when to come and go, whether to have roommates, and when to eat, among other things. Some congregate settings, such as assisted living facilities or group homes, provide some degree of community integration but also come with some restrictions. For example, residents in group homes may encounter additional rules around mealtimes and bedtimes. mandatory participation in group activities and outings, further restrictions on how and when they can leave, and little choice in staffing or roommates.

MFP accomplishments

As of December 2019, MFP had transitioned 101,540 individuals over the course of the demonstration (Liao and Pebbles 2021). Of these:

- 36,625 (36.1 percent) were people age 65 and older;
- 38,961 (38.4 percent) were people with physical disabilities;
- 16,199 (16.0 percent) were people with ID/DD;
- 7,436 (7.3 percent) were people with mental illness; and
- 2,319 (2.3 percent) belonged to some other transition group (Liao and Peebles 2020).8

At the state level, cumulative transitions ranged from 143 in Maine to 13,207 in Ohio (Appendix 1A). The distribution of transitions by population also varied across states. States participating in MFP must select target groups for their MFP transition programs, so state variation and the absence of transitions for certain populations may reflect these decisions.

Tracking transitions over time. The number of MFP transitions declined from 2016 to 2019, with a small increase in transitions in 2020 (Table 1-2).⁹ The decline, which was steepest from 2018 to 2019, coincided with the expected sunset of MFP under which states could use funds to transition beneficiaries through the end of 2018.

Subsequently, Congress authorized new funding several times, most recently under the CAA, which

TABLE 1-2. Money Follows the Person Demonstration Transitions, 2015–2021

| Year | Number of states reporting transitions | Number of transitions |
|------|--|-----------------------|
| 2015 | 41 | 8,340 |
| 2016 | 40 | 9,040 |
| 2017 | 39 | 7,803 |
| 2018 | 38 | 6,286 |
| 2019 | 36 | 4,417 |
| 2020 | 34 | 4,730 |
| 2021 | 34 | 4,624 |

Source: MACPAC, 2022, analysis of Transformed Medicaid Statistical Information System (T-MSIS) data from the Centers for Medicare & Medicaid Services.

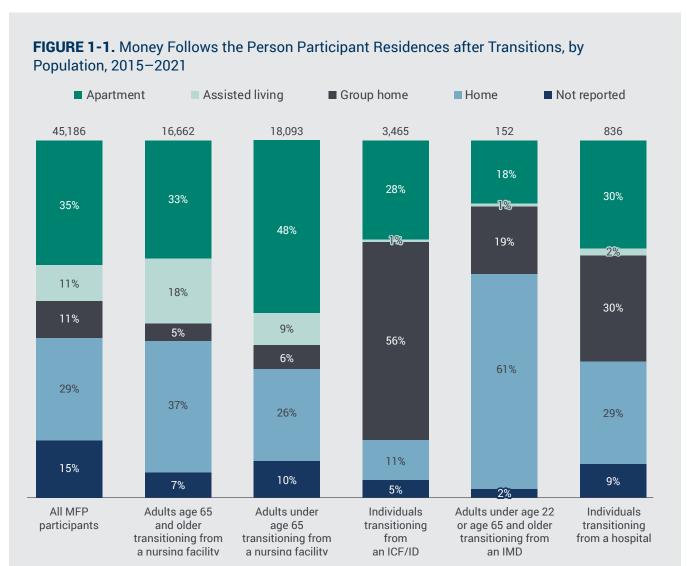
Note: State counts include the District of Columbia.



authorized funding through FY 2023. The shortterm approach to funding extensions created uncertainty for states. For example, by the time the Medicaid Extenders Act of 2019 (P.L. 116-3) was enacted in January 2019, some states had already terminated their MFP transition programs.

In 2020, 34 states reported transitioning at least one beneficiary, compared with 41 in 2015. 10 Some states are considering reactivating their programs, so that figure may change.

Transitions by setting. From 2015 through 2021, nearly two-thirds (64 percent) of MFP participants transitioned to an apartment or home (Figure 1-1). Only 22 percent of participants were transitioned to congregate settings such as group homes or assisted living.



Notes: MFP is Money Follows the Person. ICF/ID is intermediate care facilities for people with intellectual disabilities. IMD is institutions for mental diseases. Numbers may not add to 100 due to rounding. Excludes 54 individuals age 22 to 64 identified as having transitioned from IMDs, which may have reflected coding errors.

Source: MACPAC, 2022, analysis of Transformed Medicaid Statistical Information System (T-MSIS) data from the Centers for Medicaie & Medicaid Services.



Equity in MFP participation

Data about the racial and ethnic characteristics of MFP participants are incomplete. The most recent demographic data on MFP was missing race and ethnicity data for about 54 percent of transitions, making it difficult to draw conclusions about enrollment (Appendix 1B). In the 2015 annual report on MFP, evaluators compared the population of individuals eligible for MFP from a sample of 17 states to those who actually transitioned through the program in 2008, 2010, and 2012 (Irvin et al. 2017). Among adults age 65 and older, people of color were somewhat more represented among MFP participants than they were in the eligible population.

Comparing MFP with the HCBS Settings Rule

The HCBS settings rule was published in 2014, nine years after MFP was authorized, and sets a threshold for all residential and non-residential settings that receive any HCBS payment (CMS 2014a).

Overview of the HCBS settings rule

Before the 2014 rule, few specific federal requirements existed for HCBS settings receiving Medicaid payment. The HCBS settings rule is intended to ensure that HCBS settings are distinct from institutional settings and facilitate community integration. The rule defines settings by the nature and quality of individuals' experiences rather than solely by their physical location.

Under the rule, beneficiaries who use HCBS should have the same degree of access to employment, control of personal resources, and engagement in community life as others in the community (CMS 2014a). The settings rule laid out qualities of eligible settings for HCBS (Box 1-1). Settings that are eligible for payment under Section 1915(c) waivers and Sections 1915(i) and 1915(k)

state plan options must comply with the rule. In addition, CMS has indicated that it will include these requirements in the terms and conditions of Section 1115 demonstration waivers (CMS 2014b). CMS has extended the deadline to fully implement the rule multiple times (initially set at March 17, 2019, and extended most recently to March 17, 2023) due to the complexity of the undertaking and competing state priorities, including responding to the COVID-19 pandemic (CMS 2020).

The rule requires that each state submit a statewide transition plan to CMS describing how the state would assess HCBS settings for compliance with these requirements and how non-compliant settings would be brought into compliance. As of February 2022, 21 states had received final CMS approval of their statewide transition plans (CMS 2022). The rest have submitted a transition plan but are still working with CMS to address certain issues. Among the states with approved plans, most allow providers to self-assess their settings (MACPAC 2019). These provider self-assessments are supplemented by site visits, case manager reviews, or interviews of participants to validate their results. Activities to bring providers into compliance include providing guidance and technical assistance or implementing corrective action plans (MACPAC 2019).

The implementation process includes an additional step for certain settings. In March 2019, CMS released guidance describing the factors that the agency will use to determine whether a setting is presumed to have institutional qualities (CMS 2019b). These settings will be ineligible for Medicaid HCBS payment after March 17, 2023, unless those potential qualities are sufficiently mitigated and the state demonstrates the setting adheres to the regulatory criteria. States can demonstrate that these settings remain eligible for HCBS payment through the heightened scrutiny process, in which CMS evaluates justifications provided by each state. If a setting has isolating factors, but the state determined it complied by July 1, 2021, the state does not have to submit that setting to CMS for heightened scrutiny. States



were requested to submit an evidence package for settings that had not already completed remediation by October 31, 2021 (CMS 2020). Evidence packages for settings located in the same building as a public or private institution, or on the grounds of or adjacent to a public institution providing inpatient treatment, were requested to be submitted by March 31, 2021. Evidence packages

must include information such as how a setting's policies and procedures support individuals' access to the community (CMS 2019b).

Some HCBS providers may choose not to comply with the settings rule. For example, assisted living facilities that serve few Medicaid beneficiaries may not wish to invest in the substantial changes that

BOX 1-1. Qualities of Eligible Settings under the Medicaid Home- and Community-Based Services Settings Rule

The Medicaid home- and community-based services (HCBS) settings rule requires settings to have qualities that promote community integration based on an individual's needs as indicated in the person-centered service plan required under the same regulation. Under the rule, eligible settings:

- are integrated in and support full access of individuals receiving Medicaid HCBS to the greater community;
- are selected by the individual among a variety of settings;
- ensure individual rights of privacy, dignity and respect, and freedom from coercion and restraint:
- optimize individual autonomy in making life choices, including activities of daily living and environment and with whom to interact; and
- facilitate individual choice in services and providers.

If a residential setting is provider owned or controlled, it must do the following:

- consist of a specific, physical place that can be owned, rented, or occupied under a legally
 enforceable agreement, which provides the same responsibilities and protections from
 evictions that tenants have under the laws of the jurisdiction;
- give individuals privacy in their sleeping or living units;
- provide individuals with freedom and support to control their schedules and activities, including having food available at any time;
- allow individuals to have visitors of their choice at any time;
- · be physically accessible to the individual; and
- support modifications of the first four conditions above with an assessed need, which is
 justified and documented in the person-centered service plan, which must also contain
 additional information regarding this modification.

Source: 42 CFR 441.301



might be needed to comply. In such cases, states must assist beneficiaries in transitioning to new settings or fund their services through state-only funds. The statewide transition plans describe how states will approach such transitions. For example, the approved plan for the District of Columbia describes its notification process and the policy governing transitions, indicating that individuals have the right to choose their new provider, and transitions will be completed using a personcentered process (DCDDS 2018).

Differences in criteria for settings under MFP and the HCBS settings rule

MFP qualified residence criteria predate the HCBS settings rule, and the two sets of requirements differ substantially. All settings that qualify for MFP transitions must meet the requirements of the HCBS settings rule, as MFP participants all receive Medicaid-covered HCBS. However, the HCBS settings rule has a broader definition, and therefore, many qualified HCBS settings do not meet the MFP criteria.

In general, the HCBS settings rule permits a broader range of settings to receive HCBS payment, compared with those permitted under MFP. For example, a group home with five to eight beds may be permitted under the settings rule but would be disqualified from MFP transitions. An assisted living setting could also qualify for HCBS payment by having access to food at any time but would not meet MFP criteria if residents do not have their own cooking area.

Stakeholder Perspectives on the MFP Qualified Residence Criteria

There are no data to compare costs or outcomes between MFP qualified residences and other settings that are eligible for HCBS payment. Thus, our assessment of the trade-offs of retaining or making changes to the qualified residence criteria is largely informed by stakeholder perspectives. For the purposes of our inquiry, we wanted to understand what factors beneficiaries, state and federal officials, providers, and researchers considered most important in determining whether the residence criteria should be aligned with the settings rule.

Thus, from June to August 2021, we fielded a survey of state MFP program directors regarding their perspectives on the MFP qualified residence criteria. Trom August to October 2021, we also conducted 29 stakeholder interviews, talking with federal officials, state Medicaid officials, advocates, providers, and researchers. We selected states based on their varying experiences and perspectives on the qualified residence criteria as indicated through their responses to our survey. Stakeholders included organizations representing individuals with ID/DD, behavioral health conditions, and people age 65 and older, as well as providers. Providers.

Opinions on the residence criteria

Just over half of the 28 MFP program directors who responded to our survey (53.6 percent) reported that the qualified residence criteria were a barrier to transitions, 42.9 percent said they were not a barrier, and 3.6 percent were unsure. When asked to comment on whether this had been an issue for particular populations, respondents noted problems for the following:

- assisted living (five respondents);
- people with behavioral health conditions (four respondents); and
- people with a criminal background (two respondents).

When asked to comment on additional settings that should be permitted to make it easier for them to



transition participants, five responses made some reference to raising the existing four-person limit.

A large majority (71.4 percent) of MFP project directors supported aligning the MFP qualified settings criteria with the HCBS settings rule. This included some individuals who had not cited it as a barrier to transitions. Another 3.6 percent said it should be expanded but only to certain residences that qualify under the HCBS settings rule, 7.1 percent said the criteria should not be changed, and 17.9 percent were unsure.

In our interviews, stakeholders had mixed opinions on whether the qualified residence criteria should be changed to match the HCBS settings rule standards. Stakeholders were about evenly split on this question, and interviewees of the same type did not neatly separate into groups with the same perspective.

Those in favor of maintaining the current qualified residence criteria in MFP cited three key reasons. First, they preferred how the criteria have clear, enforceable requirements, such as having a lock on one's door and an individual lease. Second, the MFP settings meet a higher bar than other HCBS settings. These stakeholders said that this higher bar could incentivize states to shift their HCBS programs toward smaller settings that meet the qualified residence criteria. Although some interviewees acknowledged that this higher standard could limit the settings available for MFP transitions, they viewed it as a necessary limitation to improve HCBS and meet the goals of the MFP program. Third, some stakeholders said that the four-bed limit was a necessary restriction because quality of life may be better in smaller settings because of more opportunities for integration into the community and choice in activities.

Stakeholders who were in favor of alignment also cited three key reasons. First, some stakeholders said having a single, uniform definition of HCBS would prevent confusion or operational challenges. Second, some stakeholders thought the more flexible criteria of the settings rule would maximize

transition opportunities. A few states predicted that they could make more MFP transitions if the requirements were aligned to match the more flexible settings rule, particularly around the four-bed limit and assisted living rules. Third, some interviewees said that the settings rule allows for more choice for people with disabilities than the MFP qualified residence criteria. These interviewees said that if a setting met the needs of an individual's person-centered plan, then it should be permitted under MFP. These interviewees also discussed settings that are not MFP qualified residences, such as farmsteads and intentional communities, arguing that these settings should qualify for MFP transitions if they are remediated after heightened scrutiny.

A few interviewees commented that the criteria should be aligned only under certain conditions or for certain parts of the criteria. For example, one researcher said that if MFP is permanently integrated into Medicaid statute rather than remaining a demonstration, then the criteria should align to minimize confusion. Others said that if the settings rule is implemented with more specific guidance as to which settings qualify, then MFP should be aligned with it. Other stakeholders commented that the four-bed limit was arbitrary, noting that five beds might be more financially feasible with no real difference in the beneficiary experience.

Dissatisfaction with the HCBS settings rule implementation

Dissatisfaction with the settings rule implementation made some wary of changing the qualified settings criteria. With the settings rule implementation still in progress, some interviewees said their stance on aligning the MFP criteria with the settings rule was influenced by how the settings rule is being implemented. Multiple stakeholders said that more oversight from CMS was needed, sharing concerns that unless CMS specifically rejects certain settings, those that do not meet the principles of the settings rule



would continue to be eligible for payment, such as assisted living facilities located on the same campus as nursing facilities. Under the HCBS settings rule, these settings may receive HCBS payment if they meet its standards; however, disability advocates shared concerns that such settings do not provide meaningful integration into the community. For example, larger group homes may not allow for as much autonomy as small group homes due to the need to accommodate the schedules and preferences of many residents. Interviewees noted that states assessing their own HCBS settings without specific federal guidance would lead to weaker enforcement. A few stakeholders predicted that the lack of clarity on which settings qualify under the settings rule would lead to states making different decisions about similar settings. Federal officials said that the settings rule should provide individuals with the opportunity to move to the most integrated setting available.

Assisted living transitions

The qualified residence criteria limit MFP transitions to assisted living in some states. Stakeholders cited two parts of the guidance as limiting transitions: full kitchens and individual leases. For example, one state said that the required full kitchen was a barrier, as some assisted living settings in that state provide residents with only a refrigerator and microwave but would otherwise qualify for MFP. Assisted living providers said that the individual lease requirement under MFP may not be an adequate measure of community integration, as whether individuals have individual leases does not necessarily determine whether they have their own space and can make their own decisions. Providers noted that the requirements for assisted living may prevent some people from transitioning into settings that would meet their care needs.

However, aspects of the guidance are already routine for assisted living providers in some states. Not all states cited the MFP qualified residence criteria as a barrier to transitioning beneficiaries to assisted living. Some states told us they regularly use assisted living as an MFP residence. For example, one state said that the lock requirements were already standard for assisted living in that state.

Varying criteria across types of participants

Most stakeholders did not see the need to differentiate MFP residence criteria for different types of individuals. Many interviewees acknowledged that some settings were more ideal for specific populations—for example, assisted living for people age 65 and older and group homes for people with ID/DD. However, most stakeholders did not feel strongly that the residence criteria need to reflect this variation. Several interviewees said that ideally, MFP transitions are person centered, so different guidance for different populations is not necessary.

Assessing the Advantages and Disadvantages of the MFP Qualified Residence Criteria

After reviewing the results of our analytic work, the Commission discussed varying views on aligning MFP residence criteria with the HCBS settings rule but concluded that there was not enough empirical data to guide such a decision. Ultimately, this decision reflects a value judgment about the most appropriate use of MFP funds.

As we heard from stakeholders, there are a number of advantages and disadvantages to the current MFP criteria, which we revisit in the following sections. Both maintaining the existing criteria or aligning them with the HCBS settings rule come with trade-offs between expanding the number of residences available for new transitions and



changing the focus of MFP away from small settings that optimize beneficiaries' control over their everyday lives.

Rationale for retaining the existing criteria

The existing criteria best support the civil rights of people with disabilities affirmed by Olmstead v. L.C. by focusing on small and highly integrated community settings. Several stakeholders we interviewed said this focus incentivized states to shift their HCBS systems more generally toward smaller residences, which are also the types of residences that research suggests are preferred by most beneficiaries (Binette and Vasold 2018). Individuals living in their own homes or a family home have the greatest community living and choice outcomes across HCBS settings (Houseworth et al. 2018, Friedman 2019). Group homes with fewer residents offer more autonomy and community integration than larger group homes (Bradley 2015). Assisted living facilities vary substantially in terms of how much choice is offered to beneficiaries, and the MFP qualified residence criteria create a standard to ensure that beneficiaries have privacy and choice in their care, making their experience less institutional.

CMS has recognized person-centeredness as a key principle of HCBS in the settings rule, meaning that policy should ensure that beneficiaries have the choice of services they receive as well as a choice to receive services in the setting that works best for them (CMS 2014a). However, some advocates we spoke with were skeptical of how strictly CMS is implementing the HCBS settings rule to ensure that settings are integrated into the community. Given this concern, they said MFP should continue to set a higher bar for transitions that earn increased funding through the grant.

If an individual wants to move into a setting that qualifies under the HCBS settings rule but not MFP, such as certain assisted living facilities, other Medicaid authorities may be used to assist in their transition. States can build transition services into

authorities such as Section 1915(c) waivers, 43 percent of which we found included transition services as of March 2020, and Section 1115 demonstrations, 79 percent of which include transition services (MACPAC 2020). Transition services offered through other authorities do not have additional restrictions on eligible residences for transition and will follow the HCBS settings rule. Thus, these may be services states can use to transition individuals who cannot be transitioned through MFP due to the residence criteria or for other reasons, such as not meeting the length of stay requirement. States can also use rebalancing funds earned through MFP to support transitions outside the MFP program. For example, one state we interviewed uses MFP rebalancing funds to support transitions out of institutions for mental diseases (IMD), which are ineligible for MFP transitions due to the IMD exclusion.

Person-centeredness also encompasses the choice of how to live. The MFP qualified residence criteria specify settings in which individuals can make their own choices about how to live their lives rather than have those choices made by a provider. This right is guaranteed by the ADA and the *Olmstead* decision. Interviewees shared the positive outcomes they have seen from beneficiaries afforded this autonomy, such as gaining employment, becoming involved in their communities, and living in integrated settings long term.

Additionally, by incentivizing certain residences and providing MFP rebalancing funds, the MFP program assists states in building the infrastructure necessary to make HCBS available to additional beneficiaries. For example, some state officials shared that through MFP, they had built relationships with state housing authorities to connect beneficiaries with housing assistance, and other state officials shared that they used the MFP rebalancing funds for capital investments in affordable housing.



Rationale for aligning the MFP qualified residence criteria with the HCBS settings rule

There are also strong arguments for aligning the MFP qualified settings criteria with the HCBS settings rule to increase transitions and expand the demonstration's reach. Because the settings rule generally permits a broader range of settings, aligning the criteria could open up more settings to be eligible for MFP transitions and give states more choices to offer beneficiaries who want to transition to the community. For example, removing MFP's current four-person limit would allow transitions to a wider range of congregate settings. One state also noted that the requirement for a full kitchen was a barrier to using assisted living facilities for MFP transitions. Two stakeholders noted that settings such as farmsteads and intentional communities. if they can be shown not to be isolating and otherwise meet the settings rule criteria, could be appropriate settings for MFP transitions. In each of these cases, residences would have to meet the requirements of the settings rule around choice and community integration.

Stakeholders in favor of aligning the MFP qualified settings criteria with the settings rule also noted that a single set of criteria would be easier for state implementation. One state told us that being able to align definitions across stakeholders, including contractors and managed care plans, would be beneficial as all parties would be working from a common understanding. Streamlining definitions would also mean that instead of splitting transition services across multiple authorities, states could focus on MFP as the main funding stream and use a single set of program rules. Having one funding stream for transitions could, for example, simplify administration so that states use one set of rules for claiming federal funds.

Other Concerns about MFP

In the course of our work, stakeholders raised other concerns about MFP, unrelated to the qualified residence criteria.

Other factors that affect MFP transitions

Housing affordability and accessibility are major challenges for states as they seek to transition people through MFP. Because Medicaid cannot generally pay for housing outside a nursing or other medical facility, individuals transitioning to the community often need additional assistance to cover rent and maintenance costs. One state shared that it had successfully collaborated with state housing authorities to address this issue. Another state discussed using its MFP rebalancing fund to provide rental assistance.

Similarly, HCBS workforce capacity is a challenge to transitions. Multiple states mentioned that smaller settings, such as group homes of four beds, are more difficult to staff because they need more staff per person than in a larger facility. The providers we talked to emphasized that the workforce shortage limited their ability to serve people in the community. Advocates and providers noted that low HCBS payment rates, even during the one-year period of increased funds through MFP, limited how much they could pay HCBS workers.

The length of stay requirement was also cited as a barrier to transitioning individuals through MFP. The length of stay requirement for MFP transitions was recently shortened from 90 to 60 days by the CAA, a change viewed positively by most of those we interviewed. First, shortening the length of stay helps states serve more people. Second, many interviewees noted that the longer someone is in an institutional setting, the more difficult it is to transition them back to the community. During long stays, beneficiaries may have lost their housing



and community supports and may need to relearn skills for living independently. Although some stakeholders advocated for further shortening the length of stay, others noted that by doing so, MFP may be used to transition beneficiaries who would have been able to transition relatively easily without the additional assistance.

Funding uncertainty

The uncertainty of MFP funding caused challenges for states in operating the demonstration. All the states that we interviewed shared that short-term funding extensions and uncertainty about the future caused problems retaining MFP staff and maintaining connections with community-based organizations and providers that help facilitate transitions. For example, we heard that in one state, the transition specialist team shrunk from 10 to 4 due to the funding uncertainty. As one state official pointed out, the end of MFP's current funding in 2023 is quickly approaching and states will soon need to make decisions about the future of MFP.

Lack of recent evaluation data

The last evaluation report for MFP covers the period through 2015. Since then, relatively little information has been made available about MFP's outcomes. CAA funded new evaluations that are forthcoming. This information would be useful in understanding how MFP has worked in recent years, in identifying opportunities for improvement if the demonstration is to be continued beyond FY 2023, and for understanding how it might be incorporated into existing HCBS programs if it ends. In particular, information on the demographic characteristics of MFP participants would be useful to understanding if MFP is reaching a representative range of beneficiaries. In addition, surveys of beneficiary satisfaction after transition might help identify where attention should be focused as the MFP program evolves.

Endnotes

- ¹ The HCBS settings rule will be fully implemented March 17, 2023.
- ² MFP was first authorized in the DRA through FY 2011. It was subsequently extended by the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended), Medicaid Extenders Act of 2019 (P.L. 116-3), Medicaid Services Investment and Accountability Act of 2019 (P.L. 116-16), Sustaining Excellence in Medicaid Act of 2019 (P.L. 116-39), Further Consolidated Appropriations Act, 2020 (P.L. 116-94), Coronavirus Aid, Relief, and Economic Security Act (P.L. 116-136), and CAA.
- ³ States that received MFP grants and had MFP participants were Alabama, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, Georgia, Hawaii, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Virginia, Washington, West Virginia, and Wisconsin. Oregon withdrew from the program in 2010 after transitioning individuals to the community and rescinded its MFP grant (Liao and Peebles 2020, CMS 2019a).
- ⁴ This excludes \$595,839 awarded to New Mexico, which did not make any MFP transitions.
- ⁵ The amount of the increased match varies by state and is equal to the state's regular match plus 50 percent of the difference between the regular match and 100 percent, not to exceed 90 percent.
- ⁶ States used MFP funding to implement a variety of systems changes, many of which benefit individuals not eligible for MFP transitions, such as those who have resided in an institution for fewer than 90 days. In 2015, at least 29 grantee states reported having transition programs for individuals who did not meet MFP eligibility criteria, and 12 had formal transition programs for individuals residing in intermediate care facilities for individuals with ID/DD (Irvin et al. 2017).



- ⁷ This was reduced from six months in the DRA to 90 days in the ACA and again to 60 days in the CAA.
- 8 Percentages do not add to 100 due to rounding.
- ⁹ We obtained unpublished data on recent MFP transitions directly from CMS. These data are from the Transformed Medicaid Statistical Information System (T-MSIS) and may differ somewhat from CMS publications based on MFPspecific data files; for example, a report on transitions in 2019 differs by about 250 transitions from what we report here (Liao and Peebles 2020).
- ¹⁰ The quality of state-reported MFP data in T-MSIS varies and could differ from what states report in their MFP semiannual reports because of data quality, timeliness of T-MSIS data submissions, or other reasons.
- ¹¹ We also asked state MFP program directors about the status of their MFP transition programs and their state's implementation of the settings rule. Twenty-eight of the 42 program directors (67 percent) contacted responded to the survey. Four respondents had terminated their programs, and one had terminated but was considering rejoining. We kept responses from the terminated programs as they reflect their past experience; moreover, these states could possibly rejoin MFP.
- 12 Interviewees included federal officials from the Administration for Community Living and CMS; state officials from Connecticut, Iowa, Minnesota, North Carolina, North Dakota, and Ohio: state association representatives from ADvancing States and the National Association of State Directors of Developmental Disabilities Services; beneficiary advocates and advocacy organizations, including Access Living, AARP, Autism Speaks, Autistic Self Advocacy Network, Bazelon Center for Mental Health Law, Justice in Aging, Kansas ADAPT, National Health Law Program, Serena Lowe, The Arc, Together for Choice, and Voice of Reason; provider associations, including the American Health Care Association/National Center for Assisted Living, American Network of Community Options and Resources, and LeadingAge; and researchers Ari Ne'eman, Carol Irvin, and Joe Caldwell.
- ¹³ Although states participating in MFP were required to submit plans describing how they would sustain staffing, transition services, and structural changes after the demonstration's intended sunset, our interviews suggest

that some states struggled to maintain MFP during shortterm extensions (O'Malley Watts et al. 2015).

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APPENDIX 1A: Money Follows the Person Transitions by Population and State

TABLE 1A-1. Money Follows the Person Transitions by Population and State, Cumulative through 2019

| | | Share of total MFP participants | | | | |
|-------------------------|---------|---------------------------------|---|---|--|-------|
| State | Total | Adults age 65 and older | Individuals with a physical disability | Individuals with intellectual or developmental disabilities | Individuals with mental health conditions | Other |
| Total | 101,540 | 36.1% | 38.4% | 16.0% | 7.3% | 2.3% |
| Alabama | 354 | 73.4 | 26.6 | 0.0 | 0.0 | 0.0 |
| Arkansas | 899 | 18.4 | 30.5 | 51.1 | 0.1 | 0.0 |
| California | 4,290 | 31.8 | 38.9 | 25.2 | 2.1 | 2.0 |
| Colorado | 581 | 6.7 | 39.6 | 8.8 | 10.0 | 34.9 |
| Connecticut | 5,754 | 44.8 | 40.5 | 5.4 | 9.3 | 0.0 |
| Delaware | 328 | 35.4 | 53.4 | 8.8 | 2.4 | 0.0 |
| District of Columbia | 319 | 43.6 | 23.2 | 33.2 | 0.0 | 0.0 |
| Georgia | 4,328 | 21.6 | 57.4 | 15.1 | 5.9 | 0.0 |
| Hawaii | 733 | 57.6 | 40.4 | 2.0 | 0.0 | 0.0 |
| Idaho | 665 | 39.1 | 36.1 | 19.5 | 5.3 | 0.0 |
| Illinois | 3,177 | 25.0 | 30.9 | 10.2 | 33.9 | 0.0 |
| Indiana | 2,130 | 56.5 | 29.2 | 5.2 | 9.1 | 0.0 |
| lowa | 769 | 0.0 | 0.0 | 87.0 | 0.0 | 13.0 |
| Kansas | 1,728 | 24.4 | 56.4 | 15.9 | 0.0 | 3.3 |
| Kentucky | 760 | 29.3 | 31.1 | 26.7 | 1.3 | 11.6 |
| Louisiana | 3,109 | 44.2 | 39.4 | 16.3 | 0.0 | 0.0 |
| Maine | 143 | 39.2 | 42.7 | 0.0 | 0.0 | 18.2 |
| Maryland | 3,466 | 46.7 | 40.8 | 9.6 | 0.0 | 2.9 |
| Massachusetts | 2,151 | 46.6 | 44.9 | 2.5 | 6.0 | 0.0 |
| Michigan | 2,979 | 49.3 | 50.7 | 0.0 | 0.0 | 0.0 |
| Minnesota | 614 | 12.4 | 14.5 | 7.7 | 8.0 | 57.5 |
| Mississippi | 616 | 23.9 | 35.9 | 39.8 | 0.5 | 0.0 |



TABLE 1A-1. (continued)

| | | | Share o | f total MFP partic | cipants | |
|---------------------|---------|----------------------------|---|---|--|-------|
| State | Total | Adults age 65 and older | Individuals with a physical disability | Individuals with intellectual or developmental disabilities | Individuals with mental health conditions | Other |
| Total | 101,540 | 36.1% | 38.4% | 16.0% | 7.3% | 2.3% |
| Missouri | 1,981 | 28.5 | 48.9 | 20.5 | 0.0 | 2.0 |
| Montana | 168 | 34.5 | 38.7 | 12.5 | 14.3 | 0.0 |
| Nebraska | 677 | 46.7 | 39.7 | 10.3 | 0.0 | 3.2 |
| Nevada | 424 | 34.7 | 58.5 | 6.8 | 0.0 | 0.0 |
| New Hampshire | 308 | 40.6 | 39.3 | 4.9 | 1.0 | 14.3 |
| New Jersey | 2,943 | 33.9 | 33.5 | 32.6 | 0.0 | 0.0 |
| New York | 3,946 | 29.6 | 31.0 | 15.6 | 0.0 | 23.7 |
| North Carolina | 1,190 | 27.9 | 31.3 | 40.8 | 0.0 | 0.0 |
| North Dakota | 490 | 23.3 | 41.4 | 31.2 | 0.0 | 4.1 |
| Ohio | 13,207 | 16.5 | 32.0 | 14.9 | 36.6 | 0.0 |
| Oklahoma | 800 | 20.1 | 40.4 | 39.1 | 0.0 | 0.4 |
| Oregon ¹ | 306 | 34.3 | 47.1 | 16.3 | 0.0 | 2.3 |
| Pennsylvania | 3,625 | 54.5 | 29.1 | 10.0 | 0.0 | 6.5 |
| Rhode Island | 426 | 59.9 | 40.1 | 0.0 | 0.0 | 0.0 |
| South Carolina | 157 | 56.1 | 43.9 | 0.0 | 0.0 | 0.0 |
| South Dakota | 176 | 18.8 | 46.0 | 35.2 | 0.0 | 0.0 |
| Tennessee | 4,940 | 50.3 | 45.0 | 4.7 | 0.0 | 0.0 |
| Texas | 13,114 | 38.5 | 37.8 | 23.7 | 0.0 | 0.0 |
| Vermont | 421 | 71.3 | 28.7 | 0.0 | 0.0 | 0.0 |
| Virginia | 1,433 | 18.0 | 20.2 | 61.8 | 0.0 | 0.0 |
| Washington | 8,505 | 49.9 | 41.1 | 7.4 | 1.6 | 0.0 |
| West Virginia | 399 | 43.4 | 56.6 | 0.0 | 0.0 | 0.0 |
| Wisconsin | 2,011 | 41.0 | 47.7 | 11.2 | 0.0 | 0.0 |

Notes: MFP is Money Follows the Person. Numbers may not add to 100 due to rounding.

Source: MACPAC, 2022, analysis of Liao and Peebles 2020.

¹ Oregon ended MFP transitions in 2010 and rescinded its MFP award.



APPENDIX 1B: Demographic Characteristics of Money Follows the Person Participants

TABLE 1B-1. Characteristics of Cumulative Money Follows the Person Participants, 2008 to 2015

| Characteristics | Number of MFP participants |
|---------------------------------------|----------------------------|
| Total | 61,047 |
| Target population | |
| People age 65 and older | 31.1% |
| People with physical disabilities | 40.0 |
| People with intellectual disabilities | 13.9 |
| People with psychiatric conditions | 1.3 |
| Other | 3.9 |
| Race and ethnicity | |
| White, non-Hispanic | 30.3 |
| Black, non-Hispanic | 11.9 |
| Asian American | 0.6 |
| Hispanic | 3.0 |
| American Indian or Alaska Native | 0.4 |
| Other or unknown | 0.1 |
| Missing | 53.7 |
| Age group | |
| Younger than 21 | 5.1 |
| 21–44 | 14.2 |
| 45-64 | 43.8 |
| 65-84 | 29.9 |
| 85 and older | 7.0 |
| Gender | |
| Female | 50.3 |
| Male | 49.6 |

Note: MFP is Money Follows the Person. Numbers may not add to 100 due to rounding. Does not include data for Minnesota, South Dakota, and West Virginia due to data limitations.

Source: Coughlin et al. 2017.

Chapter 2:

Vaccine Access for Adults Enrolled in Medicaid



Vaccine Access for Adults Enrolled in Medicaid

Key Points

- Vaccines are a cost-effective tool to promote public health. However, low uptake of recommended adult vaccines has resulted in preventable disease, death, and economic burden.
- Medicaid vaccine coverage is more restrictive for some adults than vaccine coverage
 under other sources of health insurance. Under current law, Medicaid enrollees in the new
 adult group have coverage of all vaccines recommended by the Advisory Committee on
 Immunization Practices (ACIP) without cost sharing, but coverage of vaccines for other adults
 in Medicaid is optional, and states can determine which vaccines to cover and whether to
 apply cost sharing.
- These differences in vaccine coverage policies among adult eligibility groups have resulted
 in unequal access to some ACIP-recommended vaccines. For almost two out of every five
 (38.2 percent) Medicaid-enrolled adults, vaccine coverage is optional and varies by state. This
 includes adults eligible on the basis of disability, those age 65 and older, parents and caretaker
 relatives, and pregnant women.
- Medicaid-enrolled adults have lower vaccination rates than those with private insurance for nearly all vaccines. The difference in vaccination rates among pregnant women is particularly stark. The influenza vaccination rate was almost 21 percentage points lower for pregnant women enrolled in Medicaid than it was for those enrolled in private insurance.
- The U.S. House of Representatives passed legislation that would require Medicaid to cover vaccines recommended by ACIP without cost sharing for all enrollees. This coverage requirement matches those already in place for the new adult group and for most people with private insurance. This legislation has not yet been considered by the U.S. Senate.
- It is the view of the Commission that mandatory Medicaid coverage of all recommended vaccines without cost sharing is a necessary first step to ensuring vaccine access and preventing illness, hospitalization, and death from vaccine-preventable diseases.
- In addition to limited coverage, a number of factors contribute to low vaccination rates among Medicaid enrollees, including limited provider access and availability and inadequate support and education for beneficiaries.
- The Commission will continue exploring issues related to vaccine access for adults enrolled in Medicaid and consider policy options that would meaningfully address barriers to access and improve adult vaccination rates.



CHAPTER 2: Vaccine Access for Adults Enrolled in Medicaid

The COVID-19 pandemic has brought attention to the importance of vaccination in preventing illness and death. However, low vaccine uptake of recommended adult vaccines has resulted in preventable disease, death, and economic burden. In 2019, only 40 percent of adults had received age-appropriate vaccinations (Commonwealth 2021). During the same year, nearly 50,000 individuals died from influenza and pneumonia. These two vaccine-preventable diseases (VPDs) were the ninth leading cause of death in the United States (Xu et al. 2021). Researchers estimate that VPDs among adults in the United States cost between \$9 billion and \$26 billion annually (Ozawa et al. 2016).

While rates for adults are generally lower than the goals set by public health officials, adults covered by Medicaid have lower vaccination rates than those covered by private insurance across nearly all vaccines. Limited coverage and requirements for cost sharing both pose barriers to access. Although federal statute requires that those in the new adult group have coverage of all recommended vaccines without cost sharing, Medicaid coverage of vaccines for other adults is optional, and states can determine which vaccines to cover and whether to require cost sharing. In contrast, vaccines are considered a mandatory service for children and are provided without cost sharing, as discussed in later sections. At the time of this writing, the U.S. House of Representatives has passed H.R. 5376, the Build Back Better Act, which would extend the requirement to cover recommended vaccines without cost sharing to all adults enrolled in Medicaid. The U.S. Senate has not yet acted on this legislation.

In addition to coverage and cost sharing, other factors contribute to lower adult vaccination rates in Medicaid. Low payments to purchase

and administer vaccines may decrease provider willingness to administer vaccines and thus reduce access for Medicaid beneficiaries. Some states limit the types of providers who may administer vaccines (e.g., excluding pharmacists). This can be particularly problematic for Medicaid-enrolled adults who may be less likely to have a medical home and therefore may need more options to access vaccines. Finally, some beneficiaries may be unwilling or hesitant to receive vaccines. Additional outreach and education for Medicaid enrollees may also be needed to improve vaccination rates in the program.

In the Commission's view, mandatory Medicaid coverage of all recommended vaccines is a necessary first step to ensuring vaccine access and preventing illness, hospitalization, and death from VPDs. Without universal coverage of recommended vaccines, many Medicaid beneficiaries face considerable hurdles to vaccination. But coverage alone may not be sufficient to substantially improve vaccination rates. Federal and state efforts should address other barriers to access by improving provider availability and beneficiary support. The Commission is currently evaluating a range of options and may make specific recommendations in future reports.

The chapter begins by discussing the role of vaccines in promoting public health. We then review Medicaid coverage requirements for recommended vaccines and summarize recent federal proposals to require vaccine coverage for all Medicaid enrollees. Next, we discuss the rates at which Medicaid enrollees receive vaccines compared to those enrolled in other forms of insurance. Then, the chapter highlights several considerations to improve vaccine access for Medicaid enrollees. The chapter ends with a brief discussion of the Commission's next steps to identify and evaluate potential policies that could improve access and vaccination rates for Medicaid enrollees.



Vaccines and Public Health

Vaccines are an important tool in promoting public health. Vaccines can prevent illness, hospitalization, and death. Common VPDs among adults include influenza, pneumococcal disease, herpes zoster (shingles), and pertussis (whooping cough). The federal Advisory Committee on Immunization Practices (ACIP) recommends vaccines based on age and medical criteria, along with vaccination history. For example, ACIP has most recently reviewed the relevant evidence on COVID-19 vaccines and made recommendations for their use based on age, health status, and other risk factors. The Centers for Disease Control and Prevention (CDC) establishes an immunization schedule for children and adults based on ACIP recommendations (Box 2-1).

Despite the availability of vaccines and coverage by many payers, the United States continues to see cases and deaths from VPDs. The CDC estimates that since 2010, somewhere between 140,000 and 710,000 influenza-related hospitalizations and 12,000 and 56,000 influenza-related deaths have occurred per year. Each year, an estimated 150,000 individuals are hospitalized because of pneumococcal pneumonia, and 5,000 die from the disease. Chronic hepatitis B affects between 700,000 and 1.4 million people, and the human papillomavirus (HPV) causes over 27,000 cases of cancer each year (CDC 2021a).

Improving vaccination rates among adults and reducing the number of preventable deaths is a major priority for public health officials. The U.S. Department of Health and Human Services (HHS) periodically establishes federal public health priorities, including national objectives to increase vaccination and reduce preventable disease. For example, Healthy People 2030 set a goal to increase the influenza vaccination rate to 70 percent from the 49.2 percent of individuals six months or older who were vaccinated against influenza during the 2017–2018 influenza season. Although vaccination rates have increased, the United States did not meet influenza and many

other national vaccination targets that were established under Healthy People 2020.¹

Low vaccination rates may be of particular concern for people covered by Medicaid. One study suggests that compared to commercially insured individuals, Medicaid enrollees may have a higher incidence of VPDs for which vaccinations were recommended based on certain risk factors. These include pneumococcal and meningococcal diseases as well as hepatitis A and B (Krishnarajah et al. 2014). The higher incidence rates of these VPDs in Medicaid compared to commercial insurance may reflect differences in demographics, socioeconomic status, and health status of those enrolled under each type of coverage.

The economic burden of vaccinepreventable diseases

There are also economic costs of VPDs. Estimates range in quantifying the extent of this burden. One study found that VPDs cost the United States approximately \$9 billion annually. This study focused on the costs related to 10 vaccines recommended for adults age 19 and older and estimated that costs from unvaccinated individuals account for almost 80 percent of the total annual cost (\$7.1 billion) (Ozawa et al. 2016).² An earlier study estimated that the annual cost of four VPDs among adults 50 years and older totaled \$26.7 billion, with influenza accounting for \$16 billion (McLaughlin et al. 2015).

Limited research exists on the cost of VPDs to Medicaid specifically. However, after a hepatitis A outbreak in West Virginia, researchers examined hepatitis A-related medical costs among Medicaid enrollees in the state. Within the first 19 months of the outbreak, researchers estimated that the hepatitis-related medical costs ranged from \$1.4 million to \$5.6 million. As of February 2021, the outbreak was still ongoing and had resulted in hospitalizations for about half of the individuals with hepatitis A and 23 reported deaths (Batdorf et al. 2021).



BOX 2-1. The Role of the Advisory Committee on Immunization Practices

The Advisory Committee on Immunization Practices (ACIP) develops recommendations on the use of vaccines approved by the U.S. Food and Drug Administration. It was established in 1964 by the Surgeon General, and in 1972, it was designated as a federal advisory committee (Smith et al. 2014). ACIP is composed of 15 voting members who make recommendations on vaccines, 8 members who represent other federal agencies, and 30 non-voting members who represent organizations with expertise regarding immunization, including medical associations.³

ACIP develops recommendations for children, adolescents, and adults after reviewing several different types of evidence and considering a number of factors. It reviews vaccine safety, efficacy, and effectiveness data and considers the severity of the associated disease in the population. It considers the age groups for which the recommendations should be applied and the feasibility of implementing a potential recommendation (CDC 2020a). In addition, ACIP considers economic analyses during its review process. ACIP's charter was updated in 2004 to formally recognize the role of economic studies, and in more recent years, the Centers for Disease Control and Prevention (CDC) established guidance on economic studies presented to the committee to ensure that any analysis is uniform, understandable, and high quality (Smith et al. 2014).

ACIP typically meets publicly at least three times a year to discuss these factors and vote on recommendations. The approved recommendations are made to the CDC, which then sets the vaccine schedule for children and adults.

ACIP recommendations not only inform clinical practice, but they also serve as the basis for vaccine coverage across insurance programs. The Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) requires coverage of essential health benefits in commercial, non-grandfathered plans and exchange plans and for certain Medicaid beneficiaries receiving benchmark or benchmark-equivalent coverage through an alternative benefit plan (e.g., new adult group). The definition of preventive services under the ACA includes all ACIP-recommended vaccines (§ 2713 of the ACA). The ACIP recommendations also establish which vaccines should be purchased and administered through the Vaccines for Children program (CDC 2019).

Cost effectiveness of recommended vaccines

Beyond the individual and public health benefits of preventing disease through vaccination, most recommended vaccines are cost effective; that is, the cost of vaccination is less than the eventual cost of untreated disease. One systematic review of cost-effectiveness studies for adult vaccines found that the majority of published studies reported favorable cost-effectiveness profiles for adult vaccinations. Several vaccines (influenza;

pneumococcal; tetanus; and tetanus, diphtheria, and pertussis (Tdap)) were found to be cost saving, and other vaccines (HPV and shingles) generally were found to have a cost-effectiveness ratio equal to or below \$100,000 per quality-adjusted life-year saved (Leidner et al. 2019).

In Oregon, the Health Evidence Review Commission (HERC) also found ACIP-recommended vaccines to be effective, both with regard to cost and clinical effectiveness. HERC creates a prioritized list of health services to support the Medicaid program



in making decisions about covered benefits, and in its ranking of health services, HERC included all ACIP-recommended vaccines in the category of prevention services with evidence of effectiveness. The priority list ranks this category third out of 662 services in terms of cost and clinical efficacy (OHA 2021).

Coverage and Financing of Vaccines for Children in Medicaid

As part of the response to the 1989 to 1991 measles epidemic, Congress created the Vaccines for Children (VFC) program under the Omnibus Budget Reconciliation Act of 1993 (P.L. 103-66) (CDC 2020b). Children under 19 years old who are Medicaid eligible, uninsured, underinsured, or an American Indian or Alaska Native are eligible to receive vaccinations through the VFC program (§ 1928(b) of the Social Security Act (the Act)).⁴ HHS estimates that over half of young children and one-third of adolescents in the United States are eligible to receive vaccinations through this program (HHS 2020). The program provides coverage of all vaccines recommended by ACIP.

States must cover all ACIP-recommended vaccines for children under the mandatory early and periodic screening, diagnostic, and treatment (EPSDT) benefit (§ 1905(r)(1)(B)(iii) of the Act). States receive these vaccines through the VFC program. Vaccines provided through the VFC program are purchased directly by the CDC at a discounted price and then distributed to the state (e.g., state health departments), which in turn distributes them at no charge to registered VFC providers (§ 1928(a) of the Act). Neither the beneficiary nor the state is charged for any vaccine provided through the VFC program, but providers can bill for the office visit or administration of the vaccine (CDC 2020b). States may require Medicaid providers to register with VFC to ensure that any vaccine provided as part of a Medicaid-covered visit uses vaccines available

through the VFC program. Similarly, a registered VFC provider must be an enrolled Medicaid provider to bill the Medicaid program for vaccine administration (CDC 2020c).

While the CDC has the lead responsibility for policy development and implementation of the VFC program, the VFC program is established under the Medicaid statute (§ 1928 of the Act) and is fully funded by the federal government through the Medicaid program (i.e., there is no required state contribution). In fiscal year (FY) 2020, federal Medicaid spending was \$4.6 billion for the VFC program (CMS 2021a).

Coverage of Vaccines for Adults in Medicaid

Vaccines are covered under Medicaid's preventive services benefit and are treated differently than other prescription drugs (§ 1905(a)(13)(B) of the Act). Vaccines are explicitly excluded from the definition of a covered outpatient drug, which is used to designate drugs included in the Medicaid Drug Rebate Program (MDRP) (§ 1927(k)(2)(B) of the Act). This means that states do not have to cover vaccines manufactured by companies participating in the MDRP, and manufacturers do not have to provide rebates for these products.

Vaccine coverage for adults under Medicaid is more restrictive than vaccine coverage under other sources of health insurance. The Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) requires that all non-grandfathered plans and exchange plans cover preventive services, including those vaccines recommended by ACIP, without cost sharing (§ 2713 of the ACA). This means that the vast majority of individuals with private health insurance plans have coverage of ACIP-recommended vaccines without cost sharing. Medicare enrollees, including those dually eligible for both Medicare and Medicaid, receive most vaccines through Part B and Part D but may be



subject to cost sharing for vaccines covered under Part D.

Under current law, Medicaid coverage of vaccines for adults can vary by population. As part of the coverage expansion to the new adult group, the ACA required that these beneficiaries receive benchmark or benchmark-equivalent coverage, also known as an alternative benefit plan (ABP) (§ 1902(k)(1) of the Act) and that ABPs provide coverage of essential health benefits (EHB) (§ 1937(b)(5) of the Act). As part of the EHB, preventive services must be provided without cost sharing, and this includes coverage of all ACIPrecommended vaccines (42 CFR 440.347).5 For Medicaid beneficiaries not receiving coverage through an ABP, such as adults eligible on the basis of disability, those age 65 and older, parents and caretaker relatives, and pregnant women, vaccine coverage is optional.⁶ In these cases, states are not required to cover all ACIP-recommended vaccines and vary in which vaccines they opt to cover. In addition, states may require cost sharing (within federal guidelines) for vaccines. For those enrolled in Medicaid managed care, coverage and cost sharing vary by plan.

These differences in vaccine coverage requirements among adult eligibility groups and the variation in state coverage policies have resulted in unequal access to some ACIP-recommended vaccines. In FY 2019, approximately 51.8 million adults enrolled in Medicaid, of which 19.5 million (37.6 percent of adults) were in the new adult group and had mandatory coverage of vaccines without cost sharing (MACPAC 2021a). An additional 12.5 million adults (24.1 percent of adults) were dually eligible for Medicare and Medicaid and would have received vaccine coverage through Medicare. This means that for almost two out of every five Medicaidenrolled adults (38.2 percent), coverage of vaccines and any related cost sharing vary by state.

Researchers at the CDC examined variations in vaccine coverage, beneficiary cost sharing, and payment across state Medicaid programs in 2018–2019. All 49 states included in the

study offered some vaccine coverage for adults. However, only about half of states (24) covered all ACIP-recommended vaccines. The vast majority (48) covered at least one vaccine for influenza in addition to Tdap, MMR (measles, mumps, and rubella), varicella, and pneumococcal disease. Fewer states covered the HPV (9-valent human papillomavirus), Hib (haemophilus influenzae type b), and herpes zoster (shingles) vaccines. Additionally, some Medicaid-covered adults may be subject to cost sharing for vaccines. Among the 44 Medicaid programs surveyed, 15 states had cost sharing requirements on adult vaccines (Granade et al. 2020).

The U.S. House of Representatives passed the Build Back Better Act on November 19, 2021. It would require coverage of ACIP-recommended vaccines without cost sharing for all Medicaid enrollees, matching coverage requirements already in place for the new adult group and for most people with private insurance. This provision would provide comparable vaccine coverage to the 38 percent of Medicaid-enrolled adults for whom coverage of vaccines and any related cost sharing currently varies by state. At the time of this writing, the U.S. Senate has not passed the Build Back Better Act. If passed, the bill would go into effect on the first day of the fiscal quarter following a year after enactment.

To encourage coverage for preventive care for those not enrolled in the new adult group, the ACA provided a 1 percentage point increase in the federal medical assistance percentage (FMAP) applied to expenditures for adult vaccinations and clinical preventive services (§ 4106(b) of ACA). The specified preventive services are those assigned a grade of A or B by the U.S. Preventive Services Task Force and approved vaccines recommended by ACIP, along with their administration. In order for states to claim the FMAP increase for these services, states must cover all the recommended preventive services and adult vaccines (and their administration) in their standard Medicaid benefit package without cost sharing (CMS



2013a). The CDC study found that 12 of the 44 states responding to the survey had claimed the 1 percentage point FMAP increase under this provision (Granade et al. 2020).

The Build Back Better Act would also phase out the 1 percentage point FMAP increase for states that cover all recommended vaccines without cost sharing. For states that covered all ACIP-recommended vaccines without cost sharing as of the date of enactment, they may receive the 1 percentage point FMAP increase on vaccines and their administration for the first eight fiscal quarters beginning on or after the effective date of the mandatory vaccine coverage provisions.

Coverage of COVID-19 vaccines

In response to the COVID-19 pandemic, Congress passed legislation to ensure that all Medicaid beneficiaries have coverage of COVID-19 vaccines during the public health emergency (PHE) and for a period of time after the PHE. The Families First Coronavirus Response Act (FFCRA, P.L. 116-272), signed into law on March 18, 2020, provides a 6.2 percentage point increase to the FMAP for Medicaid expenditures on or after January 1, 2020. through the end of the guarter in which the PHE ends if states meet certain conditions (§ 6008 of FFCRA). Coverage of COVID-19 vaccines is required as part of terms of the FMAP increase under the FFCRA. States must cover COVID-19 vaccines and their administration for Medicaid beneficiaries without cost sharing, with certain exceptions. Additionally, states must make payments to providers for the administration of the vaccine or provider visit during which a vaccine is administered. This requirement applies even if the vaccine is supplied to the provider at no cost, as is the case under the current federal purchasing arrangement. According to the Centers for Medicare & Medicaid Services (CMS), all states and territories are currently claiming the FMAP increase under the FFCRA.

The American Rescue Plan Act of 2021 (ARPA, P.L. 117-2), signed into law on March 11, 2021,

made coverage of COVID-19 vaccines and the administration of such vaccines mandatory for the period beginning on the date of enactment and ending on the last day of the first calendar guarter that begins one year after the last day of the COVID-19 PHE (§ 9811(a)(1) of ARPA). During this period, cost sharing is prohibited for COVID-19 vaccines and the administration of such vaccines (§ 9811(a)(3) of ARPA). Additionally, mandatory coverage of COVID-19 vaccines and their administration was extended to certain limited-benefit groups (e.g., individuals eligible for medically needy coverage, individuals eligible only for family planning benefits) that otherwise would not have Medicaid coverage of the vaccine (§ 9811(a)(2) of ARPA).8 Furthermore, states will receive 100 percent FMAP on expenditures made for COVID-19 vaccines and their administration while the mandatory coverage requirement is in place (§ 9811(b) of ARPA).

Vaccination Rates

As noted earlier, adult vaccination rates are lower for those with Medicaid coverage compared to those with private insurance. In the following sections, we describe differences in vaccination rates by source of coverage and by race and ethnicity. Additionally, we compared influenza vaccination rates for adults and children across sources of coverage. We also analyzed influenza and Tdap vaccination rates among pregnant women enrolled in Medicaid compared to those enrolled in private insurance and those without insurance. Estimates are reported where sample size permits.

This analysis uses the National Health Interview Survey (NHIS) to estimate vaccination rates for eight ACIP-recommended vaccines (Table 2A-1). The NHIS is a cross-sectional household interview survey conducted annually in all 50 states and the District of Columbia by the National Center for Health Statistics. It includes approximately 87,500 people in 35,000 households each year, though



the sample size can vary. The survey includes information on health insurance coverage, health care utilization and access, health conditions and behaviors, and demographic and socioeconomic information (NCHS 2019).

Adult vaccination rates by primary source of health coverage

Medicaid-enrolled adults had lower vaccination rates than privately insured adults for nearly all vaccines included in this analysis (Table 2-1). The only exception was the pneumococcal vaccine; the vaccination rate for Medicaid enrollees was 3.7 percentage points higher than for privately

insured individuals. This may reflect a difference in health status because ACIP recommends the pneumococcal vaccine only for adults 19 to 64 years old if they have an additional risk factor such as chronic heart, lung, or liver disease or immunocompromising conditions. Adults with Medicaid are more likely to report fair or poor health status than those with private insurance and thus may be more likely to have a risk factor included in the ACIP recommendation (MACPAC 2021b). Vaccination rates for Tdap had the largest gaps between Medicaid and private insurance; the vaccination rate for those privately insured was almost 13 percentage points higher than Medicaid for Tdap and about 10 percentage points

TABLE 2-1. Vaccination Rates for Adults (19 Years and Older), by Vaccine and Primary Source of Health Coverage, 2015–2018

| | Primary source of coverage ¹ | | | | | | |
|--------------------------|---|-------------------------------|----------------------|------------|--|--|--|
| Vaccine | Total | Medicaid or CHIP ² | Private ³ | Uninsured⁴ | | | |
| Influenza | 43.6% | 32.8% | 40.8%* | 16.3%* | | | |
| Tetanus | 62.6 | 56.7 | 66.7* | 50.1* | | | |
| Tdap | 29.2 | 22.6 | 35.2* | 16.3* | | | |
| Pneumococcal | 25.2 | 16.9 | 13.3* | 9.3* | | | |
| Herpes zoster (shingles) | 22.9 | 7.4 | 12.8* | 4.3* | | | |
| Hepatitis A | 16.9 | 16.9 | 20.6* | 13.9* | | | |
| Hepatitis B | 32.1 | 33.7 | 38.8* | 26.2* | | | |
| HPV | 33.1 | 32.6 | 36.0* | 19.8* | | | |

Notes: Tdap is tetanus, diphtheria, and pertussis. HPV is human papillomavirus. For the herpes zoster (shingles) vaccine, the analysis was limited to adults 50 years and older. For HPV, the analysis was limited to adults 19 to 26 years old.

Sources: MACPAC, 2021, analysis of 2015–2018 National Health Interview Survey data.

^{*} Difference from Medicaid is statistically significant at the 0.05 level.

¹ Total includes all non-institutionalized individuals age 19 and older, regardless of coverage source. In this table, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, uninsured. Not separately shown are the estimates for those covered by Medicare and by any type of military health plan or other federal government-sponsored programs.

² Medicaid or CHIP also includes persons covered by other state-sponsored health plans. Medicaid and CHIP coverage are combined because it was determined through validation processes that respondents could not accurately distinguish between the two programs.

³ Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.



higher for tetanus. Uninsured individuals had lower vaccination rates than enrollees with both Medicaid and private insurance.

Race and ethnicity. Vaccination rates varied across racial and ethnic groups within each source of coverage. However, there appear to be smaller racial and ethnic disparities in Medicaid compared to private insurance.

Looking at adults with Medicaid coverage, the differences across racial and ethnic groups are mixed. White, non-Hispanic adults covered by Medicaid generally had a similar or higher vaccination rate than people of color, but that was not always the case (Table 2-2). For example, vaccination rates for influenza among Medicaid adults who are Hispanic (34.2 percent); Asian,

non-Hispanic (40.5 percent); and American Indian or Alaska Native, non-Hispanic (52.4 percent) were higher compared to white, non-Hispanic adults covered by Medicaid (30.9 percent), whereas Black, non-Hispanic adults in Medicaid (31.5 percent) had a similar rate to white, non-Hispanic adults (Table 2A-2). However, vaccination rates for tetanus and Tdap were highest among white, non-Hispanic adults covered by Medicaid (64.9 and 30.1 percent, respectively), compared to Black, non-Hispanic (46.4 and 15.9 percent, respectively), Hispanic (53.4 and 17.9 percent, respectively), and Asian, non-Hispanic (43.5 and 16.8 percent, respectively) adults with Medicaid coverage.

TABLE 2-2. Difference in Vaccination Rates for Adults (19 Years and Older) within Medicaid, by Vaccine and Race and Ethnicity, 2015–2018

| | Statistically significant difference within Medicaid compared to w non-Hispanic individuals | | | | | | |
|--------------------------|--|----------|-------------------------|---|-------|--|--|
| Vaccine | Black, non- Hispanic | Hispanic | Asian, non- Hispanic | American Indian or Alaska Native, non-Hispanic | Other | | |
| Influenza | _ | Higher | Higher | Higher | - | | |
| Tetanus | Lower | Lower | Lower | _ | _ | | |
| Tdap | Lower | Lower | Lower | _ | _ | | |
| Pneumococcal | _ | Lower | Lower | - | - | | |
| Herpes zoster (shingles) | _ | _ | _ | _ | _ | | |
| Hepatitis A | _ | - | Higher | - | - | | |
| Hepatitis B | Lower | _ | _ | _ | _ | | |
| HPV | _ | _ | _ | - | - | | |

Notes: Tdap is tetanus, diphtheria, and pertussis. HPV is human papillomavirus. For the herpes zoster (shingles) vaccine, the analysis was limited to adults 50 years and older. For HPV, the analysis was limited to adults 19 to 26 years old.

Lower means that the race and ethnicity group had a lower vaccination rate than the white, non-Hispanic group that was statistically significant. Higher means that the race and ethnicity group had a higher vaccination rate than the white, non-Hispanic group that was statistically significant. — means that the difference was not statistically significant.

Sources: MACPAC, 2021, analysis of 2015-2018 National Health Interview Survey data.



There are fewer statistically significant differences across racial and ethnic groups within Medicaid for other vaccines (Table 2-2). This is in contrast to the differences in vaccination rates by racial and ethnic groups for those with private insurance (Table 2A-2). White, non-Hispanic adults with private insurance generally had higher vaccination rates than Black, non-Hispanic or Hispanic adults with private insurance for most vaccines; however, we did not test these differences within the private insurance group for statistical significance.

Vaccination rates were more similar between Medicaid and private insurance among people of color than for white, non-Hispanic adults (Table 2-3). The vaccination rate for white, non-Hispanic adults with private insurance was greater than white, non-Hispanic adults with Medicaid by a statistically significant margin for six of the eight vaccines (influenza, tetanus, Tdap, herpes zoster (shingles), hepatitis A, and hepatitis B). In contrast to white, non-Hispanic adults, the vaccination rate for Black, non-Hispanic and Hispanic adults with private insurance was higher than those with Medicaid by a statistically significant margin for only four of the eight vaccines (tetanus, Tdap, hepatitis A, and hepatitis B). Similarly, the vaccination rate for Asian, non-Hispanic adults with private insurance was higher than those with Medicaid by a statistically significant margin for three of the eight vaccines (tetanus, Tdap, and hepatitis B). These data suggest that a key driver in the overall difference in vaccination rates between Medicaid and private insurance is the difference in vaccination rates among white, non-Hispanic adults.

TABLE 2-3. Difference in Vaccination Rates for Adults (19 Years and Older) between Medicaid and Private Insurance, by Vaccine and Race and Ethnicity, 2015–2018

| | Statistic | Statistically significant difference between Medicaid and private insurance | | | | | | |
|-----------------------------|-------------------------|---|----------|-------------------------|---|-------|--|--|
| Vaccine | White, non- Hispanic | Black, non- Hispanic | Hispanic | Asian, non- Hispanic | American Indian or Alaska Native, non- Hispanic | Other | | |
| Influenza | Lower | _ | _ | _ | _ | Lower | | |
| Tetanus | Lower | Lower | Lower | Lower | _ | _ | | |
| Tdap | Lower | Lower | Lower | Lower | _ | Lower | | |
| Pneumococcal | Higher | Higher | Higher | - | _ | - | | |
| Herpes zoster (shingles) | Lower | _ | _ | _ | _ | _ | | |
| Hepatitis A | Lower | Lower | Lower | _ | _ | Lower | | |
| Hepatitis B | Lower | Lower | Lower | Lower | _ | _ | | |
| HPV | _ | _ | _ | _ | _ | Lower | | |

Notes: Tdap is tetanus, diphtheria, and pertussis. HPV is human papillomavirus. For the herpes zoster (shingles) vaccine, the analysis was limited to adults 50 years and older. For HPV, the analysis was limited to adults 19 to 26 years old.

Lower means that Medicaid had a lower vaccination rate than private insurance that was statistically significant. Higher means that Medicaid had a higher vaccination rate than private insurance that was statistically significant. – means that the difference was not statistically significant.

Sources: MACPAC, 2021, analysis of 2015–2018 National Health Interview Survey data.



Vaccination rates among children compared to adults

Children enrolled in Medicaid also had a lower influenza vaccination rate than privately insured children, but the gap was narrower than it was for adults. For children enrolled in Medicaid, the influenza vaccine is covered without cost sharing through the VFC program. Similar to adults, children enrolled in Medicaid (47.2 percent) have a lower influenza vaccination rate than those in private insurance (49.8 percent) (Table 2-4). Although the difference was statistically significant, the gap was smaller for children than it was for adults. For children, the rate difference was 2.5 percentage points, versus 8.1 percentage points among adults.

Vaccination rates among pregnant women

Both the influenza and Tdap vaccines are recommended by ACIP for pregnant women. Influenza is more likely to cause severe illness

in pregnant women, and the influenza vaccine reduces the risk of hospitalization for pregnant women by an average of 40 percent (CDC 2021b). Each year, approximately 1,000 infants are hospitalized due to pertussis. Tdap administration during pregnancy can help prevent pertussis among infants who are too young to be vaccinated against the disease (CDC 2021c). HHS recently identified Tdap vaccinations among pregnant women as a high public health priority and set a new 2030 Healthy People goal to increase the vaccination rate (ODPHP 2021b).⁹

The influenza vaccination rate was almost 21 percentage points lower for pregnant women enrolled in Medicaid (36.5 percent) than it was for those enrolled in private insurance (57.5 percent) (Table 2-5). For Tdap, pregnant women with Medicaid coverage (41.4 percent) had a vaccination rate about 12 percentage points lower than those privately insured (53.8 percent). Given that Medicaid covers 43 percent of all births in the United States, this disparity in vaccination rates is particularly concerning (MACPAC 2021c).

TABLE 2-4. Influenza Vaccination Rates, by Population and Primary Source of Coverage, 2015–2018

| | Primary source of coverage ¹ | | | | |
|----------------------------|---|----------------------------------|----------------------|------------------------|--|
| Population | Total | Medicaid or CHIP ² | Private ³ | Uninsured ⁴ | |
| Adults, 19 years and older | 43.6% | 32.8% | 40.8%* | 16.3%* | |
| Children, 0-18 years | 47.8 | 47.2 | 49.8* | 26.7* | |

Notes

Source: MACPAC, 2021, analysis of 2015–2018 National Health Interview Survey data.

^{*} Difference from Medicaid is statistically significant at the 0.05 level.

¹Total includes all non-institutionalized individuals regardless of coverage source. In this table, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, uninsured. Not separately shown are the estimates for those covered by Medicare and by any type of military health plan or other federal government-sponsored programs.

² Medicaid or CHIP also includes persons covered by other state-sponsored health plans. Medicaid and CHIP coverage are combined because it was determined through validation processes that respondents could not accurately distinguish between the two programs.

³ Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.



TABLE 2-5. Vaccination Rates for Pregnant Women (18–49 Years Old), by Vaccine and Primary Source of Health Coverage, 2015–2018

| | Primary source of coverage ¹ | | | | | |
|------------|---|----------------------------------|----------------------|------------|--|--|
| Population | Total | Medicaid or CHIP ² | Private ³ | Uninsured⁴ | | |
| Influenza | 47.8% | 36.5% | 57.5%* | 19.0%* | | |
| Tdap | 47.5 | 41.4 | 53.8* | † | | |

Notes: Tdap is tetanus, diphtheria, and pertussis.

Source: MACPAC, 2021, analysis of 2015-2018 National Health Interview Survey data.

A 2020 study examined influenza and Tdap vaccination rates among pregnant women at one Florida hospital between 2016 and 2018. Before 2019, Florida's Medicaid program did not cover these vaccines for adults during pregnancy. The study found that the Tdap vaccination rate during the recommended time during pregnancy was 55 percentage points lower for pregnant women enrolled in Medicaid (13.3 percent) compared to those with private insurance (68.6 percent). Similarly, the rate for influenza vaccination during pregnancy was higher for privately insured women (70.4 percent) than for women covered by Medicaid (35.6 percent). During the study's time period, the hospital system offered these vaccines to postpartum mothers at no cost. Many women, especially those with Medicaid coverage, were vaccinated in the immediate postpartum period under this program. This led to an increase in the vaccination rates among Medicaid enrollees

for both Tdap (51.7 percent) and influenza (43.5 percent). These increases—once the vaccine was made available without cost—suggest that the state decision to not cover these vaccines during pregnancy might have depressed vaccinations among its enrollees (Merritt et al. 2020).

Improving Access for Medicaid-Enrolled Adults

Low vaccination rates among Medicaid enrollees are due to a number of factors. Limited coverage of recommended vaccines for some Medicaid enrollees has been a fundamental barrier. In addition, some Medicaid-enrolled adults are subject to cost sharing requirements for vaccines, which is associated with lower vaccination rates among low-income individuals. Specifically, one study found that each additional co-payment dollar on

^{*} Difference from Medicaid is statistically significant at the 0.05 level.

[†] Estimate not reported due to small sample size or unreliability because it has a relative standard error greater than or equal to 30 percent.

¹ Total includes all non-institutionalized individuals age 18 to 49 years old, regardless of coverage source. In this table, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid or CHIP, other, uninsured. Not separately shown are the estimates for those covered by Medicare and by any type of military health plan or other federal government-sponsored programs.

² Medicaid or CHIP also includes persons covered by other state-sponsored health plans. Medicaid and CHIP coverage are combined because it was determined through validation processes that respondents could not accurately distinguish between the two programs.

³ Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.



vaccinations decreases influenza vaccination rates by 1 to 6 percentage points (Stoecker et al. 2017).

Low vaccination rates may also reflect limited provider access and availability and inadequate support and education for beneficiaries. Additionally, limitations of and variations in immunization information systems (IIS) make it challenging for states, plans, and providers to identify which beneficiaries may need vaccines. The extent to which each of these factors influences the vaccination rate is unclear. Moreover, some of these barriers are not limited to Medicaid but may be factors related to low vaccination rates in adults regardless of insurance type.

To shed light on the barriers to vaccine access for Medicaid-enrolled adults, MACPAC conducted 21 semistructured interviews with a wide range of stakeholders. We interviewed Medicaid officials from five states, Medicaid medical directors, federal officials, Medicaid managed care plans, providers, vaccine manufacturers, immunization experts, and consumer groups. In the following section, we share insights from these interviews.

Provider access and availability

In addition to coverage of vaccines, interviewees focused heavily on the key role of providers in vaccination. Adults who report that a provider both recommended and offered an influenza vaccine had higher vaccination rates (Lu et al. 2018). In our interviews, we heard concerns that low payment hinders a provider's willingness to administer vaccinations, which contributes to lower vaccination rates in Medicaid. Public health experts and providers also noted the need for improved vaccine access across a variety of settings beyond primary care settings.

Adequate payment. Payment adequacy was a primary concern among stakeholders. To provide vaccines to patients, providers face costs associated with purchasing the vaccine (e.g., upfront purchase cost but deferred payment), storing the vaccine (e.g., adequate refrigerator or freezer,

backup power, insurance), and administering the vaccine (e.g., staff time, documentation, billing across payers). Vaccine prices can vary, and adult vaccine providers have smaller economies of scale than pediatric providers because vaccine recommendations for adults include factors beyond age and demand is less predictable (Shen 2017). Given the uncertainty of demand among adults, some providers choose not to stock all recommended vaccines, viewing it as a financial liability.

The literature provides some evidence to support concerns about low payment in Medicaid. A recent study found that some Medicaid programs may not cover a provider's costs of purchasing or administering adult vaccines, with median Medicaid payment amounts for vaccines below the reported private sector price for 9 of 13 vaccines. Additionally, the median Medicaid payment to health care professionals to administer a single adult vaccination was \$13.62 for injection and \$13.98 for intranasal administration (Granade et al. 2020). Those median rates are below the \$15 to \$23 average estimated cost to providers for vaccine administration to adults (Yarnoff et al. 2019). Similarly, in a 2014 survey of family and general internal medicine physicians, the majority of respondents (55 percent) reported that they lost money administering vaccines to adult Medicaid beneficiaries, whereas 25 percent or less reported having lost money administering vaccines to adults covered by other public and private payers (Lindley et al. 2018). Research has shown a positive relationship between Medicaid payment rates and vaccination rates for children. One study found higher Medicaid payment rates were associated with increases in influenza vaccination rates among children (Yoo et al. 2010). Another study found that higher Medicaid payment for vaccine administration was positively associated with immunizations for children, which suggested that increasing Medicaid payment could increase the number of Medicaid-enrolled children getting vaccinations (Tsai 2018).



Higher payment rates for vaccine administration could also increase provider participation and in turn improve access to vaccines for Medicaid beneficiaries. Policymakers could consider options that create incentives for states to increase payment for vaccine administration. For example, ARPA provides a 100 percent FMAP for the COVID-19 vaccine and its administration through the last day of the first calendar quarter that begins one year after the last day of the COVID-19 PHE (§ 9811(b) of ARPA). Stakeholders in our interviews noted that increased federal match has led to the vast majority of states increasing payment

rates to equal Medicare rates for COVID-19 vaccine administration. Congress could consider increasing the federal match on administration of other vaccines to encourage provider participation and increase access. Any increase in the federal match would likely need to be greater than the 1 percentage point increase provided in Section 4106 of the ACA. Many stakeholders in our interviews stated that the 1 percentage point increase did not create a strong enough incentive for states to cover all recommended vaccines without cost sharing.

BOX 2-2. Federally Qualified Health Centers and Payment for Vaccinations

Federally qualified health centers (FQHCs) are community-based health care providers that provide comprehensive primary and preventive health care to low-income individuals in underserved areas. FQHCs receive federal funds from the Health Resources and Services Administration under Section 330 of the Public Health Service Act, and state Medicaid programs are required to cover their services, which are otherwise included in the Medicaid state plan (MACPAC 2017). FQHCs are required to provide preventive and primary health services, including vaccines, to all patients.

Medicaid payment rules for FQHCs differ from those of other providers because federal law has established a prospective payment system (PPS) that sets how FQHCs are paid for each encounter or visit (Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000 (P.L. 106-554)). Under the PPS, FQHCs are paid a single rate for each billable visit, regardless of the number or types of services provided during the visit. The PPS rate, also called an encounter rate, is established for each FQHC based on the center's average cost to provide Medicaid-covered services to Medicaid beneficiaries during a base year; this base rate is then adjusted each year by the Medicare Economic Index to account for inflation. States also have the option to use an alternative payment methodology (APM) provided that the health center agrees to the method and that the APM pays at least what the health center would have received under the PPS.

Federal law requires that a billable visit include a face-to-face encounter with one of six types of core providers (physicians, physician assistants, nurse practitioners, clinical nurse-midwives, clinical psychologists, and clinical social workers). States have some flexibility in defining which services are included in the encounter or visit. Immunizations are considered services and costs incident to the services provided by the six core provider types and should be included in the total costs included in the PPS rate calculation (NACHC 2019).



BOX 2-2. (continued)

States have the flexibility to count encounters with other providers, such as nurses or pharmacists, as billable visits but are not required to do so. This means that immunization-only visits provided by a nurse or a pharmacist may not be considered a billable visit by the state Medicaid agency, and such a visit would not trigger payment of the encounter rate for the health center. Because the cost of immunizations should be included in the calculation of the encounter rate, the cost of an immunization-only visit would be paid indirectly across other billable visits. However, the inability to directly bill for this type of encounter in some states may create a perception of not getting paid, and thus, health centers may be reluctant to provide immunization-only visits (NACHC 2019).

One way to address this issue would be for states to recalculate the base encounter rate to include nurse and pharmacist encounters as a billable visit. This would allow health centers to bill the encounter rate for immunization-only visits with these providers. However, it would result in the encounter rate for all billable visits being lower, as the same costs would be divided by a larger number of visits. Alternatively, states could establish an APM in which immunizations are removed from the PPS calculations and paid for separately. Both of these options can be a considerable undertaking for the state, and many health centers are hesitant to make changes to the encounter rate, such as developing an APM, without more information on how potential changes could affect their overall revenue (NACHC 2019).

Expanding provider types. Vaccine access could also be improved by making vaccines available in more settings and from additional types of providers. Several interviewees noted that adults are less likely than children to have medical homes and more likely to access the health care system through providers such as pharmacists, hospital emergency room or urgent care staff, or a consulting specialist. Although many Medicaid programs allow payments to pharmacies and other providers beyond physicians, this is not universal. A recent CDC survey found that 31 state Medicaid programs paid pharmacists to administer vaccines, 29 state Medicaid programs paid nurse practitioners, and 4 states paid midwives (Granade et al. 2021). Many interviewees noted the success of allowing COVID-19 vaccination administration at multiple locations and commented that other adult vaccinations should be similarly accessible. 10

Experience during the COVID-19 pandemic is changing how some states approach adult

vaccinations. For example, a few states changed their policies to allow pharmacies to administer and bill for the COVID-19 vaccine and are considering expanding the scope of allowable services provided at pharmacies. However, such actions may require changes to state scope of practice laws. Federal guidance encouraging vaccinations across a wide range of settings could also lead to more states allowing additional providers to bill for vaccinations under Medicaid.

Beneficiary support and education

Factors beyond payment can make it more challenging to vaccinate adults than children for multiple reasons. First, children generally have a medical home, and the age-based vaccination schedule is integrated into physician workflows. Second, there are vaccination requirements for children to attend school, which motivates parents to ensure that children are up to date on their required immunizations. Third, children have



greater vaccine access through the VFC program, which covers uninsured and Medicaid-eligible children.

Improving vaccination rates among adults in Medicaid may require additional education, support, and outreach to beneficiaries. As noted earlier, the vaccine schedule for adults is based on age, medical conditions, and vaccine history. Although some vaccines are universal for adults, such as the influenza vaccine, others depend on risk factors and age. Providers play an important role in educating beneficiaries about the value of immunization and identifying which vaccinations are recommended based on the beneficiary's health status and medical history.

Beneficiary advocates stressed the importance of using multiple reminder and outreach methods (e.g., text, phone call, mail). These should come from both trusted sources in the community and general public health campaigns (e.g., advertisements in grocery stores). They also noted that increased supports may be needed to help a beneficiary get to the pharmacy or doctor. Some interviewees pointed to the programs that ridesharing companies such as Uber and Lyft have implemented during the pandemic to transport people to COVID-19 vaccine appointments.

The extent of beneficiary support needed to improve access may vary by patient, provider, and vaccine type. One study found that the median cost of vaccination was substantially higher for obstetrics and gynecology (OB-GYN) practices due to the increased time needed to counsel patients, administer vaccines, and manage inventory (Shen et al. 2019). These higher costs may be contributing to vaccination rates among pregnant women that are lower than goals set by public health experts. As noted earlier, vaccination rates are lower among pregnant women enrolled in Medicaid compared to those with private insurance.

There is concern that vaccine opposition and hesitancy are growing, and additional educational efforts may be necessary to encourage adults to get vaccinations at appropriate points. In

addition to public health campaigns and increased community engagement in vaccination efforts, some interviewees noted that providers may need to spend more time counseling patients about vaccines. For example, they may need to have multiple conversations with a patient about specific vaccine recommendations before the individual chooses to get vaccinated. Some stakeholders suggested that providers should be encouraged to counsel patients who may not be ready to be vaccinated, and they should be paid for their time.

Currently, most states only pay for vaccine administration but do not make a separate payment for counseling that does not result in a vaccination. During the COVID-19 pandemic, a few states (e.g., North Carolina) have begun to pay providers for providing counseling on the benefits of COVID-19 vaccination (NCDHHS 2021). As mentioned previously, one reason median costs of vaccination were substantially higher for OB-GYN practices was due to the increased time needed to counsel patients. A study found that among the patients seen by OB-GYN practices, 68 percent declined to receive recommended vaccines (Shen et al. 2019). To the extent that patients decline recommended vaccines due to a lack of understanding about vaccine benefits and risks, a separate payment for vaccine counseling could improve vaccination rates by allowing clinicians to increase the time they spend educating Medicaid beneficiaries on the benefits of receiving recommended vaccines during pregnancy.

In December 2021, CMS issued a press release indicating that it considers COVID-19 vaccine counseling visits for children under age 21 to be part of COVID-19 vaccine administration under the Medicaid EPSDT benefit. States will receive the 100 percent FMAP available under ARPA for these COVID-19 vaccine counseling visits. Additionally, CMS will require that states pay for and cover stand-alone vaccine counseling visits as part of vaccine administration required for all pediatric vaccines under the EPSDT benefit (CMS 2021b). To address vaccine hesitancy in adults, CMS could provide additional guidance on how states



can provide coverage of and payment for vaccine counseling visits.

Immunization information systems

It can be challenging for providers to identify which adult vaccinations are needed by their patients given that the beneficiary may have received recommended vaccines from another provider. Providers need access to a central source of vaccination records, such as an IIS, but many face systems interoperability issues. Some stakeholders have noted that state and local IIS need substantial improvements. Interviewees cited challenges with data quality and interoperability issues with provider electronic health record systems. This issue has become particularly challenging in tracking COVID-19 vaccinations.

Currently, state Medicaid programs can receive a 90 percent federal match rate for the design and development of immunization systems that are part of the state's Medicaid Management Information System (MMIS) and a 75 percent match for its ongoing maintenance. 11 In states where the IIS is developed, owned, and operated by a public health or other non-Medicaid agency, match is available at 50 percent (HCFA 2000). Many states have built stopgap solutions to better track COVID-19 vaccinations, but these processes may not be optimal for long-term data exchange for all vaccines. A few interviewees mentioned that additional federal guidance and technical assistance from CMS would be useful to help states understand what types of activities may be eligible for the enhanced matching rate as states develop an IIS or make additional improvements to integrate their MMIS and IIS.

Next Steps

It is the Commission's view that universal access to recommended vaccines for all Medicaidenrolled adults is a necessary first step to improve vaccination rates. Although the Commission recognizes that coverage is foundational to this effort, low vaccination rates may also result from limited provider access and availability and inadequate support and education for beneficiaries. We will continue to explore these issues and consider options that could improve provider availability and ensure adequate support and education for beneficiaries.

Policy options could achieve these goals by addressing payment adequacy, expanding provider networks, and improving support and education for beneficiaries. The Commission will assess these policy options with the goal to improve vaccination rates overall as well as reduce racial disparities among Medicaid enrollees. We will weigh the relative merits of various policy options and consider their effects on state and federal spending. In addition, we will consider how operationally complex any policy would be to administer.

We expect that any single policy option may have only a modest effect on vaccination rates. For this reason, we will consider how policies might be combined and how a multifaceted approach could more meaningfully address barriers to access and improve vaccination rates.

Endnotes

- Healthy People 2020 established a set of goals to improve the influenza vaccination rate among adults. The targets varied by population. For example, the target for pregnant women was an 80 percent influenza vaccination rate, compared with the baseline of 40.4 percent in 2012–2013. By 2016–2017, the rate increased to 53.5 percent (ODPHP 2021c). Healthy People 2020 also set goals to increase the percentage of adults vaccinated against pneumococcal disease and herpes zoster (shingles) (ODPHP 2021a). For pneumococcal disease, the target vaccination rate was 60 percent for non-institutionalized high-risk adults age 18 to 64. The baseline rate was 16.6 percent in 2008 and reached 24.3 percent in 2017 (ODPHP 2021d).
- ² The authors estimated the annual economic burden of diseases associated with 10 vaccines. These vaccines



protect against hepatitis A; hepatitis B; herpes zoster (shingles); HPV; influenza; measles, mumps, and rubella (MMR); meningococcal disease; pneumococcal disease; tetanus, diphtheria, and pertussis (Tdap/Td); and varicella (chicken pox) (Ozawa et al. 2016).

- The Secretary of HHS (the Secretary) selects 15 voting members after an application and nomination process. One member is a consumer representative, and the other 14 members have expertise in vaccinology, immunology, pediatrics, internal medicine, nursing, family medicine, virology, public health, infectious diseases, and preventive medicine (CDC 2021d). Examples of professional organizations represented by non-voting members include the American Academy of Pediatrics, American Academy of Family Physicians, American College of Nurse-Midwives, American College of Obstetricians and Gynecologists, and American College of Physicians. To protect against potential conflicts of interest, the committee has explicit membership exclusion criteria, including individuals employed by vaccine manufacturers (CDC 2016).
- ⁴ Underinsured means the child has health insurance, but it does not cover vaccines, does not cover certain vaccines, or has a fixed dollar limit or cap for vaccines. Underinsured children are eligible to receive vaccines only at federally qualified health centers (FQHCs) or rural health clinics.
- As of 2021, ACIP recommends 13 vaccinations for adults 19 years or older, including influenza; tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis (Tdap or Td); measles, mumps, and rubella (MMR); varicella; recombinant zoster (shingles); HPV; pneumococcal conjugate (PCV13); pneumococcal polysaccharide (PPSV23); hepatitis A; hepatitis B; serogroup A, C, W, and Y meningococcal; serogroup B meningococcal; and haemophilus influenzae type b (Hib) vaccines. At the time of this writing, ACIP also recommends use of COVID-19 vaccines for everyone age 5 and older within the scope of the emergency use authorization or biologics license application for the particular vaccine (CDC 2021e).
- ⁶ MACPAC uses the term "pregnant women" as this is the term used in the statute and regulations. However, the term "birthing people" is being used increasingly, as it is more inclusive and recognizes that not all individuals who become pregnant and give birth identify as women. Vaccine coverage may be mandated through other requirements

such as the EPSDT benefit for adults 19 to 20 years old or if provided as part of pregnancy-related care (KFF 2017).

- In Medicaid, co-payments are limited to nominal amounts and are typically less than \$4 for most beneficiaries (CMS 2013b).
- ⁸ ARPA extends coverage of COVID-19 vaccines to most beneficiaries receiving limited-benefit packages, including individuals eligible for only family planning benefits, individuals eligible for only tuberculosis-related benefits, individuals eligible for the optional COVID-19 group, individuals eligible for medically needy coverage, and limited-benefit groups authorized under Section 1115(a)(2) expenditure authority. States can provide coverage to the optional COVID-19 group, including coverage of COVID-19 vaccinations, only through the last day of the COVID-19 PHE.
- ⁹ This objective is currently categorized as developmental because there is not yet reliable baseline data.
- ¹⁰ The Public Readiness and Emergency Preparedness Act (PREP Act, P.L. 109-148) authorizes the Secretary to issue a declaration that provides immunity from liability arising from specified efforts to combat a disease or threat. On March 10, 2020, the Secretary issued a PREP Act declaration establishing that the COVID-19 pandemic constitutes a PHE warranting liability protections for the administration of medical countermeasures against COVID-19. Under subsequent amendments to the declaration, HHS has allowed a wide range of health professionals, including qualified pharmacy technicians, emergency medical technicians, and midwives, to administer COVID-19 vaccines. Additionally, the Secretary has allowed statelicensed pharmacists, and pharmacy interns or technicians acting under supervision of such pharmacist, to administer childhood vaccines for children age 3 through 18 or seasonal influenza vaccines to adults. The PREP Act declaration expressly preempts any state or local law that prohibits any covered persons who satisfy the requirements from ordering or administering COVID-19 vaccines, childhood vaccines, or seasonal influenza for adults. The PREP Act declaration extends protection for covered COVID-19 countermeasures through October 1, 2024 (ASPR 2022).
- ¹¹ Under the Health Information Technology for Economic and Clinical Health Act of 2009 (HITECH Act, Title XIII of



P.L. 111-5), states were eligible to receive a 90 percent match through HITECH funding to plan, design, develop, and implement systems that connect health care providers to IIS (ASTHO 2018). However, HITECH funding is not available after 2021.

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APPENDIX 2A: Vaccination Rates for Adults by Primary Source of Health Coverage

TABLE 2A-1. Vaccines Included in Analysis

| Vaccines | Recommendation for adult population |
|-----------------------------|---|
| Influenza | Annually for individuals age six months or older |
| Tetanus | A booster dose is given every 10 years, or after 5 years in the case of a severe or dirty wound or burn. |
| Tdap | Any adult 19 years of age or older who has never received a dose of Tdap should get one as soon as feasible. This should be followed by either a Td or Tdap shot every 10 years. |
| | Pregnant women should get a dose of Tdap during each pregnancy, preferably during the early part of gestation in weeks 27 through 36. |
| Pneumococcal | All adults 65 years or older, people 2 through 64 years old with certain medical conditions, and adults 19 through 64 years old who smoke cigarettes |
| Herpes zoster (shingles) | Immunocompetent adults age 50 years and older |
| Hepatitis A | Adults at risk for infection or severe disease from hepatitis A virus and for adults requesting protection against hepatitis A virus without acknowledging a risk factor |
| | In some cases, vaccination before travel, for postexposure prophylaxis, in settings providing services to adults, and during outbreaks |
| Hepatitis B | In 2021, adults at risk for hepatitis B virus infection, including universal vaccination of adults in settings in which a high proportion have risk factors for hepatitis B infection and vaccination of adults requesting protection from hepatitis B virus without acknowledging a specific risk factor |
| | In 2022, any adult age 19 to 59 who has not previously been vaccinated or adults age 60 and older who have risk factors for hepatitis B virus |
| HPV | Everyone through age 26 years if not adequately vaccinated previously |
| | Vaccination is not recommended for everyone older than age 26 years. However, some adults age 27 through 45 years may decide to get the HPV vaccine based on clinician guidance. |

Notes: Tdap is tetanus, diphtheria, and pertussis. Td is tetanus and diphtheria. HPV is human papillomavirus.

Source: CDC, 2021e, 2021f.



TABLE 2A-2. Vaccination Rates for Adults (19 Years and Older), by Vaccine, Race and Ethnicity, and Primary Source of Health Coverage, 2015–2018

| | | | Primary sourc | e of coverage ¹ | |
|--------------|---|-------|-------------------------------|----------------------------|------------|
| Vaccine | Race and ethnicity | Total | Medicaid or CHIP ² | Private ³ | Uninsured⁴ |
| Influenza | White, non-Hispanic | 47.1% | 30.9% | 42.7%* | 14.6%* |
| | Black, non-Hispanic | 35.8 | 31.5 | 32.9 | 15.8* |
| | Hispanic | 33.7 | 34.2^ | 34.5 | 17.1* |
| | Asian, non-Hispanic | 47.9 | 40.5^ | 46.3 | 21.2* |
| | American Indian or Alaska Native, non-Hispanic | 47.0 | 52.4^ | 49.9 | 25.0* |
| | Other | 47.0 | 52.4^ | 49.9 | 25.0* |
| Tetanus | White, non-Hispanic | 67.8% | 64.9% | 71.1%* | 57.8%* |
| | Black, non-Hispanic | 50.7 | 46.4^ | 53.9* | 43.8 |
| | Hispanic | 53.3 | 53.4^ | 58.8* | 43.5* |
| | Asian, non-Hispanic | 53.0 | 43.5^ | 57.0* | 38.5 |
| | American Indian or Alaska Native, non-Hispanic | 66.5 | 63.0 | 65.5 | 69.3 |
| | Other | 64.6 | 61.3 | 67.3 | 58.2 |
| Tdap | White, non-Hispanic | 34.2% | 30.1% | 39.8%* | 22.0%* |
| | Black, non-Hispanic | 18.1 | 15.9^ | 21.6* | 12.4 |
| | Hispanic | 19.1 | 17.9^ | 25.3* | 10.5* |
| | Asian, non-Hispanic | 25.7 | 16.8^ | 29.8* | 15.8 |
| | American Indian or Alaska Native, non-Hispanic | 28.6 | 22.9 | 35.0 | 31.5 |
| | Other | 36.5 | 26.1 | 42.3* | 28.2 |
| Pneumococcal | White, non-Hispanic | 28.8% | 18.7% | 13.8%* | 10.2%* |
| | Black, non-Hispanic | 20.9 | 16.9 | 12.4* | 9.1* |
| | Hispanic | 15.9 | 15.3^ | 11.6* | 8.1* |
| | Asian, non-Hispanic | 18.6 | 13.3^ | 12.1 | 7.7 |
| | American Indian or Alaska Native, non-Hispanic | 22.2 | 17.5 | 12.0 | 15.9 |
| | Other | 24.0 | 14.2 | 15.1 | 13.5 |



TABLE 2A-2. (continued)

| | | | Primary sourc | e of coverage¹ | |
|-----------------------------|---|-------|-------------------------------|----------------------|------------|
| Vaccine | Race and ethnicity | Total | Medicaid or CHIP ² | Private ³ | Uninsured⁴ |
| Herpes zoster (shingles) | White, non-Hispanic | 26.5% | 8.2% | 14.3%* | 4.7%* |
| | Black, non-Hispanic | 11.0 | 5.4 | 6.5 | 1.7* |
| | Hispanic | 12.1 | 6.2 | 7.7 | 4.3 |
| | Asian, non-Hispanic | 18.5 | 9.3 | 11.7 | 1.2* |
| | American Indian or Alaska Native, non-Hispanic | 19.4 | 12.0 | 13.6 | 13.9 |
| | Other | 19.6 | 9.7 | 10.9 | 6.4 |
| Hepatitis A | White, non-Hispanic | 16.1% | 16.1% | 19.5%* | 13.5%* |
| | Black, non-Hispanic | 14.9 | 15.0 | 17.9* | 12.5 |
| | Hispanic | 18.0 | 17.5 | 23.0* | 13.6* |
| | Asian, non-Hispanic | 26.2 | 25.3^ | 29.0 | 22.0 |
| | American Indian or Alaska Native, non-Hispanic | 16.0 | 17.1 | 17.4 | 15.0 |
| | Other | 24.5 | 19.3 | 30.4* | 22.8 |
| Hepatitis B | White, non-Hispanic | 32.0% | 34.9% | 38.8%* | 29.5%* |
| | Black, non-Hispanic | 30.3 | 30.0^ | 34.9* | 30.1 |
| | Hispanic | 29.7 | 33.1 | 36.9* | 20.2* |
| | Asian, non-Hispanic | 40.2 | 35.7 | 46.1* | 26.6* |
| | American Indian or Alaska Native, non-Hispanic | 34.3 | 37.0 | 39.6 | 31.1 |
| | Other | 41.8 | 42.3 | 48.5 | 36.4 |
| HPV | White, non-Hispanic | 35.6% | 34.5% | 37.3% | 21.0%* |
| | Black, non-Hispanic | 30.6 | 30.9 | 33.3 | 22.0 |
| | Hispanic | 27.2 | 31.7 | 31.4 | 15.8* |
| | Asian, non-Hispanic | 30.9 | 30.6 | 32.7 | 16.7 |
| | American Indian or Alaska Native, non-Hispanic | 28.4 | † | † | † |
| | Other | 44.3 | 27.6 | 49.5* | 43.3 |

Notes: Tdap is tetanus, diphtheria, and pertussis. HPV is human papillomavirus. For the herpes zoster (shingles) vaccine, the analysis was limited to adults 50 years and older. For HPV, the analysis was limited to adults 19 to 26 years old.

 $[\]mbox{\ensuremath{^{\star}}}\xspace$ Difference from Medicaid is statistically significant at the 0.05 level.

[^] Within Medicaid, difference from white, non-Hispanic individuals is statistically significant at the 0.05 level.

[†] Estimate not reported due to too small of a sample size or unreliability because it has a relative standard error greater than or equal to 30 percent.



¹ Total includes all non-institutionalized individuals age 19 and older, regardless of coverage source. In this table, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, uninsured. Not separately shown are the estimates for those covered by Medicare and by any type of military health plan or other federal government-sponsored programs.

² Medicaid or CHIP also includes persons covered by other state-sponsored health plans. Medicaid and CHIP coverage are combined because it was determined through validation processes that respondents could not accurately distinguish between the two programs.

³ Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

Source: MACPAC, 2021, analysis of 2015–2018 National Health Interview Survey data.

TABLE 2A-3. Vaccination Rates for Influenza among Children (0–18 Years), by Race and Ethnicity and Primary Source of Health Coverage, 2015–2018

| | Primary source of coverage ¹ | | | | |
|--|---|----------------------------------|----------------------|------------|--|
| Race and ethnicity | Total | Medicaid or CHIP ² | Private ³ | Uninsured⁴ | |
| White, non-Hispanic | 46.4% | 42.6% | 49.0%* | 19.8%* | |
| Black, non-Hispanic | 44.7 | 44.3 | 44.8 | 32.5* | |
| Hispanic | 48.8 | 51.7^ | 48.9 | 29.5* | |
| Asian, non-Hispanic | 61.4 | 60.7^ | 62.5 | 41.6* | |
| American Indian or Alaska Native, non-Hispanic | 53.5 | 59.5^ | 41.9 | 52.8 | |
| Other | 50.0 | 44.0 | 55.6* | 25.3* | |

Notes:

Source: MACPAC, 2021, analysis of 2015-2018 National Health Interview Survey data.

^{*} Difference from Medicaid is statistically significant at the 0.05 level.

¹ Total includes all non-institutionalized individuals age 0–18 years, regardless of coverage source. In this table, the following hierarchy was used to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, uninsured. Not separately shown are the estimates for those covered by Medicare and by any type of military health plan or other federal government-sponsored programs.

² Medicaid or CHIP also includes persons covered by other state-sponsored health plans. Medicaid and CHIP coverage are combined because it was determined through validation processes that respondents could not accurately distinguish between the two programs.

³ Private health insurance coverage excludes plans that paid for only one type of service, such as accidents or dental care.

⁴ Individuals were defined as uninsured if they did not have any private health insurance, Medicaid, CHIP, Medicare, state- or other government-sponsored health plan, or military plan. Individuals were also defined as uninsured if they had only Indian Health Service coverage or had only a private plan that paid for one type of service, such as accidents or dental care.

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 disproportionate share hospital (DSH) allotments to states and the following three factors that Congress has asked the Commission to study:
 - the number of uninsured individuals;
 - the amount and sources of hospitals' uncompensated care costs; and
 - the number of hospitals with high levels of uncompensated care that also provide essential community services for low-income, uninsured, and vulnerable populations.
- In 2020, 28 million people, or 8.6 percent of the U.S. population, were uninsured, which indicates no statistical change from the number or share of the uninsured population in 2018 (27.5 million or 8.5 percent).
- The uninsured rate increased in spring 2020, which coincided with the early stages of the COVID-19 pandemic. Starting in August 2020 until July 2021, the Census reported declines in the monthly uninsured rate and increases in Medicaid enrollment.
 - The decline in the uninsured rate and increase in Medicaid enrollment are partially attributable to the Families First Coronavirus Response Act (FFCRA, P.L. 116-127), which required states to provide continuous coverage to Medicaid enrollees until the end of the public health emergency to receive FFCRA's increased federal medical assistance percentage (FMAP).
- Medicaid shortfall, the difference between the Medicaid base payments a hospital receives and its costs of providing services to Medicaid-enrolled patients, decreased 700 million (4 percent) between 2018 and 2019, according to the American Hospital Association (AHA) annual survey. In 2019, total Medicaid shortfall for all U.S. hospitals was \$19 billion.
- To help address financial challenges related to the pandemic, Congress authorized relief funding to support providers. But provider relief funds mostly targeted hospitals with high patient revenue, and there was no relationship between total hospital relief funding and the number of uninsured individuals in the area.
- The American Rescue Plan Act of 2021 (ARPA, P.L. 117-2) increased DSH allotments for the remainder of the public health emergency by applying an enhanced FMAP to the total DSH funds available to states. We estimate that ARPA increased federal allotments by \$1.5 billion for fiscal year 2022.
- The Consolidated Appropriations Act, 2021 (P.L. 116-260) partially implemented a prior MACPAC recommendation requiring the Secretary of the U.S. Department of Health and Human Services (HHS) to report Medicaid supplemental payments. Beginning in October 2021, HHS started collecting hospital-level data on non-DSH supplemental payments. These data will be useful in analyzing Medicaid shortfall for DSH and non-DSH 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 is limited by annual federal DSH allotments, which vary widely by state. States can distribute DSH payments to virtually any hospital in their state, but total DSH payments to a hospital cannot exceed the total amount of uncompensated care that the hospital provides. DSH payments help offset two types of uncompensated care: Medicaid shortfall (the difference between the payments for care a hospital receives and its costs of providing services to Medicaid-enrolled patients) and unpaid costs of care for uninsured individuals. More generally, DSH payments also help support the financial viability of safety-net hospitals.

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

- changes in the number of uninsured individuals;
- the amounts and sources of hospitals' uncompensated care costs; and
- the number of hospitals with high levels of uncompensated care that also provide essential community services for low-income, uninsured, and vulnerable populations (§ 1900 of the Social Security Act (the Act)).¹

As in our previous DSH reports, we find little meaningful relationship between DSH allotments

and the factors that Congress asked the Commission to study. This is because DSH allotments are largely based on states' historical DSH spending before federal limits were established in 1992. Moreover, the variation is projected to continue after federal DSH allotment reductions take effect.

In this report, we update our previous findings to reflect new information on changes in the number of uninsured individuals and levels of hospital uncompensated care. We also provide updated information on deemed DSH hospitals, which are statutorily required to receive DSH payments because they serve a high share of Medicaidenrolled and low-income patients. Specifically, we find the following:

- Twenty-eight million people, or 8.6 percent of the U.S. population, were uninsured in 2020.²
- Hospitals reported \$42 billion in hospital charity care and bad debt costs on Medicare cost reports in fiscal year (FY) 2019. This represented a \$2.3 billion (5.5 percent) increase in uncompensated care costs from FY 2018. While uncompensated care as a share of hospital operating expense dropped substantially after coverage provisions of the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) went into effect, it has largely remained unchanged since 2016.
- Hospitals reported \$19 billion in Medicaid shortfall on the American Hospital Association (AHA) annual survey for 2019, a 4 percent decline from 2018 (AHA 2021a, 2020, 2019, 2017, 2015).
- In FY 2019, deemed DSH hospitals continued to report lower aggregate operating margins than other hospitals (-3.3 percent for deemed DSH hospitals vs. 0.2 percent for all hospitals). Total margins (which include government appropriations and revenue not directly related to patient care) were also lower for deemed DSH hospitals (5.7 percent) compared with all



hospitals (6.9 percent). Aggregate operating and total margins for deemed DSH hospitals would have been 3 to 4 percentage points lower without DSH payments.

In this report, we also project DSH allotments before and after implementation of federal DSH allotment reductions, which are currently scheduled to begin in FY 2024. DSH allotment reductions were included in the ACA under the assumption that increased insurance coverage through Medicaid and the health insurance exchanges would lead to reductions in hospital uncompensated care and thereby lessen the need for DSH payments. DSH allotment reductions have been delayed several times; most recently, the Consolidated Appropriations Act, 2021 (P.L. 116-260) delayed implementation of reductions until FY 2024. The amount of reductions is scheduled to be \$8 billion a year between FY 2024 and FY 2027 (amounting to 56.9 percent of FY 2024 unreduced allotments).

MACPAC has made several recommendations for statutory changes to improve Medicaid DSH policy (Box 3-1). Most recently, the Commission recommended changes to the treatment of third-party payments in the DSH definition of Medicaid shortfall, which Congress enacted in the

Consolidated Appropriations Act, 2021.³ In March 2019, the Commission also made recommendations for how pending DSH allotment reductions should be structured; these have not been implemented, and no reductions have been made. The Commission remains concerned about the issues it previously noted, such as the abrupt reductions anticipated under current law and the lack of meaningful relationship between DSH allotments and measures of need for DSH funds.

Congress also made some changes to how DSH allotments are calculated in response to the COVID-19 pandemic. The Families First Coronavirus Response Act (FFCRA, P.L. 116-127) increased the Medicaid federal medical assistance percentage (FMAP) during the COVID-19 public health emergency, which decreased the total amount of DSH funding available for states during the public health emergency. Subsequently, Congress increased DSH funding under the American Rescue Plan Act of 2021 (ARPA, P.L. 117-2) so that the combined amount of state and federal DSH funding remained the same as it would have been before the FMAP increase.4 For FY 2022, we estimate that ARPA led to an increase of approximately \$1.5 billion in federal DSH allotments.

BOX 3-1. Prior MACPAC Recommendations Related to Disproportionate Share Hospital Policy

February 2016

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

- The Secretary of the U.S. Department of Health and Human Services (the Secretary) should collect and report hospital-specific data on all types of Medicaid payments for all hospitals that receive them. In addition, the Secretary should collect and report data on the sources of non-federal share necessary to determine net Medicaid payment at the provider level.
 - P.L. 116-260 requires the U.S. Department of Health and Human Services to establish
 a system for states to submit non-disproportionate share hospital (DSH) supplemental
 payment data in a standard format, beginning October 1, 2021. However, this system does
 not include managed care payments or information on the sources of non-federal share
 necessary to determine net Medicaid payments at the provider level.



BOX 3-1. (continued)

March 2019

Improving the structure of disproportionate share hospital allotment reductions

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

June 2019

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

- To avoid Medicaid making disproportionate share hospital payments to cover costs that are
 paid by other payers, Congress should change the definition of Medicaid shortfall in Section
 1923 of the Social Security Act to exclude costs and payments for all Medicaid-eligible
 patients for whom Medicaid is not the primary payer.
 - P.L. 116-260 enacted this recommendation for most DSH hospitals, effective October 1, 2021, while exempting hospitals that treat a large percentage and number of patients who are eligible for Medicare and receive Supplemental Security Income (SSI).

The Commission has also long held that DSH payments should be better targeted to hospitals that serve a high share of Medicaid-enrolled and low-income uninsured patients and have higher levels of uncompensated care, consistent with the original statutory intent. However, development of policy to achieve this goal must be considered

in terms of all Medicaid payments that hospitals receive, and complete data on these payments are not available.⁵ In February 2016, the Commission recommended that the Secretary of the U.S. Department of Health and Human Services (the Secretary) collect and report complete information on Medicaid payments to hospitals to help inform



analyses about the targeting of DSH payments. The Consolidated Appropriations Act, 2021, requires the U.S. Department of Health and Human Services (HHS) to collect and report data on non-DSH supplemental payments beginning October 1, 2021, which may help inform additional analyses about the targeting of DSH payments.⁶ This data will be collected through the Medicaid Budget and Expenditure System, but the Centers for Medicare & Medicaid Services (CMS) is still working with states to develop the format for data submissions (CMS 2021b). This means any challenges setting up this new system may further delay reporting of supplemental payment data.

The COVID-19 pandemic is having substantial effects on hospital finances, but the full effects of the pandemic on safety-net and DSH hospitals will likely not be clear until after the public health emergency has ended. Hospitals have reported increased costs of treating patients with COVID-19 and costs associated with reducing the risk of COVID-19 infection among patients and staff, as well as declines in revenue as a result of delays in elective procedures and other routine services (AHA 2021b).

To respond to these challenges, Congress has authorized several relief funds to support providers. Some state Medicaid programs are also making additional payments to hospitals to supplement federal relief efforts (Gifford et al. 2020). However, as noted by the Commission and others, the actual distribution of funds suggests that relief funding has not been well targeted based on community needs (Buxbaum and Rak 2021, Coughlin et al. 2021, MACPAC 2020b and 2020c). The Commission will continue to monitor the pandemic's effects on safety-net providers as more data become available.

This chapter begins with a background on Medicaid DSH policy and then reviews the most recently available data on the number of uninsured individuals, the amounts and sources of hospital uncompensated care, and the number of hospitals with high levels of uncompensated care that also

provide essential community services. We also summarize the limited information available about the effects of the COVID-19 pandemic on safety-net hospitals. The chapter concludes with an analysis of DSH allotment reductions under current law and how they relate to the factors that Congress asked us to consider.

Background

Current DSH allotments vary widely among states, reflecting the evolution of federal policy over time. States began making Medicaid DSH payments in 1981, when Medicaid hospital payment methods and amounts were uncoupled from Medicare payment standards.7 Initially, states were slow to make these payments, and in 1987, Congress required states to make payments to hospitals that serve a high share of Medicaid-enrolled and low-income patients, referred to as deemed DSH hospitals. Total state and federal DSH spending grew rapidly in the early 1990s-from \$1.3 billion in 1990 to \$17.7 billion in 1992 -after Congress clarified that DSH payments were not subject to Medicaid hospital upper payment limitations (Matherlee 2002, Holahan et al. 1998, Klem 2000).8 Most of this growth was driven by large DSH spending increases in a small number of states, while the majority of states made relatively level year-over-year DSH payments.

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 3-2). 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. States are not required to spend their entire allotment and do not receive federal funding for DSH payments that exceed the allotment.



BOX 3-2. Glossary of Key Medicaid Disproportionate Share Hospital Terminology

DSH hospital. A hospital that receives disproportionate share hospital (DSH) payments and meets the minimum statutory requirements to be eligible for DSH payments; that is, a Medicaid inpatient utilization rate of at least 1 percent and at least two obstetricians with staff privileges that treat Medicaid enrollees (with certain exceptions for rural and children's hospitals and those that did not provide obstetric services to the general population in 1987).

Deemed DSH hospital. A DSH hospital with a Medicaid inpatient utilization rate 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 regular Medicaid service expenditures. If a state does not spend the full amount of its allotment for a given year, the unspent portion is not paid to the state and does not carry over to future years. Allotments are determined annually and are generally equal to the prior year's allotment, adjusted for inflation (§ 1923(f) of the Act).

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

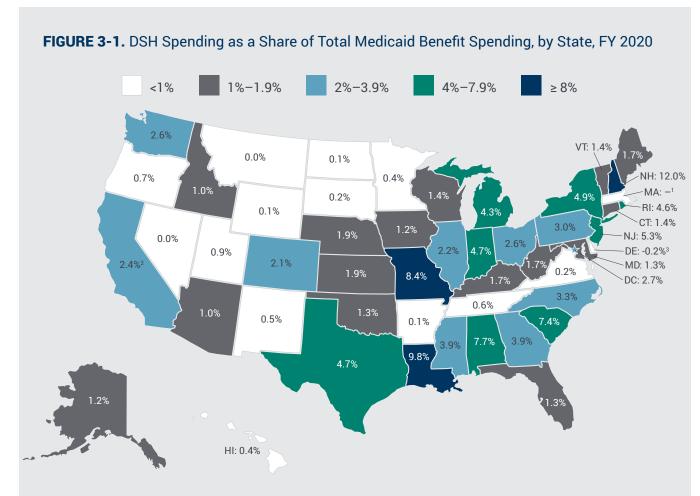
In FY 2020, federal allotments to states for DSH payments totaled \$14.2 billion. State-specific DSH allotments that year ranged from less than \$15 million in six states (Delaware, Hawaii, Montana, North Dakota, South Dakota, and Wyoming) to more than \$1 billion in three states (California, New York, and Texas).

Total federal and state DSH payments were \$19.5 billion in FY 2020 and accounted for 3 percent of total Medicaid benefit spending.¹⁰ DSH spending as a share of total Medicaid benefit spending varied widely by state, from less than 1 percent in 15 states to 12 percent in New Hampshire (Figure 3-1).

States typically have up to two years to spend their DSH allotments after the end of the fiscal year. ¹¹ As of the end of FY 2021, \$1.4 billion in federal DSH allotments for FY 2019 were

unspent. 12 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 previously, DSH payments to an individual hospital cannot exceed that hospital's level of uncompensated care. In FY 2019, half of unspent DSH allotments were attributable to four states (Connecticut, Maine, New Jersey, and Pennsylvania). All of these states, excluding Maine, had FY 2019 DSH allotments (including both state and federal funds) that were larger than the total amount of hospital uncompensated care in the state reported on 2019 Medicare cost reports, which suggests that these states may not be able to spend their full DSH allotments even if they have sufficient state funds to provide the non-federal share.¹³





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

Source: MACPAC, 2022, analysis of CMS-64 financial management report net expenditure data as of June 28, 2021.

In state plan rate year (SPRY) 2017, 43 percent of U.S. hospitals received DSH payments (Table 3-1).¹⁴ 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. Public teaching hospitals in urban settings received more than half of total DSH funding. Half of all rural hospitals (50 percent) also received DSH payments, including many critical

access hospitals (42 percent), which receive a special payment designation from Medicare because they are small and often the only provider in their geographic area.

The proportion of hospitals receiving DSH payments varies widely by state. In SPRY 2017, five states made DSH payments to fewer than 10 percent of the hospitals in their state (Arkansas,

⁻ Dash indicates zero; 0.0 percent indicates an amount between 0 and 0.05 percent that rounds to zero.

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

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

³ Delaware reported negative DSH spending in FY 2020. A state may report negative spending in a fiscal year due to a prior period adjustment.



TABLE 3-1. Distribution of DSH Spending by Hospital Characteristics, SPRY 2017

| | | Number of hosp | itals | |
|---------------------------------|---------------|----------------|--|-------------------------------------|
| Hospital characteristics | DSH hospitals | All hospitals | DSH hospitals as a percentage of all hospitals in category | Total DSH spending (millions) |
| Total | 2,598 | 5,994 | 43% | \$16,516 |
| Hospital type | | | | |
| Short-term acute care hospitals | 1,800 | 3,249 | 55 | 12,877 |
| Critical access hospitals | 574 | 1,360 | 42 | 385 |
| Psychiatric hospitals | 140 | 612 | 23 | 2,873 |
| Long-term hospitals | 10 | 377 | 3 | 23 |
| Rehabilitation hospitals | 21 | 300 | 7 | 6 |
| Children's hospitals | 53 | 96 | 55 | 352 |
| Urban or rural | | | | |
| Urban | 1,370 | 3,554 | 39 | 14,581 |
| Rural | 1,228 | 2,439 | 50 | 1,935 |
| Hospital ownership | | | | |
| For-profit | 380 | 1,778 | 21 | 876 |
| Non-profit | 1,568 | 2,980 | 53 | 5,644 |
| Public | 650 | 1,236 | 53 | 9,996 |
| Teaching status | | | | |
| Non-teaching | 1,788 | 4,734 | 38 | 4,772 |
| Low-teaching | 509 | 834 | 61 | 3,225 |
| High-teaching | 301 | 426 | 71 | 8,518 |
| Deemed DSH status | | | | |
| Deemed | 733 | 733 | 100 | 10,577 |
| Not deemed | 1,865 | 5,261 | 35 | 5,939 |

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 55 DSH hospitals that did not submit a fiscal year 2019 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. Analyses of deemed DSH hospitals are limited to hospitals that received DSH payments and exclude hospitals in California and Massachusetts that received funding from safety-net care pools that are financed with DSH funding in demonstrations authorized under waiver expenditure authority of Section 1115 of the Social Security Act.

Source: MACPAC, 2022, analysis of FY 2019 Medicare cost reports and SPRY 2017 as-filed Medicaid DSH audits.



Illinois, Iowa, and North Dakota), and only New York made DSH payments to more than 90 percent of hospitals in the state (93 percent).¹⁵

As noted previously, 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 2017, about 12 percent of U.S. hospitals met this standard. These deemed DSH hospitals constituted just over one-quarter (28 percent) of DSH hospitals but accounted for nearly two-thirds (64 percent) of all DSH payments, receiving \$10 billion in DSH

FIGURE 3-2. Share of Hospitals Receiving DSH Payments and Share of DSH Payments to Deemed DSH Hospitals, by State, SPRY 2017



Notes: DSH is disproportionate share hospital. SPRY is state plan rate year, which often coincides with state fiscal year and may not align with the federal fiscal year. Deemed DSH hospitals are statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. The share of DSH payments to deemed DSH hospitals shown does not account for provider contributions to the non-federal share; these contributions may reduce net payments. Analysis excludes Massachusetts and California, which have demonstration waivers under Section 1115 of the Social Security Act that allow them to distribute DSH funding to hospitals through safety-net care pools.

Source: MACPAC, 2022, analysis of FY 2019 Medicare cost reports and SPRY 2017 as-filed Medicaid DSH audits.



payments. States vary in how they distribute DSH payments to deemed DSH hospitals, from less than 10 percent of DSH payments to deemed DSH hospitals in five states (Alabama, Arkansas, Connecticut, Hawaii, and Utah) to 100 percent in three states (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., Arkansas and Connecticut); conversely, some states that distribute DSH payments across most hospitals still target the largest share of DSH payments to deemed DSH hospitals (e.g., New Jersey, North Carolina, and Oregon) (Figure 3-2). State criteria for identifying eligible DSH hospitals and how much funding they receive vary but are often related to hospital ownership, hospital type, and geographic factors. The methods states use to finance the non-federal share of DSH payments may also affect their DSH targeting policies. For example, states that finance DSH payments with greater levels of intergovernmental transfers or certified public expenditures tend to have a greater share of DSH payments to public hospitals (MACPAC 2017). More information about state DSH targeting policies is included in Chapter 3 of MACPAC's March 2017 report to Congress (MACPAC 2017).

State DSH policies change frequently, often as a function of state budgets. The amounts paid to hospitals are more likely to change than the types of hospitals receiving payments. Over 90 percent of the hospitals that received DSH payments in SPRY 2017 also received DSH payments in SPRY 2016. However, the amount that hospitals receive can change considerably in subsequent reporting years. For example, 21 percent of hospitals that received DSH payments in SPRY 2016 and SPRY 2017 reported that the amount of DSH payments they received in SPRY 2017 increased or decreased by more than 50 percent, compared with SPRY 2016.

Changes in the Number of Uninsured Individuals

In 2020, 28 million people were uninsured (8.6 percent of the U.S. population), which is not statistically different from the number or share in 2018 (27.5 million or 8.5 percent) (Table 3-2) (Keisler-Starkey and Bunch 2021). ¹⁶ This statistic from the Current Population Survey (CPS) includes only individuals who did not have coverage at any point during the year and therefore does not include individuals who had coverage in early 2020 but lost it after the start of the COVID-19 public health emergency.

Similar to prior years, the CPS uninsured rate in 2020 was highest for adults below age 65, individuals of Hispanic origin, and individuals with incomes below the federal poverty level (FPL) (Table 3-2). Between 2018 and 2020, the uninsured rate increased significantly for individuals living between 200 and 400 percent FPL. In addition, there was a significant decrease in the uninsured rate for non-Hispanic Asian individuals (Keisler-Starkey and Bunch 2021).

In 2020, the uninsured rate in states that did not expand Medicaid under the ACA to adults under age 65 with incomes at or below 138 percent FPL was nearly twice as high as the uninsured rate in states that expanded Medicaid (12.6 and 6.4 percent, respectively). Between 2019 and 2021, Idaho, Missouri, Nebraska, Oklahoma, and Utah expanded Medicaid, but state-level data on the effects of Medicaid expansion in these states is not yet available (KFF 2021a). 18

To better understand the effects of the COVID-19 pandemic on the number of uninsured individuals, MACPAC examined findings from the U.S. Census Bureau's Household Pulse Survey (HPS), a biweekly survey intended to collect a range of information about household experiences during the pandemic.¹⁹ During the first phase of HPS data collection (April through July 2020), the



uninsured rate in the sample increased significantly by 0.9 percentage points.²⁰ Furthermore, by the third quarter of 2020, 69.5 percent of uninsured respondents to the HPS reported that they or a family member had experienced a loss of employment income, and 41.5 percent of uninsured respondents reported a household income below

100 percent FPL, indicating that COVID-19 had a large effect on household finances.

Between August 2020 and July 2021, the uninsured rate in the sample declined significantly by 1.1 percentage points and the Medicaid coverage rate increased significantly by 1.0 percentage

TABLE 3-2. Uninsured Rates by Selected Characteristics, United States, 2018 and 2020

| Characteristic | 2018 | 2020 | Percentage point change |
|---------------------------------------|---------------------------|------|-------------------------|
| All uninsured | 8.5% | 8.6% | 0.1% |
| Age group | | | |
| Under age 19 | 5.5 | 5.6 | 0.1 |
| Age 19-64 | 11.7 | 11.9 | 0.2 |
| Over age 64 | 0.9 | 1.0 | 0.1 |
| Race and ethnicity | | | |
| White, non-Hispanic | 5.4 | 5.4 | 0.0 |
| Black, non-Hispanic | 9.7 | 10.4 | 0.7 |
| Asian, non-Hispanic | 6.8 | 5.9 | -0.9* |
| Hispanic (any race) | 17.8 | 18.3 | 0.5 |
| Income-to-poverty ratio | | | |
| Below 100 percent | 16.3 | 17.2 | 0.9 |
| 100-199 percent | 13.6 | 13.3 | -0.3 |
| 200-299 percent | 10.8 | 11.9 | 1.1* |
| 300-399 percent | 8.1 | 8.9 | 0.8* |
| At or above 400 percent | 3.4 | 3.4 | 0.0 |
| Medicaid expansion status in state of | of residence ¹ | | |
| Non-expansion | 12.0 | 12.6 | 0.6* |
| Expansion | 6.2 | 6.4 | 0.2 |

Notes: Uninsured rates by Medicaid expansion status are based on the Current Population Survey Annual Social and Economic Supplement (CPS). Medicaid expansion status reflects state expansion decisions as of January 1, 2020. In past years, we reported national data on uninsured individuals using the American Community Survey (ACS). However, due to complications related to data collection during COIVD-19 for CPS 2019 and ACS 2020 estimates, we are reporting CPS 2018 and 2020 numbers to align with prepandemic trends. Numbers do not sum due to rounding. For a discussion on the differences between each survey's uninsured rates, please refer to Appendix 3B.

Sources: MACPAC, 2022, analysis of Keisler-Starkey and Bunch 2021.

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

¹ MACPAC calculated significance using technical documentation from Keisler-Starkey and Bunch 2021.



point.²¹ Similar trends were observed in states that expanded Medicaid and those that did not.

Because Medicaid is a countercyclical program, Medicaid enrollment often increases during economic recessions (MACPAC 2021b). The continuous coverage provisions of the FFCRA that prohibit states from disenrolling Medicaid beneficiaries during the COVID-19 public health emergency are also likely contributing to the increases in Medicaid enrollment and decreases in the uninsured rate. When the COVID-19 public health emergency ends and states resume Medicaid eligibility redeterminations, Medicaid enrollment is expected to decline substantially, and the uninsured rate will likely increase. One analysis estimated that approximately 15 million Medicaid beneficiaries (including 8.7 million adults and 5.9 million children) will no longer be eligible for coverage when the public health emergency ends (Buettgens and Green 2021).²² The Commission is particularly concerned about eligible Medicaid beneficiaries who may lose coverage during this time because of difficulties navigating the

renewal process and plans to closely monitor how restarting Medicaid redeterminations affects Medicaid enrollment and the number of uninsured individuals (MACPAC 2020b).

Changes in the Amount of Hospital Uncompensated Care

In considering changes in the amount of uncompensated care, it is important to note that DSH payments cover both unpaid costs of care for uninsured individuals and Medicaid shortfall. Since the implementation of the ACA coverage expansion 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 increased between 2014 and 2017, Medicaid shortfall increased as well.

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

Data sources

American Hospital Association annual survey. An annual survey of hospitals that provides aggregated national estimates of uncompensated care for community hospitals.

Medicare cost report. An annual report on hospital finances that must be submitted by all hospitals that receive Medicare payments (that is, most U.S. hospitals with the exception of some freestanding children's hospitals). Medicare cost reports define hospital uncompensated care as bad debt and charity care.

Medicaid disproportionate share hospital audit. A statutorily required audit of a disproportionate share hospital's (DSH) uncompensated care. The audit ensures that Medicaid DSH payments do not exceed the hospital-specific DSH limit, which is equal to the sum of Medicaid shortfall and the unpaid costs of care for uninsured individuals for allowable inpatient and outpatient costs. Forty-five percent of U.S. hospitals were included on DSH audits in 2015, the latest year for which public data are available.



BOX 3-3. (continued)

Definitions

Medicare cost report components of uncompensated care

Charity care. Health care services for which a hospital determines the patient does not have the capacity to pay and, based on its charity care policy, either does not charge the patient at all for the services or charges the patient a discounted rate below the hospital's cost of delivering the care. Charity care costs cannot exceed a hospital's cost of delivering the care. Medicare cost reports include costs of care provided to both uninsured individuals and patients with insurance who cannot pay deductibles, co-payments, or coinsurance.

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

Medicaid DSH audit components of uncompensated care

Unpaid costs of care for uninsured individuals. The difference between a hospital's costs of providing services to individuals without health coverage and the total amount of payment received for those services. This includes charity care and bad debt for individuals without health coverage and generally excludes charity care and bad debt for individuals with health coverage.

Medicaid shortfall. The difference between a hospital's costs of providing services to Medicaideligible patients and the total amount of Medicaid payment received for those services (under both fee-for-service and managed care, excluding DSH payments but including most other types of supplemental payments).

 The Consolidated Appropriations Act, 2021 (P.L. 116-260) changes the DSH definition of Medicaid shortfall for most hospitals beginning October 1, 2021, to exclude costs and payments for patients for whom Medicaid is not the primary payer.

State decisions about whether to expand Medicaid coverage can affect hospital uncompensated care, especially among safety-net providers. Medicaid expansion tended to decrease unpaid costs of care for the uninsured while also increasing Medicaid revenue between 2011 and 2017. Researchers estimated that expansion led to a decline in unpaid costs of care for the uninsured among safety-net hospitals of \$9.5 million (2.5 percentage point decline as a share of total expenses) and \$5.8 million for non-safety-net hospitals (2.6 percentage point decline as a share of total expenses) over a six-year period, though some

of these declines in unpaid costs of care could have been offset by states paying below costs for Medicaid services (Blavin and Ramos 2021) (Box 3-3). This trend could be seen nationally but was also pronounced at the state level. For example, after Louisiana expanded Medicaid in 2016, there was a 33 percent reduction in the share of total operating expenses attributable to unpaid costs of care for the uninsured within acute care and surgical hospitals. Furthermore, these effects were more pronounced for Louisiana's rural and public hospitals (Callison et al. 2021). It should be noted that these studies looked only at unpaid costs of



care for the uninsured and Medicaid revenue. They did not examine Medicaid shortfall (discussed in more detail in the following sections). MACPAC previously found that Medicaid shortfall increased by 23 percent (\$3 billion) due to enrollment gains after the ACA (MACPAC 2018a).

Definitions of uncompensated care vary among data sources, complicating comparisons at the hospital level and our ability to fully understand the effects of uncompensated care on hospital finances (Box 3-3). The most recently available data on hospital uncompensated care for all hospitals comes from Medicare cost reports, which define uncompensated care as charity care and bad debt. However, Medicare cost reports do not include reliable information on Medicaid shortfall, which is the difference between a hospital's costs of care for Medicaid-enrolled patients and the total payments it receives for those services. Medicaid DSH audits include data on both Medicaid shortfall and unpaid costs of care for uninsured individuals for DSH hospitals, but these audits are due to CMS approximately three years after DSH payments are made and are not published until CMS reviews the data for completeness (42 CFR 455.304). Furthermore, DSH audits are available only for those hospitals that receive Medicaid DSH payments. As of the publication of this report, the last publicly available DSH audit is for SPRY 2015, indicating a data lag of almost six years.

In the following sections, we review the most recent uncompensated care data available for all hospitals in 2019 as well as additional information about Medicaid shortfall reported for DSH hospitals in SPRY 2017.

Unpaid costs of care for uninsured individuals

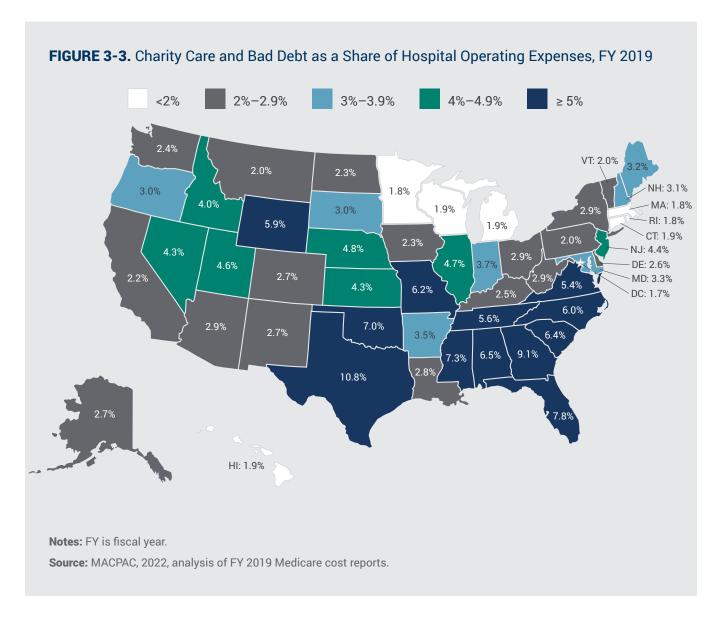
According to Medicare cost reports, hospitals reported a total of \$42 billion in charity care and bad debt in FY 2019, comprising 4.2 percent of hospital operating expenses. This is a \$2.3 billion increase from FY 2018 and a 0.03 percentage point increase as a share of hospital operating

expenses. Uncompensated care as a percentage of hospital operating expenses has remained largely unchanged since FY 2017 (4.3 percent), and uncompensated care no longer appears to be declining year-over-year as it did in the first few years after the ACA coverage expansions took effect.^{23,24}

As a share of hospital operating expenses, charity care and bad debt varied widely by state in FY 2019 (Figure 3-3). In the aggregate, hospitals in states that expanded Medicaid before September 30, 2019, reported less than half the uncompensated care that was reported in non-expansion states (2.8 percent of hospital operating expenses in Medicaid expansion states vs. 7.1 percent in states that did not expand Medicaid).

Uncompensated care reported on Medicare cost reports includes the costs of care provided to both uninsured individuals and insured patients who cannot pay deductibles, co-payments, or coinsurance. In FY 2019, about 51 percent of reported uncompensated care was for charity care for uninsured individuals (\$21.6 billion), 16 percent was for charity care for insured individuals (\$6.7 billion), and 34 percent was for bad debt expenses for both insured and uninsured individuals (\$14.1 billion).²⁵ Uncompensated care for uninsured individuals is affected by the uninsured rate, while uncompensated care for patients with insurance is affected by specific features of their health insurance, such as deductibles, coinsurance, and other forms of cost sharing (Kullgren 2020). These costs are increasing; within the employersponsored insurance market, the average deductible for single workers was \$1,434 in 2021, almost double the average deductible in 2011 (\$747) (KFF 2019a, 2019b, 2021b). However, when patients cannot pay cost sharing, these costs might be forgiven as charity care or might become bad debt expenses for hospitals. This type of uncompensated care for insured patients cannot be covered by Medicaid DSH.





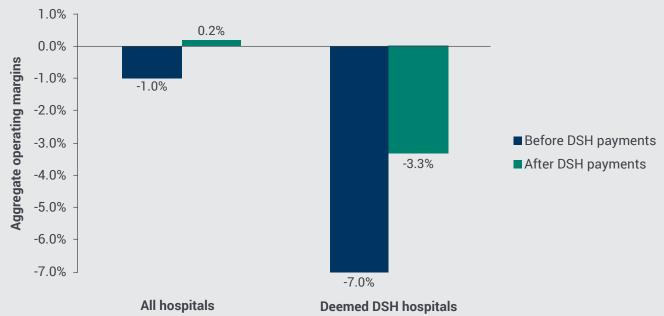
Medicaid shortfall

Medicaid shortfall is the difference between a hospital's costs of providing services to Medicaid-enrolled patients and the total amount of Medicaid payment received for those services. According to the AHA annual survey, Medicaid shortfall in 2019 for all U.S. hospitals totaled \$19 billion, a decrease of \$700 million from 2018. In the same survey, the aggregate Medicaid payment-to-cost ratio was 90 percent in 2019, which means national shortfall as a percentage of costs has mostly remained unchanged since 2013 (AHA 2021a, 2020a, 2019a, 2015).

Previously, MACPAC found wide variation in the amount of Medicaid shortfall for DSH hospitals reported on DSH audits.²⁷ For example, in SPRY 2014, 15 states reported no Medicaid shortfall for DSH hospitals, and 12 states reported shortfall that exceeded 50 percent of total DSH hospital uncompensated care.²⁸ As a result of litigation about the DSH definition of Medicaid shortfall, many states have changed how they report Medicaid shortfall on their DSH audits, which makes it difficult to examine hospital-level shortfall data.²⁹ At issue in these lawsuits is how Medicaid shortfall should be counted for Medicaid-eligible patients with third-party coverage.



FIGURE 3-4. Aggregate Hospital Operating Margins Before and After DSH Payments, All Hospitals versus Deemed DSH Hospitals, FY 2019



Notes: DSH is disproportionate share hospital. FY is fiscal year. Operating margins measure income from patient care divided by net patient revenue. Operating margins before DSH payments in FY 2019 were estimated using state plan rate year (SPRY) 2017 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. This analysis includes hospitals in California and Massachusetts that appear to meet the eligibility criteria for deemed DSH hospitals but did not receive DSH payments because these states instead distributed DSH funding through safety-net care pools authorized under waiver expenditure authority of Section 1115 of the Social Security Act. For further discussion of this methodology and limitations, see Appendix 3B.

Source: MACPAC, 2022, analysis of FY 2019 Medicare cost reports and SPRY 2017 as-filed Medicaid DSH audits.

In 2019, the U.S. Court of Appeals for the District of Columbia ruled that CMS can require states to count third-party payments associated with Medicaid-eligible individuals in calculating Medicaid shortfall for payments after June 2, 2017 (CMS 2020).³⁰ States implemented this guidance in SPRY 2017, though many did so only for payments for a portion of the fiscal year.

Congress further revised the DSH definition of Medicaid shortfall to exclude costs and payments for patients for whom Medicaid is not the primary payer starting with the SPRY 2022 reporting year (Consolidated Appropriations Act, 2021, P.L. 116-

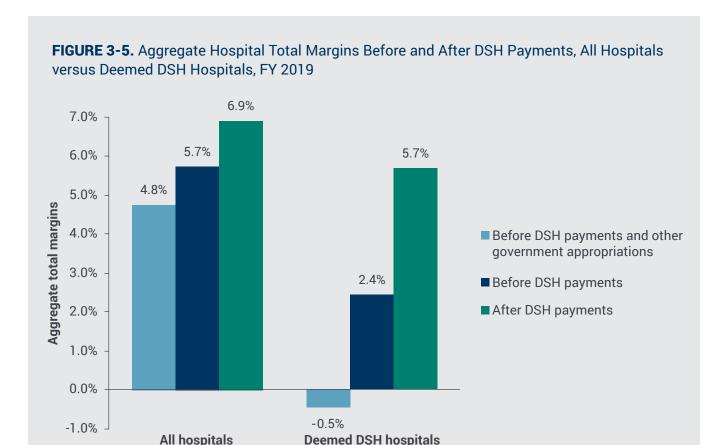
260). The revised shortfall definition is expected to increase the amount of uncompensated care reported for hospitals that serve a large number of Medicaid-enrolled patients with private insurance, such as children's hospitals, and decrease the amount of uncompensated care reported for hospitals that serve a large number of patients dually eligible for Medicare and Medicaid, for whom Medicare is the primary payer (MACPAC 2019a).³¹ In the Consolidated Appropriations Act, 2021, Congress added an exception to this change that allows hospitals with a high share of Medicaid patients who are dually eligible to calculate Medicaid shortfall using CMS's prior definition,



which may increase the amount of uncompensated care that these hospitals report.³² CMS is developing a database that will support states in determining which hospitals are eligible for this exception but noted that since this provision went into effect in October 2021, states need to amend their DSH payment policies to be consistent with the new shortfall definition (CMS 2021b).

Hospital margins

Changes in hospital uncompensated care costs may affect hospital margins. For example, deemed DSH hospitals report higher uncompensated care costs and lower operating and total margins than other hospital types on average.³³ MACPAC estimates both total and operating margins using a



Notes: DSH is disproportionate share hospital. FY is fiscal year. Total margins include revenue not directly related to patient care, such as investment income, parking receipts, and non-DSH state and local subsidies to hospitals. Total margins before DSH payments in FY 2019 were estimated using state plan rate year (SPRY) 2017 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. This analysis includes hospitals in California and Massachusetts that appear to meet the eligibility criteria for deemed DSH hospitals but did not receive DSH payments because these states instead distributed DSH funding through safety-net care pools authorized under waiver expenditure authority of Section 1115 of the Social Security Act. For further discussion of this methodology and limitations, see Appendix 3B.

Source: MACPAC, 2022, analysis of FY 2019 Medicare cost reports and SPRY 2017 as-filed Medicaid DSH audits.



combination of Medicaid DSH audit and Medicare cost report data. Operating margins primarily include only revenues and costs related to patient care, while total margins can include the hospital's investment income, parking receipts, or state and local subsidies. MACPAC analyzes both types of margins to have a fuller understanding of the financial health of safety-net hospitals.

In FY 2019, aggregate operating margins were positive across all hospitals after including DSH payments (0.2 percent), although they were 0.4 percentage points lower than in FY 2018. By contrast, deemed DSH hospitals reported negative aggregate operating margins both before and after counting DSH payments (-7 percent and -3.3 percent, respectively) (Figure 3-4).³⁴

Total margins include revenue not directly related to patient care (Appendix 3B). The aggregate total margins for all hospitals after DSH payments was 6.9 percent in FY 2019, which is 0.5 percentage points higher than in FY 2018. Before counting DSH payments and other government appropriations, deemed DSH hospitals reported an aggregate total margin of -0.5 percent in FY 2019. However, after counting these payments and appropriations, deemed DSH hospitals reported positive aggregate total margins of 5.7 percent, comparable to the aggregate total margins reported for all hospitals (Figure 3-5).

Changes in hospital total margins may be affected by multiple factors, such as changes in the prices that a hospital can negotiate because of its competitive position in its market and changes in its costs (Bai and Anderson 2016, Tollen and Keating 2020). Moreover, hospitals that are struggling financially may cut unprofitable services, which would increase their margins in the short term; hospitals that are doing well financially may make additional investments, which could decrease their margins in the short term. Struggling hospitals that are unable to improve their financial outlook and face payment cuts from Medicare or Medicaid are more likely to close or consolidate with a larger health system (Chernew et al. 2021).

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

MACPAC is required to provide data identifying hospitals with high levels of uncompensated care that also provide access to essential community services. Given that the concept of essential community services is not defined elsewhere in Medicaid statute or regulation, MACPAC has developed a definition based on the types of services suggested in the statutory provision calling for MACPAC's study and the limits of available data (Box 3-4).³⁵

Using data from 2019 Medicare cost reports and the 2019 AHA annual survey, we found that among hospitals that met the deemed DSH criteria in SPRY 2017, almost all (91 percent) provided at least one of the services included in MACPAC's definition of essential community services, 70 percent provided two of these services, and 56 percent provided three or more of these services. By contrast, among non-deemed DSH hospitals, 34 percent provided three or more of these services.

The COVID-19 Pandemic and Hospital Finances

The COVID-19 pandemic is affecting hospital finances in a variety of ways, but its ultimate effect on hospital costs and revenue and uncompensated care are still unclear at this time. For example, hospitals have had higher expenses largely due to the costs of treating patients with COVID-19, and they implemented new infection control practices to protect patients and staff, which may have increased hospital uncompensated care costs to the extent that these are not paid for by other sources (AHA 2021b). However, hospitals are experiencing declines in care unrelated to COVID-19 as a result of postponed non-emergent and elective



surgeries, which may reduce the amount of overall care (including reduced uncompensated care but also reduced revenue) relative to prior years (AHA 2021b; Gallagher et al. 2021; Birkmeyer et al. 2020; Mehrotra et al. 2020a, 2020b, 2020c). Furthermore, it should be noted that the pandemic led to significant workforce shortages, which may be contributing to increased labor costs, further straining hospital finances (KaufmanHall 2021, Russell 2021). In early 2022, hospitalization rates

surged once again due to the omicron variant of COVID-19 (CDC 2022).

Provider relief funding

To help address pandemic-related financial challenges, Congress provided dedicated relief funding for hospitals through a variety of mechanisms. The Coronavirus Aid, Relief, and Economic Security Act (CARES Act, P.L. 116-136),

BOX 3-4. Identifying Hospitals with High Levels of Uncompensated Care That Provide Essential Community Services for Low-Income, Uninsured, and Other Vulnerable Populations

MACPAC's authorizing statute requires that MACPAC provide data identifying hospitals with high levels of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations, such as graduate medical education, and the continuum of primary through quaternary care, including the provision of trauma care and public health services (§ 1900 of the Social Security Act). Based on the types of services suggested in the statute and the limits of available data, we included the following services in our definition of essential community services in this report:

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

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



the Paycheck Protection Program and Health Care Enhancement Act (P.L. 116-139), and the Consolidated Appropriations Act, 2021, made available \$178 billion in provider relief funding to offset lost revenue or expenses during the pandemic; a portion of this funding is also being used to pay for hospital care for uninsured individuals with COVID-19. The CARES Act also temporarily increased Medicare payments to hospitals for COVID-19 hospitalizations and established the Paycheck Protection Program for businesses with fewer than 500 employees.³⁶

In April 2020, HHS made a general distribution of provider relief funding to all Medicare-enrolled providers (which includes virtually all hospitals) equal to 2 percent of each provider's FY 2019 patient care revenue.³⁷ In June 2020, HHS made additional, targeted funding available to specific safety-net hospitals, defined as those with total margins below 3 percent, uncompensated care costs greater than \$25,000 per bed, and a high Medicare DSH patient percentage, a measure of the share of patients enrolled in Medicaid and Supplemental Security Income (HHS 2021a). HHS has also made additional provider relief funding available to hospitals with a high number of COVID-19 admissions, rural hospitals, children's hospitals, and tribal hospitals (GAO 2021, HRSA 2021).

At the time of the initial distribution of funds, MACPAC expressed concern that provider relief funding was not appropriately targeting safety-net providers (MACPAC 2020b). Since disbursements were based on Medicare revenue, it was unclear whether the funding would be disbursed to hospitals that serve a large percentage of the Medicaid population. For example, deemed DSH hospitals account for about 17 percent of Medicare fee-for-service revenue and 19 percent of patient care revenue. However, deemed DSH hospitals accounted for nearly one-third (31 percent) of hospital uncompensated care costs in FY 2017 (MACPAC 2020c).

A more recent review of funds distributed through February 2021 found that relief funding was mostly distributed to hospitals with high patient revenue. The research team found no association between total hospital relief funding and the number of uninsured residents in a region (Buxbaum and Rak 2021).

In January 2022, CMS issued guidance on how federal relief funds should be accounted for in the SPRY 2020–2021 Medicaid DSH audits. In general, provider relief payments should not be used to offset the costs of Medicaid patients but can be used to pay for COVID-19 testing and treatment for uninsured individuals (CMS 2022). Since federal relief funds can be counted as a payment for unpaid costs of care for the uninsured, those funds will reduce the amount of Medicaid DSH funding that a hospital could receive, which may result in an increase in unspent DSH allotments. The Commission will continue to monitor the effect of the pandemic on safety-net providers as more data become available.

Federal changes to DSH allotments

ARPA temporarily adjusted the DSH allotment calculations to account for the effect of the enhanced FMAP available to states due to the COVID-19 pandemic. As noted previously, the increase in federal share decreased the amount of required state contribution by 6.2 percentage points. This effectively reduced total (state and federal) DSH spending as federal spending remained the same under the cap, but state contributions were reduced. ARPA changed how state and federal DSH allotments are calculated for the duration of the public health emergency by combining the state and federal DSH allotment and then applying the FFCRA-enhanced FMAP to the total amount, so that the total DSH allotment for each state increases in proportion to the FMAP increase. We estimate that this led to an increase of \$1.5 billion in federal DSH allotments for FY 2022.



DSH Allotment Reductions

In December 2020, Congress delayed implementing FY 2021 DSH reductions until FY 2024 and extended DSH allotment reductions until FY 2027. As such, DSH allotments are scheduled to be reduced by the following annual amounts:

- \$8 billion in FY 2024;
- \$8 billion in FY 2025;
- \$8 billion in FY 2026; and
- \$8 billion in FY 2027.

DSH allotment reductions are applied against unreduced DSH allotments—that is, the amounts that states would have received without DSH allotment reductions. In FY 2024, DSH allotment reductions will amount to 56.9 percent of states' unreduced DSH allotment amounts, and because unreduced DSH allotments continue to increase each year based on inflation, FY 2027 DSH allotment reductions will be a slightly smaller share of states' unreduced allotments (52.9 percent).³⁸ In FY 2028 and beyond, there are no DSH allotment reductions scheduled. Thus, under current law, state DSH allotments will return to their higher, unreduced DSH allotment amounts in FY 2028.

DSH allotment reductions will be applied using the DSH Health Reform Reduction Methodology (DHRM). This methodology uses specific statutorily defined 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 3-5).

Reduced versus unreduced DSH allotments

To determine the effects of DSH allotment reductions on state finances and DSH funding, we compared states' reduced DSH allotments to their unreduced amounts. For FY 2024, we estimated DSH allotment reduction factors using the most

reliable and latest available data. We used data from the 2019 American Community Survey and SPRY 2017 Medicaid DSH audits to estimate the reduction factors for each state and projected the DSH allotments in FY 2024 (Dobson and DaVanzo 2016). In each of FYs 2024–2027, DSH allotments will be reduced by \$8 billion. The distribution of DSH allotment reductions among states is expected to be largely the same, assuming states do not change their DSH targeting policies and there are no changes in uninsured rates across states.

Reductions will affect states differently, with estimated reductions ranging from 6.4 percent to 90 percent of unreduced allotment amounts (Figure 3-6). Smaller reductions are applied to states with historically low DSH allotments (low-DSH states). Because of the low-DSH factor, the projected percentage reduction in DSH allotments for the 17 low-DSH states (16.4 percent in the aggregate) is one-quarter that of the other states (58.8 percent in the aggregate). Among states that do not meet the low-DSH criteria, the projected percentage reduction in DSH allotments is larger for states that expanded Medicaid as of January 1, 2021 (61.1 percent in the aggregate), than for states that did not expand Medicaid (58.8 percent in the aggregate). (Complete state-by-state information on DSH allotment reductions and other factors are included in Appendix 3A.)

DSH allotment reductions will result in a corresponding decline in spending only in states that spend their full DSH allotment. For example, 11 states are projected to have FY 2024 DSH allotment reductions that are smaller than the state's unspent DSH funding in FY 2019. This means that these states could make DSH payments from their reduced FY 2024 allotment equal to the payments that they made from their FY 2019 allotment.³⁹



BOX 3-5. Factors Used in Disproportionate Share Hospital Health Reform Reduction Methodology

The Disproportionate Share Hospital (DSH) Health Reform Reduction Methodology (DHRM), finalized in September 2019, is used by the Centers for Medicare & Medicaid Services to calculate how DSH allotment reductions will be distributed across states. As required by statute, the 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 expenditures 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, including Hawaii, where eligibility is based on a special statutory exception (§§ 1923(f)(5) and 1923(f)(6) of the Social Security Act).

Uninsured percentage factor. Imposes larger DSH allotment reductions on states with lower uninsured rates relative to other states. One-half of DSH reductions are based on this factor.

High volume of Medicaid inpatients factor. Imposes larger DSH allotment reductions on states that do not target DSH payments to hospitals with high Medicaid volume. The proportion of a state's DSH payments made to hospitals with Medicaid inpatient utilization that is one standard deviation above the mean (the same criteria used to determine deemed DSH hospitals) is compared among states. One-quarter of DSH reductions are based on this factor.

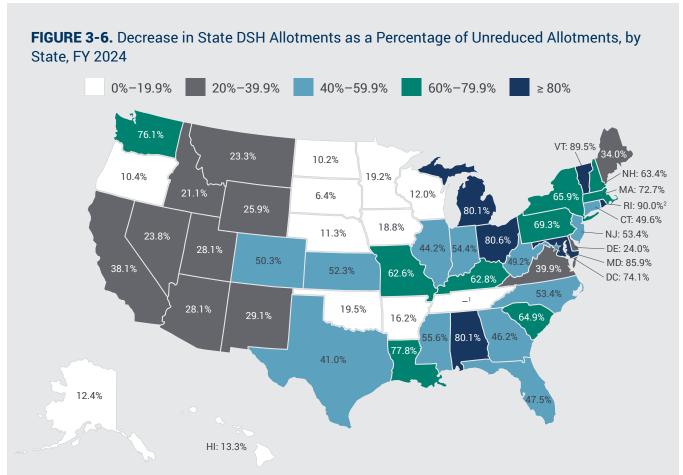
High level of uncompensated care factor. Imposes larger reductions on states that do not target DSH payments to hospitals with high levels of uncompensated care. The proportion of a state's DSH payments made to hospitals with above-average uncompensated care as a proportion of total hospital costs is compared among states. This factor is calculated using DSH audit data, which define uncompensated care costs as the sum of Medicaid shortfall and unpaid costs of care for uninsured individuals. One-quarter of DSH reductions are based on this factor.

Budget neutrality factor. An adjustment to the high Medicaid and high uncompensated care factors that accounts for DSH allotments that were used as part of the budget neutrality calculations for coverage expansions under waivers under Section 1115 of the Social Security Act as of July 2009. Specifically, DSH funding used for coverage expansions is excluded from the calculation of whether DSH payments were targeted to hospitals with high volumes of Medicaid inpatients or high levels of uncompensated care.



We do not know how states will respond to these reductions. As noted previously, some states distribute DSH funding proportionally among all eligible hospitals, while other states target payments to a small number of hospitals. States may also take different approaches to reductions, with some states applying them to all DSH hospitals and others reducing DSH payments only at specific hospitals. Because the DHRM applies larger reductions to states that do not target DSH funds to hospitals with high Medicaid volume or high levels of uncompensated care, states might change their DSH targeting policies to minimize

their DSH allotment reductions in future years. 40 However, the DSH audit data used to calculate the DSH targeting factors in the DHRM have a substantial data lag of four to five years. States may be able to offset some of the effects of DSH allotment reductions by increasing other types of Medicaid payments to providers. Each type of Medicaid payment is subject to its own unique rules and limitations. For example, aggregate feefor-service payments to hospitals, excluding DSH payments, cannot exceed a reasonable estimate of what Medicare would have paid for the same service, referred to as the upper payment limit. 41



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

Source: MACPAC, 2022, analysis of preliminary unreduced and reduced allotment amounts using data provided by CMS as of October 15, 2021, and projected for FY 2024.

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).

² DSH allotment reductions are capped at 90 percent of unreduced allotments with the remaining allotment reductions being distributed to other states. This cap only affects the DSH allotment reductions in Rhode Island.



Relationship of DSH allotments to the statutorily required factors

As in our past reports, we find little meaningful relationship between DSH allotments and the factors that Congress asked MACPAC to consider.⁴² In summary, we found the following:

- Changes in number of uninsured individuals.
 FY 2022 DSH allotments range from less than \$100 per uninsured individual in five states to more than \$1,000 per uninsured individual in eight states and the District of Columbia.
 Nationally, the average FY 2022 DSH allotment per uninsured individual is \$453.43
- Amount and sources of hospital uncompensated care costs. As a share of hospital charity care and bad debt costs reported on 2019 Medicare cost reports. unreduced FY 2022 federal DSH allotments range from less than 10 percent in eight states to more than 80 percent in five states and the District of Columbia. Nationally, these allotments are equal to 31.9 percent of hospital charity care and bad debt costs. At the state level, total unreduced FY 2022 DSH funding (including state and federal funds combined) exceeds total reported hospital charity care and bad debt costs in nine states and the District of Columbia. Because DSH payments to hospitals may not exceed total uncompensated care costs for Medicaid and uninsured patients, states with DSH allotments larger than the amount of charity care and bad debt in their state will not be able to spend their full DSH allotment.44
- Number of hospitals with high levels of uncompensated care that also provide essential community services for lowincome, uninsured, and vulnerable populations. Finally, there continues to be no meaningful relationship between state DSH allotments and the number of deemed DSH hospitals in the state that provided at least one of the services included in MACPAC's definition of essential community services.

Endnotes

- This chapter includes findings for fiscal year (FY) 2019, which includes the period from October 1, 2018, through September 30, 2019, and FY 2020, which covers October 1, 2019, through September 30, 2020. The first determination of a nationwide public health emergency due to the novel coronavirus (COVID-19) was on January 31, 2020, midway through FY 2020. Thus, any FY 2019 findings in this chapter are from the period before the public health emergency, while findings from FY 2020 include periods both before and during the public health emergency. We have noted any specific policy changes or data reporting differences related to the public health emergency as appropriate in the chapter.
- ² Due to the COVID-19 pandemic, the U.S. Census Bureau suspended in-person interviews and completed the 2019 Current Population Survey (CPS) Annual Social and Economic Supplement using telephone interviews. As a result, the response rate for the 2019 CPS was about 10 percentage points lower compared with the same period for the 2018 CPS. To make the most consistent comparisons, we are following the Census Bureau's decision to focus on health insurance coverage changes between 2018 and 2020.
- ³ The changes to the DSH definition of Medicaid shortfall made by the Consolidated Appropriations Act, 2021 (P.L. 116-260) were effective beginning October 1, 2021. The law exempts the top 3 percent of hospitals that treat a high number and share of patients who are eligible for Medicare and receive Supplemental Security Income (SSI) from this change.
- ⁴ ARPA increases the combined state and federal DSH allotment with inflation and then applies an enhanced FMAP of 6.2 percentage points to the combined amount as a way of determining the total federal allotment.
- ⁵ Hospitals may also receive upper payment limit payments and payments from Medicaid managed care plans. Furthermore, some hospitals may also partially finance the non-federal share of DSH through provider taxes and other contributions (GAO 2014). Assessing DSH payment within the context of these other financing and payment arrangements would assist the Commission in determining the extent to which DSH fulfills its statutory intent of funding hospitals that serve a high proportion of Medicaid beneficiaries and uninsured individuals. Additional



information on all types of Medicaid payments to hospitals is provided in MACPAC's issue brief, *Medicaid Base and Supplemental Payments to Hospitals* (MACPAC 2021c). Additional information on how provider taxes are used to finance the non-federal share within Medicaid is provided in MACPAC's issue brief, *Health Care-Related Taxes in Medicaid* (MACPAC 2021a).

- The Consolidated Appropriations Act, 2021 (P.L 116-260) does not require states to collect and report data on the sources of non-federal share necessary to determine net payments at the provider level, which was also a component of MACPAC's prior recommendation. Subsequent guidance has clarified that all supplemental payments under Section 1115 demonstration waiver authority, such as Delivery System Reform Incentive Payments and uncompensated care pool payments, will be included in the new reporting requirements. However, managed care payments to providers will not be included in this new supplemental payment database (CMS 2021b).
- Medicare also makes DSH payments. Hospitals are eligible for Medicare DSH payments based on their Medicaid and SSI patient utilization rate. Historically, the amount of Medicare DSH payments a hospital was eligible to receive was based solely on a hospital's Medicaid and SSI patient utilization, but since 2014, the ACA has required that most Medicare DSH payments be based on a hospital's uncompensated care relative to other Medicare DSH hospitals. In addition, the ACA linked the total amount of funding for Medicare DSH payments to the uninsured rate.
- ⁸ Medicaid fee-for-service payments for hospitals cannot exceed a reasonable estimate of what Medicare would have paid in the aggregate. Medicaid DSH payments are not subject to this upper payment limit, but Medicaid DSH payments to an individual hospital are limited to that hospital's uncompensated care costs for Medicaid-enrolled and uninsured patients.
- ⁹ The most recent marginal change to allotments was due to the federal government's response to the COVID-19 pandemic; the federal share of available DSH funding increased by 6.2 percent within each state starting in January 2020. This did not change the total amount of DSH funding available (state and federal) for the public health emergency and only changed the federal share of available funding. Additional background information about the

history of DSH payment policy is included in Chapter 1 and Appendix A of MACPAC's first DSH report (MACPAC 2016).

- DSH spending in FY 2020 includes spending funded from prior year allotments. Total DSH spending includes an estimate of the portion of California's spending under its demonstration waiver authorized under Section 1115 of the Act, which is based on the state's DSH allotment.
- ¹¹ States are required to submit claims for federal Medicaid funding within two years after the payment is made. However, states can sometimes claim federal match for adjusted DSH payments that are made after the initial two-year window (*Virginia Department of Medical Assistance Services*, DAB No. 1838 (2002), https://www.hhs.gov/sites/default/files/static/dab/decisions/board-decisions/2002/dab1838.html).
- ¹² Analysis excludes unspent federal DSH funding that is reported for California and Massachusetts (\$1.3 billion in FY 2019) because these states use their DSH allotment in the budget neutrality assumptions for their Section 1115 waivers.
- ¹³ Uncompensated care is calculated differently on DSH audits and Medicare cost reports. Medicare cost reports define uncompensated care as charity care and bad debt, including uncompensated care for individuals with insurance, which is not part of the Medicaid DSH definition of uncompensated care. Medicare cost reports do not include reliable information on Medicaid shortfall, which is part of the Medicaid DSH definition.
- ¹⁴ 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.
- ¹⁵ California also made DSH payments to fewer than 10 percent of hospitals (4 percent) as reported on the as-filed Medicaid DSH audits for state FY 2017. However, this analysis omits California and Massachusetts, because both states have hospitals that receive funding from safety-net care pools authorized under Section 1115 demonstration waivers that are financed with DSH funds.



- ¹⁶ As noted earlier, the COVID-19 pandemic affected survey collection for the 2019 CPS. The U.S. Census Bureau's telephone response rate was 10 percentage points lower in March 2020 compared with the same period in 2019, indicating a possibility that the sampled population differed in unobservable characteristics between the two periods.
- ¹⁷ This statistic includes only states that expanded Medicaid before January 1, 2020. Therefore, it does not include Nebraska (expanded in October 2020), Oklahoma (expanded in July 2021), and Missouri (expanded in October 2021 with coverage retroactive to July 2021) (KFF 2021a).
- ¹⁸ While the CPS Annual Social and Economic Supplement collects state-level data, those values are primarily used for creating national-level estimates. As a result, we rely on the American Community Survey (ACS) for state-level data. Due to data collection issues during the COVID-19 pandemic, the 2020 ACS collected only two-thirds of the responses it is normally able to collect. The U.S. Census Bureau reported higher non-response rates in people with lower income, educational attainment, and home ownership. Therefore, the Census Bureau provided experimental estimates developed from its 2020 ACS one-year data instead of the standard one-year estimates from the 2020 ACS. Given the experimental nature of these estimates, we have decided not to use 2020 ACS data for our analysis.
- ¹⁹ The HPS is designed to collect and measure household experiences during the COVID-19 pandemic, including education, employment, insurance coverage, and physical and mental health. HPS is collected over several phases with multiple two-week collection periods. Data from each two-week collection period is disseminated in real time throughout the phase duration.
- ²⁰ Because of differences in methodology between the CPS and the HPS, the uninsured rate is not directly comparable between the two data sets. We are therefore displaying HPS data as percentage point changes in the uninsured rate. Our analysis of 2021 third-quarter data includes only July 2021.
- ²¹ Because several variables were replaced following Phase 1 of the HPS, we treated this as a break in series and did not report time trends with these data. The last month of data used within HPS was July 2021.

- ²²The authors made these estimates based on the assumption that all states will process redeterminations within six months of the expiration of the public health emergency. The redetermination process can disenroll eligible individuals who fail to submit the required paperwork. This estimate does not include these individuals and may undercount the number of Medicaid beneficiaries who potentially lose coverage (Buettgens and Green 2021).
- ²³ Due to changes in Medicare cost report instructions, uncompensated care reported on FY 2018 Medicare cost reports cannot be compared with data from before the implementation of the ACA. These changes went into effect in FY 2017 and may have had a particularly marked effect on uncompensated care costs reported that year. CMS modified the definition of charity care to include uninsured discounts and changed the way that cost-tocharge ratios were applied. Hospitals that partially discount charges to uninsured or underinsured patients report higher uncompensated care costs on the Medicare cost reports under the new formula (MedPAC 2018, CMS 2017). As a result of retroactive changes to Medicare cost reports, the adjusted amount of uncompensated care reported by hospitals for 2015 under the new definitions was \$9 billion higher than had been previously reported. Hospitals have retroactively adjusted their 2015 cost reports to comply with the new definitions, but they are not required to update uncompensated care data from 2013 (MACPAC 2019b).
- ²⁴ MACPAC compared FY 2017 Medicare cost reports with SPRY 2017 Medicaid DSH audits to compare reporting of uncompensated care costs for the uninsured. While there is a large degree of correlation, the two data sets provide different figures. For example, average reported uncompensated care costs on Medicaid DSH audits were 28 percent lower than reported charity care and bad debt on the Medicare cost reports.
- ²⁵ Bad debt expenses for insured and uninsured individuals are not reported separately on Medicare cost reports. The 2018 Medicare cost report data used in this chapter have not been audited, so bad debt and charity care costs may not be reported consistently for all hospitals. CMS began to audit charity care and bad debt costs reported on Medicare cost reports in fall 2018 (CMS 2018).



- ²⁶ Most costs of care for Medicaid-eligible patients with third-party coverage are paid by other payers because Medicaid is a payer of last resort. Medicaid shortfall is defined in Section 1923(g) of the Act and refers to Medicaid-eligible patients. In this chapter, we discuss Medicaid enrolled because that is often how this provision is operationalized by states.
- ²⁷ The amount of Medicaid shortfall reported on the AHA annual survey differs from the amount for DSH hospitals reported on DSH audits because of differences in the set of hospitals included in each data source and in how shortfall is calculated (Nelb et al. 2016). For example, on the AHA survey, Medicaid payments are reported after subtracting health care-related taxes, but on DSH audits, health care-related taxes are not subtracted from payments (AHA 2018).
- ²⁸ One reason many states may report no Medicaid shortfall for DSH hospitals is that when Medicaid base payments for hospital services are below costs, many states make large non-DSH supplemental payments that reduce or eliminate the amount of shortfall reported on DSH audits (MACPAC 2019a).
- ²⁹ On April 30, 2019, states were informed that CMS would accept revised audits for SPRY 2011–2015. States have two years from April 30, 2019, to submit revised audits with the approval of a good-cause waiver of timely filing requirements by CMS (CMS 2021a).
- ³⁰ In April 2020, the U.S. Court of Appeals for the Fifth Circuit issued a similar ruling against eight hospitals in Mississippi, contending that CMS acted within its authority in compelling DSH hospitals to count payments from Medicare and private insurers when calculating Medicaid shortfall. The Children's Hospital Association of Texas asked the Supreme Court to review the appeals court decision, a request that was denied (*Baptist Memorial Hospital-Golden Triangle, Inc. v. Azar*).
- ³¹ Medicare shortfall for patients dually eligible for Medicare and Medicaid consists of the difference between Medicare payment rates and hospital costs and the amount of Medicare cost sharing that is not paid for by Medicaid. For example, in 2015 hospitals were paid, on average, \$930 below costs for a Medicare inpatient stay, which would normally be covered by the patient's Medicare hospital deductible (MACPAC 2018b, MACPAC 2018c). For Medicaid beneficiaries, most states cover part or all of this cost

- sharing amount. In 2017, deemed DSH hospitals reported an aggregate Medicare payment-to-cost ratio of 92.8 percent, indicating that DSH hospitals that see a large number of beneficiaries eligible for Medicare and Medicaid could see declines in their DSH limit and therefore receive less in DSH payments (MedPAC 2019).
- ³² The Consolidated Appropriations Act, 2021 (P.L. 116-260) exempts the top 3 percent of hospitals that treat a high number and share of patients who are eligible for Medicare and receive SSI.
- ³³ Note that no standard definition exists for operating versus non-operating margins, and therefore, operating margins might be an imperfect measure of a hospital's financial health. This disclaimer does not apply to total margins, because hospitals are supposed to submit financial statements prepared by certified public accountants that match the data in the Medicare cost report schedule G.
- ³⁴ Reliability of financial reporting in Medicare cost reports improved substantially after 2010, compared with internal hospital audits; before 2010, cost report data was considered to be an imperfect method for determining hospital margins (Dranove et al. 2016, MedPAC 2015).
- ³⁵ In Chapter 3 of MACPAC's March 2017 report to Congress, the Commission analyzed other criteria that could be used to identify hospitals that should receive DSH payments (MACPAC 2017).
- ³⁶ In addition, the FFCRA (P.L. 116-127) provided an option for states to provide Medicaid coverage for diagnostic testing to uninsured individuals with COVID-19.
- ³⁷ In June 2020, HHS made provider relief funds available to Medicaid-enrolled providers who are not enrolled in Medicare (HHS 2021b).
- ³⁸ Unreduced allotments increase each year based on the Consumer Price Index for All Urban Consumers, and these inflation-based increases will apply even in years when DSH allotment reductions take effect.
- ³⁹ For states to spend the same amount of DSH funding in FY 2024 as they spent in FY 2019, DSH payments to individual hospitals may not exceed those hospitals' uncompensated care costs.



- ⁴⁰ Additional analyses of potential strategic state responses to the DSH allotment reduction methodology proposed by CMS are provided in Chapter 2 of MACPAC's 2016 DSH report (MACPAC 2016).
- ⁴¹ Additional information on all types of Medicaid payments to hospitals is provided in MACPAC's issue brief, *Medicaid Base and Supplemental Payments to Hospitals* (MACPAC 2021c).
- ⁴² All estimates using FY 2022 DSH allotments assume totals with no ARPA-enhanced FMAP of 6.2 percentage points. To see our FY 2022 DSH allotment estimates with and without ARPA's enhanced FMAP, please refer to Appendix 3A.
- ⁴³ Due to complications related to collecting 2020 statelevel uninsured data, we are using 2019 uninsured estimates from the ACS for this statistic.
- ⁴⁴ 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 can pay for with Medicaid DSH funds.

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APPENDIX 3A: State-Level Data

TABLE 3A-1. State DSH Allotments, FYs 2022 and 2023 (millions)

| | FY 2022 wi | | FY 2022 v Adjust | | FY 2 | 023 |
|----------------------|---------------------------|------------|---------------------------|------------|---------------------------|------------|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$23,473.9 | \$14,890.9 | \$24,010.1 | \$13,742.3 |
| Alabama | 520.5 | 376.7 | 520.5 | 408.9 | 532.4 | 385.3 |
| Alaska | 49.9 | 25.0 | 49.9 | 28.0 | 51.0 | 25.5 |
| Arizona | 177.2 | 124.0 | 177.2 | 135.0 | 181.2 | 126.9 |
| Arkansas | 73.8 | 52.8 | 73.8 | 57.4 | 75.5 | 54.1 |
| California | 2,685.6 | 1,342.8 | 2,685.6 | 1,509.3 | 2,747.2 | 1,373.6 |
| Colorado | 226.6 | 113.3 | 226.6 | 127.4 | 231.8 | 115.9 |
| Connecticut | 490.0 | 245.0 | 490.0 | 275.4 | 501.2 | 250.6 |
| Delaware | 19.2 | 11.1 | 19.2 | 12.3 | 19.7 | 11.3 |
| District of Columbia | 107.2 | 75.0 | 107.2 | 81.7 | 109.6 | 76.7 |
| Florida | 401.4 | 245.0 | 401.4 | 269.9 | 410.6 | 250.6 |
| Georgia | 492.4 | 329.2 | 492.4 | 359.7 | 503.7 | 336.7 |
| Hawaii | 22.3 | 11.9 | 22.3 | 13.3 | 22.8 | 12.2 |
| Idaho | 28.7 | 20.1 | 28.7 | 21.9 | 29.3 | 20.6 |
| Illinois | 515.5 | 263.4 | 515.5 | 295.3 | 527.3 | 269.4 |
| Indiana | 394.9 | 261.8 | 394.9 | 286.3 | 404.0 | 267.8 |
| Iowa | 77.6 | 48.2 | 77.6 | 53.1 | 79.4 | 49.3 |
| Kansas | 84.0 | 50.5 | 84.0 | 55.7 | 85.9 | 51.7 |
| Kentucky | 244.1 | 177.6 | 244.1 | 192.8 | 249.7 | 181.7 |
| Louisiana | 1,234.8 | 839.9 | 1,234.8 | 916.4 | 1,263.1 | 859.1 |
| Maine | 201.0 | 128.6 | 201.0 | 141.1 | 205.6 | 131.6 |
| Maryland | 186.8 | 93.4 | 186.8 | 105.0 | 191.1 | 95.5 |
| Massachusetts | 747.2 | 373.6 | 747.2 | 419.9 | 764.3 | 382.2 |
| Michigan | 495.7 | 324.6 | 495.7 | 355.3 | 507.1 | 332.0 |
| Minnesota | 181.1 | 91.5 | 181.1 | 102.7 | 185.3 | 93.6 |
| Mississippi | 238.5 | 186.8 | 238.5 | 201.6 | 244.0 | 191.1 |
| Missouri | 874.5 | 580.3 | 874.5 | 634.5 | 894.5 | 593.6 |
| Montana | 21.4 | 13.9 | 21.4 | 15.2 | 21.9 | 14.2 |
| Nebraska | 60.0 | 34.7 | 60.0 | 38.4 | 61.3 | 35.5 |



TABLE 3A-1. (continued)

| | FY 2022 wi | | FY 2022 v Adjust | | FY 2 | 023 |
|------------------------|---------------------------|------------|------------------------------|------------|---------------------------|------------|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$23,473.9 | \$14,890.9 | \$24,010.1 | \$13,742.3 |
| Nevada | 90.5 | 56.7 | 90.5 | 62.3 | 92.6 | 58.0 |
| New Hampshire | 392.2 | 196.1 | 392.2 | 220.4 | 401.2 | 200.6 |
| New Jersey | 1,577.1 | 788.5 | 1,577.1 | 886.3 | 1,613.2 | 806.6 |
| New Mexico | 33.9 | 25.0 | 33.9 | 27.0 | 34.6 | 25.5 |
| New York | 3,935.1 | 1,967.5 | 3,935.1 | 2,211.5 | 4,025.2 | 2,012.6 |
| North Carolina | 534.1 | 361.4 | 534.1 | 394.5 | 546.4 | 369.6 |
| North Dakota | 21.8 | 11.7 | 21.8 | 13.1 | 22.3 | 12.0 |
| Ohio | 776.3 | 497.6 | 776.3 | 545.8 | 794.1 | 509.0 |
| Oklahoma | 64.9 | 44.4 | 64.9 | 48.4 | 66.4 | 45.4 |
| Oregon | 92.1 | 55.4 | 92.1 | 61.2 | 94.2 | 56.7 |
| Pennsylvania | 1,305.0 | 687.5 | 1,305.0 | 768.4 | 1,334.9 | 703.2 |
| Rhode Island | 145.1 | 79.6 | 145.1 | 88.6 | 148.4 | 81.4 |
| South Carolina | 567.0 | 401.2 | 567.0 | 436.3 | 580.0 | 410.4 |
| South Dakota | 23.1 | 13.5 | 23.1 | 15.0 | 23.6 | 13.8 |
| Tennessee ³ | 80.0 | 53.1 | 80.0 | 58.1 | 80.0 | 53.1 |
| Texas | 1,926.5 | 1,171.3 | 1,926.5 | 1,290.8 | 1,970.7 | 1,198.2 |
| Utah | 36.0 | 24.0 | 36.0 | 26.3 | 36.8 | 24.6 |
| Vermont | 48.8 | 27.6 | 48.8 | 30.6 | 49.9 | 28.2 |
| Virginia | 214.6 | 107.3 | 214.6 | 120.6 | 219.5 | 109.8 |
| Washington | 453.2 | 226.6 | 453.2 | 254.7 | 463.6 | 231.8 |
| West Virginia | 110.7 | 82.7 | 110.7 | 89.5 | 113.3 | 84.6 |
| Wisconsin | 193.4 | 115.8 | 193.4 | 127.8 | 197.8 | 118.4 |
| Wyoming | 0.6 | 0.3 | 0.6 | 0.3 | 0.6 | 0.3 |

Notes: DSH is disproportionate share hospital. FY is fiscal year. ARPA is the American Rescue Plan Act (P.L. 117-2) which provided an enhanced FMAP to states during the COVID-19 public health emergency. This table assumes the non-ARPA adjusted FY 2022 FMAP for FY 2023. State and federal totals are different from data reported to the Medicaid Budget and Expenditure System (MBES) because MBES estimates apply a traditional FMAP to the ARPA enhanced federal allotment.

Source: MACPAC, 2022, analysis of CMS Medicaid Budget and Expenditure System and CBO 2021.

¹ Totals reflect a federal medical assistance percentage with no ARPA adjustment for FY 2022.

² Totals reflect a federal medical assistance percentage with an ARPA adjustment for FY 2022.

³ 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).



TABLE 3A-2. FY 2024 DSH Allotment Reductions, By State (millions)

| | Unreduced | l allotment | A | llotment reduction | n |
|----------------------|---------------------------|-------------|---------------------------|--------------------|---------------------------|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) |
| Total | \$24,570.7 | \$14,063.0 | \$13,919.1 | \$8,000.0 | 56.9% |
| Alabama | 544.9 | 394.3 | 436.5 | 315.9 | 80.1 |
| Alaska | 52.2 | 26.1 | 6.5 | 3.2 | 12.4 |
| Arizona | 185.5 | 129.8 | 52.1 | 36.5 | 28.1 |
| Arkansas | 77.2 | 55.3 | 12.5 | 8.9 | 16.2 |
| California | 2,811.6 | 1,405.8 | 1,071.5 | 535.8 | 38.1 |
| Colorado | 237.2 | 118.6 | 119.3 | 59.6 | 50.3 |
| Connecticut | 512.9 | 256.5 | 254.5 | 127.2 | 49.6 |
| Delaware | 20.1 | 11.6 | 4.8 | 2.8 | 24.0 |
| District of Columbia | 112.2 | 78.5 | 83.1 | 58.2 | 74.1 |
| Florida | 420.2 | 256.5 | 199.8 | 121.9 | 47.5 |
| Georgia | 515.5 | 344.6 | 238.1 | 159.1 | 46.2 |
| Hawaii | 23.3 | 12.5 | 3.1 | 1.7 | 13.3 |
| Idaho | 30.0 | 21.1 | 6.3 | 4.4 | 21.1 |
| Illinois | 539.6 | 275.7 | 238.7 | 122.0 | 44.2 |
| Indiana | 413.4 | 274.1 | 225.0 | 149.2 | 54.4 |
| Iowa | 81.3 | 50.5 | 15.3 | 9.5 | 18.8 |
| Kansas | 87.9 | 52.9 | 46.0 | 27.7 | 52.3 |
| Kentucky | 255.6 | 185.9 | 160.4 | 116.7 | 62.8 |
| Louisiana | 1,292.7 | 879.3 | 1,006.1 | 684.4 | 77.8 |
| Maine | 210.4 | 134.6 | 71.6 | 45.8 | 34.0 |
| Maryland | 195.6 | 97.8 | 168.0 | 84.0 | 85.9 |
| Massachusetts | 782.2 | 391.1 | 568.7 | 284.4 | 72.7 |
| Michigan | 519.0 | 339.8 | 415.9 | 272.3 | 80.1 |
| Minnesota | 189.6 | 95.8 | 36.4 | 18.4 | 19.2 |
| Mississippi | 249.7 | 195.6 | 138.9 | 108.8 | 55.6 |
| Missouri | 915.5 | 607.5 | 573.3 | 380.4 | 62.6 |
| Montana | 22.4 | 14.6 | 5.2 | 3.4 | 23.3 |
| Nebraska | 62.8 | 36.3 | 7.1 | 4.1 | 11.3 |
| Nevada | 94.8 | 59.3 | 22.6 | 14.1 | 23.8 |
| New Hampshire | 410.6 | 205.3 | 260.4 | 130.2 | 63.4 |



TABLE 3A-2. (continued)

| | Unreduced | allotment | A | llotment reduction | on |
|------------------------|---------------------------|------------|---------------------------|--------------------|---------------------------|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) |
| Total | \$24,570.7 | \$14,063.0 | \$13,919.1 | \$8,000.0 | 56.9% |
| New Jersey | 1,651.0 | 825.5 | 881.6 | 440.8 | 53.4 |
| New Mexico | 35.4 | 26.1 | 10.3 | 7.6 | 29.1 |
| New York | 4,119.6 | 2,059.8 | 2,714.6 | 1,357.3 | 65.9 |
| North Carolina | 559.2 | 378.3 | 298.5 | 202.0 | 53.4 |
| North Dakota | 22.9 | 12.2 | 2.3 | 1.3 | 10.2 |
| Ohio | 812.7 | 521.0 | 655.1 | 420.0 | 80.6 |
| Oklahoma | 68.0 | 46.4 | 13.3 | 9.1 | 19.5 |
| Oregon | 96.4 | 58.0 | 10.1 | 6.1 | 10.4 |
| Pennsylvania | 1,366.2 | 719.7 | 947.2 | 499.0 | 69.3 |
| Rhode Island | 151.9 | 83.4 | 136.7 | 75.0 | 90.0 |
| South Carolina | 593.6 | 420.0 | 385.5 | 272.7 | 64.9 |
| South Dakota | 24.1 | 14.2 | 1.6 | 0.9 | 6.4 |
| Tennessee ¹ | 80.0 | 53.1 | _ | _ | _ |
| Texas | 2,016.9 | 1,226.3 | 826.2 | 502.3 | 41.0 |
| Utah | 37.6 | 25.2 | 10.6 | 7.1 | 28.1 |
| Vermont | 51.1 | 28.9 | 45.7 | 25.8 | 89.5 |
| Virginia | 224.7 | 112.3 | 89.7 | 44.8 | 39.9 |
| Washington | 474.5 | 237.2 | 361.2 | 180.6 | 76.1 |
| West Virginia | 115.9 | 86.6 | 57.0 | 42.6 | 49.2 |
| Wisconsin | 202.4 | 121.2 | 24.3 | 14.5 | 12.0 |
| Wyoming | 0.6 | 0.3 | 0.2 | 0.1 | 25.9 |

Notes: FY is fiscal year. DSH is disproportionate share hospital. Under current law, federal DSH allotments will be reduced by \$8 billion in FY 2024. DSH allotments were estimated using FY 2022 DSH allotments with no American Rescue Plan Act (P.L. 117-2) adjustment for FY 2022. For further discussion of methodology and limitations, see Appendix 3B.

Source: MACPAC, 2022, analysis of SPRY 2017 as-filed Medicaid DSH audits, 2019 American Community Survey, CBO 2021, and Dobson and DaVanzo 2016.

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).



TABLE 3A-3. Number of Uninsured Individuals and Uninsured Rate, by State, 2018–2019

| | 20 | 18 | 20 | 19 | Difference i | n uninsured |
|----------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|
| State | Number (thousands) | Percent of state population | Number (thousands) | Percent of state population | Number (thousands) | Percent of state population |
| Total | 28,566 | 8.9% | 29,639 | 9.2% | 1,073 | 0.3% |
| Alabama | 481 | 10.0 | 469 | 9.7 | -12 | -0.3 |
| Alaska | 90 | 12.6 | 86 | 12.2 | -4 | -0.4 |
| Arizona | 750 | 10.6 | 809 | 11.3 | 59 | 0.7 |
| Arkansas | 244 | 8.2 | 271 | 9.1 | 27 | 0.9 |
| California | 2,826 | 7.2 | 3,002 | 7.7 | 176 | 0.5 |
| Colorado | 422 | 7.5 | 453 | 8.0 | 31 | 0.5 |
| Connecticut | 187 | 5.3 | 207 | 5.9 | 20 | 0.6 |
| Delaware | 54 | 5.7 | 63 | 6.6 | 9 | 0.9 |
| District of Columbia | 22 | 3.2 | 25 | 3.5 | 3 | 0.3 |
| Florida | 2,728 | 13.0 | 2,784 | 13.2 | 56 | 0.2 |
| Georgia | 1,411 | 13.7 | 1,398 | 13.4 | -13 | -0.3 |
| Hawaii | 56 | 4.1 | 56 | 4.2 | 0 | 0.1 |
| Idaho | 193 | 11.1 | 191 | 10.8 | -2 | -0.3 |
| Illinois | 875 | 7.0 | 923 | 7.4 | 48 | 0.4 |
| Indiana | 545 | 8.3 | 578 | 8.7 | 33 | 0.4 |
| Iowa | 147 | 4.7 | 156 | 5.0 | 9 | 0.3 |
| Kansas | 250 | 8.8 | 262 | 9.2 | 12 | 0.4 |
| Kentucky | 248 | 5.6 | 283 | 6.4 | 35 | 0.8 |
| Louisiana | 363 | 8.0 | 404 | 8.9 | 41 | 0.9 |
| Maine | 106 | 8.0 | 107 | 8.0 | 1 | 0.0 |
| Maryland | 357 | 6.0 | 357 | 6.0 | 0 | 0.0 |
| Massachusetts | 189 | 2.8 | 204 | 3.0 | 15 | 0.2 |
| Michigan | 535 | 5.4 | 571 | 5.8 | 36 | 0.4 |
| Minnesota | 244 | 4.4 | 273 | 4.9 | 29 | 0.5 |
| Mississippi | 354 | 12.1 | 377 | 13.0 | 23 | 0.9 |
| Missouri | 566 | 9.4 | 604 | 10.0 | 38 | 0.6 |
| Montana | 86 | 8.2 | 87 | 8.3 | 1 | 0.1 |
| Nebraska | 158 | 8.3 | 158 | 8.3 | 0 | 0.0 |
| Nevada | 336 | 11.2 | 348 | 11.4 | 12 | 0.2 |



TABLE 3A-3. (continued)

| | 20 | 18 | 20 | 19 | Difference i | n uninsured |
|----------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|-----------------------|-----------------------------------|
| State | Number (thousands) | Percent of state population | Number (thousands) | Percent of state population | Number (thousands) | Percent of state population |
| Total | 28,566 | 8.9% | 29,639 | 9.2% | 1,073 | 0.3% |
| New Hampshire | 77 | 5.7 | 84 | 6.3 | 7 | 0.6 |
| New Jersey | 655 | 7.4 | 692 | 7.9 | 37 | 0.5 |
| New Mexico | 196 | 9.5 | 205 | 10.0 | 9 | 0.5 |
| New York | 1,041 | 5.4 | 1,007 | 5.2 | -34 | -0.2 |
| North Carolina | 1,092 | 10.7 | 1,157 | 11.3 | 65 | 0.6 |
| North Dakota | 54 | 7.3 | 51 | 6.9 | -3 | -0.4 |
| Ohio | 744 | 6.5 | 758 | 6.6 | 14 | 0.1 |
| Oklahoma | 548 | 14.2 | 553 | 14.3 | 5 | 0.1 |
| Oregon | 293 | 7.1 | 299 | 7.2 | 6 | 0.1 |
| Pennsylvania | 699 | 5.5 | 726 | 5.8 | 27 | 0.3 |
| Rhode Island | 42 | 4.1 | 43 | 4.1 | 1 | 0.0 |
| South Carolina | 522 | 10.5 | 548 | 10.8 | 26 | 0.3 |
| South Dakota | 85 | 9.8 | 88 | 10.2 | 3 | 0.4 |
| Tennessee | 675 | 10.1 | 682 | 10.1 | 7 | 0.0 |
| Texas | 5,003 | 17.7 | 5,234 | 18.4 | 231 | 0.7 |
| Utah | 295 | 9.4 | 307 | 9.7 | 12 | 0.3 |
| Vermont | 25 | 4.0 | 28 | 4.5 | 3 | 0.5 |
| Virginia | 731 | 8.8 | 658 | 7.9 | -73 | -0.9 |
| Washington | 477 | 6.4 | 496 | 6.6 | 19 | 0.2 |
| West Virginia | 114 | 6.4 | 118 | 6.7 | 4 | 0.3 |
| Wisconsin | 313 | 5.5 | 329 | 5.7 | 16 | 0.2 |
| Wyoming | 59 | 10.5 | 70 | 12.3 | 11 | 1.8 |

Notes: 0 indicates an amount between -5,000 and 5,000 that rounds to zero; 0.0 percent indicates an amount between -0.05 percent and 0.05 percent that rounds to zero.

Source: MACPAC, 2022, analysis of Keisler-Starkey and Bunch 2020 and Census 2020.



TABLE 3A-4. State Levels of Uncompensated Care, FYs 2018–2019

| | | uncompensated sts, 2018 | | uncompensated osts, 2019 | | n total hospital ated care costs |
|----------------------|---------------------|---|---------------------|---|---------------------|--|
| State | 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 | \$39,813 | 4.1% | \$42,063 | 4.2% | \$2,250 | 0.0% |
| Alabama | 765 | 7.0 | 754 | 6.5 | -11 | -0.4 |
| Alaska | 54 | 2.8 | 53 | 2.7 | -0 | -0.1 |
| Arizona | 437 | 2.8 | 480 | 2.9 | 43 | 0.1 |
| Arkansas | 230 | 3.4 | 248 | 3.5 | 18 | 0.1 |
| California | 2,374 | 2.0 | 2,714 | 2.2 | 340 | 0.2 |
| Colorado | 390 | 2.7 | 434 | 2.7 | 44 | 0.1 |
| Connecticut | 229 | 1.9 | 243 | 1.9 | 14 | 0.0 |
| Delaware | 88 | 2.9 | 85 | 2.6 | -4 | -0.3 |
| District of Columbia | 62 | 1.7 | 65 | 1.7 | 3 | -0.1 |
| Florida | 3,570 | 7.2 | 4,096 | 7.8 | 526 | 0.6 |
| Georgia | 2,231 | 8.6 | 2,480 | 9.1 | 249 | 0.5 |
| Hawaii | 108 | 3.1 | 69 | 1.9 | -39 | -1.2 |
| Idaho | 188 | 3.6 | 223 | 4.0 | 35 | 0.4 |
| Illinois | 1,695 | 4.3 | 1,916 | 4.7 | 222 | 0.4 |
| Indiana | 828 | 3.5 | 900 | 3.7 | 72 | 0.2 |
| Iowa | 208 | 2.2 | 226 | 2.3 | 17 | 0.1 |
| Kansas | 360 | 3.9 | 414 | 4.3 | 54 | 0.3 |
| Kentucky | 316 | 2.2 | 364 | 2.5 | 48 | 0.2 |
| Louisiana | 403 | 2.9 | 409 | 2.8 | 6 | -0.1 |
| Maine | 223 | 3.7 | 195 | 3.2 | -28 | -0.6 |
| Maryland | 487 | 3.1 | 550 | 3.3 | 62 | 0.2 |
| Massachusetts | 451 | 1.7 | 505 | 1.8 | 55 | 0.1 |
| Michigan | 599 | 1.8 | 643 | 1.9 | 44 | 0.0 |
| Minnesota | 317 | 1.6 | 356 | 1.8 | 39 | 0.1 |
| Mississippi | 583 | 7.3 | 604 | 7.3 | 21 | 0.1 |
| Missouri | 1,181 | 5.7 | 1,328 | 6.2 | 146 | 0.5 |
| Montana | 86 | 2.0 | 89 | 2.0 | 3 | 0.0 |
| Nebraska | 278 | 4.3 | 325 | 4.8 | 47 | 0.5 |



TABLE 3A-4. (continued)

| | | incompensated sts, 2018 | | uncompensated osts, 2019 | | n total hospital ated care costs |
|----------------|---------------------|---|---------------------|---|---------------------|---|
| State | 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 | \$39,813 | 4.1% | \$42,063 | 4.2% | \$2,250 | 0.0% |
| Nevada | 244 | 3.9 | 273 | 4.3 | 29 | 0.4 |
| New Hampshire | 137 | 2.7 | 165 | 3.1 | 28 | 0.3 |
| New Jersey | 1,005 | 4.1 | 1,104 | 4.4 | 99 | 0.2 |
| New Mexico | 149 | 2.7 | 158 | 2.7 | 9 | 0.0 |
| New York | 2,482 | 3.2 | 2,380 | 2.9 | -101 | -0.3 |
| North Carolina | 1,775 | 6.4 | 1,793 | 6.0 | 18 | -0.4 |
| North Dakota | 94 | 2.3 | 98 | 2.3 | 4 | 0.0 |
| Ohio | 1,088 | 2.8 | 1,173 | 2.9 | 84 | 0.1 |
| Oklahoma | 722 | 6.8 | 770 | 7.0 | 48 | 0.2 |
| Oregon | 831 | 6.4 | 410 | 3.0 | -421 | -3.4 |
| Pennsylvania | 782 | 1.8 | 875 | 2.0 | 93 | 0.1 |
| Rhode Island | 71 | 1.9 | 70 | 1.8 | -1 | 0.0 |
| South Carolina | 983 | 7.4 | 895 | 6.4 | -88 | -0.9 |
| South Dakota | 134 | 3.2 | 136 | 3.0 | 2 | -0.2 |
| Tennessee | 1,079 | 5.5 | 1,132 | 5.6 | 53 | 0.1 |
| Texas | 6,561 | 10.5 | 6,965 | 10.8 | 404 | 0.3 |
| Utah | 369 | 5.0 | 369 | 4.6 | -0 | -0.4 |
| Vermont | 51 | 1.9 | 56 | 2.0 | 5 | 0.1 |
| Virginia | 1,359 | 6.6 | 1,170 | 5.4 | -189 | -1.2 |
| Washington | 494 | 2.3 | 550 | 2.4 | 56 | 0.0 |
| West Virginia | 159 | 2.3 | 214 | 2.9 | 54 | 0.6 |
| Wisconsin | 404 | 1.9 | 433 | 1.9 | 29 | 0.0 |
| Wyoming | 97 | 5.6 | 106 | 5.9 | 9 | 0.3 |

Notes: FY is fiscal year. Uncompensated care is calculated using Medicare cost reports, which define uncompensated care as charity care and bad debt. Because of changes in Medicare cost report definitions that changed uncompensated care reporting for 2015 and subsequent years, these data are not comparable with data for prior years.

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

Source: MACPAC, 2022, analysis of Medicare cost reports for FYs 2018 and 2019.



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| IABLE 3A-5. Number and Share of Hospitals Receiving DSH Payments and Meeting Other Criteria, by State, FY 2017 | d share of Hospital | s Receiving DS | н Раумептѕ а | nd Meeting Utn | er Criteria, by s | state, FY 2017 | |
|--|---------------------|----------------|--------------|----------------------|-------------------|--|---|
| | N | DSH hospitals | spitals | Deemed DSH hospitals | H hospitals | Deemed DSH hospitals that provide at least one essential community service | hospitals that t one essential ty service |
| State | hospitals (all) | Number | Percent | Number | Percent | Number | Percent |
| Total | 5,994 | 2,598 | 43% | 733 | 12% | 899 | 11% |
| Alabama | 115 | 84 | 73 | ∞ | 7 | 7 | 9 |
| Alaska | 25 | 4 | 16 | 2 | 8 | 2 | 8 |
| Arizona | 112 | 31 | 28 | 28 | 25 | 28 | 25 |
| Arkansas | 102 | 7 | 7 | 1 | 1 | 1 | _ |
| California | 407 | 15 | 4 | 13 | က | _∞ | 2 |
| Colorado | 106 | 26 | 25 | 7 | 7 | 7 | 7 |
| Connecticut | 41 | 80 | 20 | 2 | 2 | 2 | 2 |
| Delaware | 15 | င | 20 | ဇ | 20 | က | 20 |
| District of Columbia | 13 | 7 | 54 | 9 | 46 | 4 | 31 |
| Florida | 254 | 50 | 20 | 24 | 6 | 22 | 6 |
| Georgia | 162 | 124 | 77 | 25 | 15 | 22 | 14 |
| Hawaii | 26 | 13 | 20 | 2 | 8 | 2 | 8 |
| Idaho | 51 | 25 | 49 | 7 | 14 | 9 | 12 |
| Illinois | 206 | 13 | 9 | 12 | 9 | 11 | 2 |
| Indiana | 166 | 52 | 31 | 11 | 7 | 10 | 9 |
| lowa | 121 | 11 | 6 | 6 | 7 | 6 | 7 |
| Kansas | 152 | 63 | 41 | 11 | 7 | 6 | 9 |
| Kentucky | 114 | 97 | 85 | 40 | 35 | 34 | 30 |
| Louisiana | 204 | 62 | 30 | 41 | 20 | 35 | 17 |
| Maine | 38 | 1 | 3 | 1 | က | 1 | က |
| Maryland | 59 | 19 | 32 | 10 | 17 | œ | 14 |
| Massachusetts² | 86 | I | I | I | I | I | I |



TABLE 3A-5. (continued)

| | Number of | DSH hospitals | spitals | Deemed DSH hospitals | H hospitals | Deemed DSH hospitals that provide at least one essential community service | hospitals that t one essential ty service |
|----------------|-----------------|---------------|---------|----------------------|-------------|--|---|
| State | hospitals (all) | Number | Percent | Number | Percent | Number | Percent |
| Total | 5,994 | 2,598 | 43% | 733 | 12% | 899 | 11% |
| Michigan | 161 | 125 | 78 | 17 | 11 | 16 | 10 |
| Minnesota | 142 | 37 | 26 | 12 | ∞ | 12 | 8 |
| Mississippi | 109 | 55 | 20 | 15 | 14 | 13 | 12 |
| Missouri | 141 | 107 | 9/ | 24 | 17 | 23 | 16 |
| Montana | 29 | 35 | 52 | 7 | 10 | 9 | 6 |
| Nebraska | 26 | 28 | 29 | 13 | 13 | 13 | 13 |
| Nevada | 57 | 21 | 37 | က | 2 | ო | 2 |
| New Hampshire | 30 | 25 | 83 | 4 | 13 | 4 | 13 |
| New Jersey | 26 | 77 | 79 | 24 | 25 | 23 | 24 |
| New Mexico | 54 | 14 | 26 | 7 | 13 | 9 | 11 |
| New York | 200 | 185 | 93 | 46 | 23 | 45 | 23 |
| North Carolina | 131 | 82 | 63 | 22 | 17 | 21 | 16 |
| North Dakota | 49 | 4 | ∞ | 2 | 4 | 2 | 4 |
| Ohio | 233 | 153 | 99 | 18 | 80 | 17 | 7 |
| Oklahoma | 148 | 59 | 40 | 14 | 6 | 12 | 8 |
| Oregon | 63 | 42 | 29 | 10 | 16 | 10 | 16 |
| Pennsylvania | 226 | 176 | 78 | 39 | 17 | 34 | 15 |
| Rhode Island | 14 | 10 | 71 | 1 | 7 | 1 | 7 |
| South Carolina | 84 | 62 | 74 | 14 | 17 | 11 | 13 |
| South Dakota | 09 | 22 | 37 | 13 | 22 | 12 | 20 |
| Tennessee | 142 | 74 | 52 | 17 | 12 | 11 | ∞ |



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| | - | DSH hospitals | spitals | Deemed DSH hospitals | H hospitals | Deemed DSH hospitals that provide at least one essential community service | nospitals that t one essential y service |
|---------------|------------------------------|---------------|---------|----------------------|-------------|--|--|
| State | Number of hospitals (all) | Number | Percent | Number | Percent | Number | Percent |
| Total | 5,994 | 2,598 | 43% | 733 | 12% | 899 | 11% |
| Texas | 577 | 178 | 31 | 87 | 15 | 85 | 15 |
| Utah | 09 | 42 | 70 | 9 | 10 | 5 | 8 |
| Vermont | 16 | 13 | 81 | - | 9 | _ | 9 |
| Virginia | 108 | 38 | 35 | വ | 2 | 2 | 2 |
| Washington | 105 | 63 | 09 | 16 | 15 | 13 | 12 |
| West Virginia | 62 | 47 | 9/ | 12 | 19 | 12 | 19 |
| Wisconsin | 144 | 86 | 89 | 18 | 13 | 18 | 13 |
| Wyoming | 30 | 11 | 37 | က | 10 | ဇ | 10 |
| Wyoming | 30 | 11 | 37 | က | 10 | ဇ | 10 |

Notes: DSH is disproportionate share hospital. FY is fiscal year. Excludes 55 DSH hospitals that did not submit a FY 2019 Medicare cost report. Deemed DSH hospitals are or statutorily required to receive DSH payments because they serve a high share of Medicaid-enrolled and low-income patients. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. Our definition of essential community services includes the following services that we could identify pased on the limits of available data: burn services, dental services, graduate medical education, HIV/AIDS care, inpatient psychiatric services (through psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, primary care services, substance use disorder services, and trauma services

Dash indicates zero.

Analysis excludes 17 hospitals that received funding under the state's Global Payment Program as authorized under Section 1115 of the Social Security Act, which uses DSH funding to pay hospitals using a different payment mechanism. These hospitals appear to meet deemed DSH criteria based on available Medicare cost report data.

*Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Social Security Act allows it to use all of its DSH funding for the state's safety-net care pool. However, at least eight hospitals in Massachusetts appear to meet the criteria for deemed DSH hospitals based on available Medicare cost report data.

Source: MACPAC, 2022, analysis of SPRY 2017 as-filed Medicaid DSH audits, Medicare cost reports for FYs 2016–2019, and the AHA 2021



TABLE 3A-6. Number and Share of Hospital Beds and Medicaid Days Provided by Deemed DSH Hospitals, by State, FY 2017

| | | Numb | er of hospital beds | al beds | | Z | umber of M | edicaid day | Number of Medicaid days (thousands) | (3) |
|-------------------------|-----------|---------|---------------------|----------------------|-------------|-----------|------------|---------------|-------------------------------------|-------------|
| | IA | DSH ho | spitals | Deemed DSH hospitals | H hospitals | IA | DSH ho | DSH hospitals | Deemed DSH hospitals | H hospitals |
| State | hospitals | Number | Percent | Number | Percent | hospitals | Number | Percent | Number | Percent |
| Total | 808,332 | 449,383 | 26% | 150,462 | 19% | 43,037 | 26,954 | 63% | 12,914 | 30% |
| Alabama | 14,869 | 13,369 | 06 | 1,038 | 7 | 693 | 634 | 92 | 107 | 15 |
| Alaska | 2,119 | 638 | 30 | 471 | 22 | 102 | 22 | 56 | 47 | 46 |
| Arizona | 15,170 | 5,962 | 39 | 5,291 | 35 | 966 | 529 | 53 | 497 | 20 |
| Arkansas | 9,348 | 206 | 10 | 22 | - | 352 | 32 | 6 | 2 | _ |
| California ¹ | 75,414 | 4,140 | 2 | 2,913 | 4 | 5,320 | 436 | _∞ | 307 | 9 |
| Colorado | 10,421 | 3,925 | 38 | 1,485 | 14 | 643 | 325 | 51 | 176 | 27 |
| Connecticut | 8,042 | 2,450 | 30 | 330 | 4 | 519 | 163 | 32 | 34 | 7 |
| Delaware | 2,606 | 480 | 18 | 480 | 18 | 146 | 34 | 23 | 34 | 23 |
| District of Columbia | 3,018 | 1,848 | 61 | 1,142 | 38 | 256 | 180 | 70 | 119 | 47 |
| Florida | 55,081 | 15,158 | 28 | 8,710 | 16 | 2,738 | 1,144 | 42 | 876 | 32 |
| Georgia | 21,826 | 18,258 | 84 | 5,892 | 27 | 1,179 | 1,070 | 91 | 517 | 44 |
| Hawaii | 2,597 | 2,230 | 98 | 258 | 10 | 175 | 164 | 94 | 20 | 28 |
| Idaho | 3,136 | 2,474 | 79 | 1,066 | 34 | 136 | 121 | 89 | 61 | 45 |
| Illinois | 30,875 | 2,902 | 6 | 2,280 | 7 | 1,755 | 218 | 12 | 166 | 6 |
| Indiana | 17,190 | 6,904 | 40 | 3,833 | 22 | 912 | 466 | 51 | 359 | 39 |
| Iowa | 7,457 | 2,699 | 36 | 2,603 | 35 | 347 | 228 | 99 | 225 | 92 |
| Kansas | 8,243 | 4,373 | 53 | 2,750 | 33 | 247 | 175 | 7.1 | 153 | 62 |
| Kentucky | 14,167 | 12,962 | 91 | 5,629 | 40 | 869 | 787 | 91 | 452 | 52 |
| Louisiana | 16,454 | 8,262 | 20 | 3,673 | 22 | 814 | 488 | 09 | 268 | 33 |
| Maine | 3,011 | 51 | 2 | 51 | 2 | 134 | 0 | 0 | 0 | 0 |



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| | | Numb | Number of hospital beds | al beds | | Z | umber of M | ledicaid day | Number of Medicaid days (thousands) | (S) |
|----------------------------|-----------|---------|-------------------------|----------------------|-------------|-----------|------------|---------------|-------------------------------------|----------------------|
| | ΑII | DSH ho | DSH hospitals | Deemed DSH hospitals | H hospitals | ₹ | DSH ho | DSH hospitals | Deemed DS | Deemed DSH hospitals |
| State | hospitals | Number | Percent | Number | Percent | hospitals | Number | Percent | Number | Percent |
| Total | 808,332 | 449,383 | 26% | 150,462 | 19% | 43,037 | 26,954 | 63 % | 12,914 | 30% |
| Maryland | 12,571 | 4,304 | 34 | 3,174 | 25 | 808 | 271 | 34 | 197 | 24 |
| Massachusetts ² | 42,010 | I | I | I | I | 1,396 | I | I | I | I |
| Michigan | 23,844 | 21,996 | 92 | 4,919 | 21 | 1,320 | 1,256 | 92 | 480 | 36 |
| Minnesota | 11,139 | 6,834 | 61 | 1,476 | 13 | 209 | 492 | 81 | 153 | 25 |
| Mississippi | 10,375 | 5,713 | 52 | 2,289 | 22 | 426 | 257 | 09 | 145 | 34 |
| Missouri | 18,292 | 14,589 | 80 | 3,117 | 17 | 915 | 685 | 75 | 268 | 29 |
| Montana | 2,902 | 2,195 | 92 | 448 | 15 | 108 | 101 | 94 | 27 | 25 |
| Nebraska | 5,539 | 3,784 | 89 | 1,838 | 33 | 185 | 176 | 92 | 117 | 63 |
| Nevada | 7,018 | 4,113 | 59 | 1,190 | 17 | 515 | 370 | 72 | 168 | 33 |
| New Hampshire | 2,728 | 2,419 | 88 | 292 | 28 | 121 | 116 | 26 | 74 | 61 |
| New Jersey | 26,020 | 24,438 | 94 | 6,294 | 24 | 1,090 | 1,035 | 92 | 449 | 41 |
| New Mexico | 4,383 | 1,531 | 35 | 424 | 10 | 332 | 105 | 31 | 18 | 2 |
| New York | 45,567 | 44,557 | 86 | 10,287 | 23 | 3,647 | 3,565 | 86 | 1,134 | 31 |
| North Carolina | 21,931 | 18,824 | 98 | 6,558 | 30 | 1,179 | 1,098 | 66 | 453 | 38 |
| North Dakota | 2,566 | 357 | 14 | 230 | 6 | 98 | 13 | 15 | 11 | 13 |
| Ohio | 31,622 | 24,797 | 78 | 6,256 | 20 | 1,727 | 1,349 | 78 | 296 | 34 |
| Oklahoma | 11,187 | 6,974 | 62 | 1,461 | 13 | 472 | 316 | 29 | 92 | 16 |
| Oregon | 686'9 | 5,190 | 74 | 1,356 | 19 | 437 | 389 | 88 | 150 | 34 |
| Pennsylvania | 36,577 | 33,530 | 92 | 7,795 | 21 | 1,857 | 1,805 | 26 | 707 | 38 |
| Rhode Island | 2,855 | 2,135 | 75 | 247 | 6 | 191 | 141 | 87 | 41 | 26 |
| South Carolina | 12,461 | 11,200 | 06 | 3,479 | 28 | 588 | 571 | 26 | 284 | 48 |



TABLE 3A-6. (continued)

| | | Numb | Number of hospital beds | al beds | | Z | umber of M | edicaid day | Number of Medicaid days (thousands) | (s |
|---------------|-----------|---------------|-------------------------|----------------------|-------------|-----------|------------|---------------|-------------------------------------|-------------|
| | IA | DSH hospitals | spitals | Deemed DSH hospitals | H hospitals | IA | DSHho | DSH hospitals | Deemed DSH hospitals | H hospitals |
| State | hospitals | Number | Percent | Number | Percent | hospitals | Number | Percent | Number | Percent |
| Total | 808,332 | 449,383 | 26% | 150,462 | 19% | 43,037 | 26,954 | 63 % | 12,914 | 30% |
| South Dakota | 2,750 | 1,927 | 70 | 1,543 | 26 | 06 | 87 | 96 | 81 | 89 |
| Tennessee | 18,707 | 14,373 | 77 | 4,124 | 22 | 931 | 808 | 87 | 365 | 39 |
| Texas | 68,832 | 38,929 | 22 | 19,699 | 29 | 2,934 | 2,306 | 79 | 1,514 | 52 |
| Utah | 5,638 | 4,634 | 82 | 962 | 17 | 233 | 219 | 94 | 9/ | 33 |
| Vermont | 1,136 | 972 | 98 | 415 | 37 | 51 | 51 | 100 | 30 | 59 |
| Virginia | 16,472 | 9,795 | 59 | 2,172 | 13 | 723 | 549 | 92 | 201 | 28 |
| Washington | 11,750 | 9,581 | 82 | 1,844 | 16 | 843 | 736 | 87 | 200 | 24 |
| West Virginia | 6,199 | 5,568 | 06 | 2,466 | 40 | 314 | 305 | 26 | 199 | 64 |
| Wisconsin | 15,887 | 13,523 | 85 | 3,448 | 22 | 580 | 518 | 89 | 247 | 43 |
| Wyoming | 1,339 | 609 | 45 | 231 | 17 | 23 | 10 | 44 | 4 | 18 |

Notes: DSH is disproportionate share hospital. FY is fiscal year. Excludes 55 DSH hospitals that did not submit a FY 2019 Medicare cost report. Deemed DSH status was 3B. Absed on available data on Medicaid inpatient and low-income utilization rates. For further discussion of the methodology and limitations, see Appendix 3B.

Source: MACPAC, 2022, analysis of Medicare cost reports for FYs 2016–2019 and SPRY 2017 as-filed Medicaid DSH audits.

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

Analysis excludes 17 hospitals that received funding under California's Global Payment Program demonstration waiver under Section 1115 of the Social Security Act (the Act), which uses DSH funding to pay hospitals using a different payment mechanism. These hospitals appear to meet deemed DSH criteria based on available Medicare cost report data.

² Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Act allows it to use all of its DSH funding for the state's safety-net care pool. However, at least 8 hospitals in Massachusetts appear to meet the criteria for deemed DSH hospitals based on available Medicare cost report data.



TABLE 3A-7. FY 2022 DSH Allotment per Uninsured Individual and Non-Elderly Low-Income Individual, by State

| | | H allotment ions) | per uninsure | H allotment ed individual sands) | non-elderly | allotment per low-income idual |
|----------------------|---------------------------------|----------------------|---------------------------------|--|---------------------------------|--------------------------------------|
| State | Total (federal and state) | Federal | Total (federal and state) | Federal | Total (federal and state) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$792.0 | \$453.3 | \$279.8 | \$160.2 |
| Alabama | 520.5 | 376.7 | 1,109.7 | 803.1 | 348.3 | 252.1 |
| Alaska | 49.9 | 25.0 | 580.3 | 290.1 | 303.0 | 151.5 |
| Arizona | 177.2 | 124.0 | 219.0 | 153.3 | 86.2 | 60.4 |
| Arkansas | 73.8 | 52.8 | 272.2 | 195.0 | 74.5 | 53.3 |
| California | 2,685.6 | 1,342.8 | 894.6 | 447.3 | 257.3 | 128.6 |
| Colorado | 226.6 | 113.3 | 500.2 | 250.1 | 185.6 | 92.8 |
| Connecticut | 490.0 | 245.0 | 2,367.0 | 1,183.5 | 741.0 | 370.5 |
| Delaware | 19.2 | 11.1 | 305.0 | 176.0 | 92.3 | 53.3 |
| District of Columbia | 107.2 | 75.0 | 4,287.2 | 3,001.1 | 657.0 | 459.9 |
| Florida | 401.4 | 245.0 | 144.2 | 88.0 | 69.7 | 42.6 |
| Georgia | 492.4 | 329.2 | 352.2 | 235.5 | 161.4 | 107.9 |
| Hawaii | 22.3 | 11.9 | 397.4 | 213.2 | 88.7 | 47.6 |
| Idaho | 28.7 | 20.1 | 150.1 | 105.4 | 56.8 | 39.9 |
| Illinois | 515.5 | 263.4 | 558.5 | 285.3 | 169.2 | 86.5 |
| Indiana | 394.9 | 261.8 | 683.2 | 453.0 | 223.3 | 148.0 |
| Iowa | 77.6 | 48.2 | 497.6 | 309.2 | 107.1 | 66.6 |
| Kansas | 84.0 | 50.5 | 320.6 | 192.9 | 115.0 | 69.2 |
| Kentucky | 244.1 | 177.6 | 862.7 | 627.6 | 180.3 | 131.2 |
| Louisiana | 1,234.8 | 839.9 | 3,056.3 | 2,078.9 | 811.3 | 551.9 |
| Maine | 201.0 | 128.6 | 1,878.2 | 1,202.0 | 665.2 | 425.7 |
| Maryland | 186.8 | 93.4 | 523.3 | 261.6 | 172.3 | 86.2 |
| Massachusetts | 747.2 | 373.6 | 3,662.8 | 1,831.4 | 619.2 | 309.6 |
| Michigan | 495.7 | 324.6 | 868.2 | 568.5 | 186.5 | 122.2 |
| Minnesota | 181.1 | 91.5 | 663.5 | 335.1 | 165.8 | 83.7 |
| Mississippi | 238.5 | 186.8 | 632.7 | 495.5 | 226.7 | 177.5 |
| Missouri | 874.5 | 580.3 | 1,447.8 | 960.8 | 539.4 | 358.0 |
| Montana | 21.4 | 13.9 | 246.2 | 159.8 | 76.7 | 49.8 |



TABLE 3A-7. (continued)

| TABLE 3A-1. (CONTINUE | FY 2022 DS | H allotment ions) | per uninsure | H allotment ed individual sands) | non-elderly | allotment per low-income ridual |
|-----------------------|---------------------------------|----------------------|---------------------------------|--|---------------------------------|---------------------------------------|
| State | Total (federal and state) | Federal | Total (federal and state) | Federal | Total (federal and state) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$792.0 | \$453.3 | \$279.8 | \$160.2 |
| Nebraska | 60.0 | 34.7 | 379.6 | 219.4 | 131.9 | 76.2 |
| Nevada | 90.5 | 56.7 | 260.1 | 162.8 | 110.1 | 68.9 |
| New Hampshire | 392.2 | 196.1 | 4,669.2 | 2,334.6 | 1,901.2 | 950.6 |
| New Jersey | 1,577.1 | 788.5 | 2,279.0 | 1,139.5 | 942.9 | 471.4 |
| New Mexico | 33.9 | 25.0 | 165.1 | 121.7 | 47.0 | 34.6 |
| New York | 3,935.1 | 1,967.5 | 3,907.7 | 1,953.9 | 825.2 | 412.6 |
| North Carolina | 534.1 | 361.4 | 461.7 | 312.3 | 181.9 | 123.1 |
| North Dakota | 21.8 | 11.7 | 428.1 | 229.4 | 139.6 | 74.8 |
| Ohio | 776.3 | 497.6 | 1,024.2 | 656.5 | 256.8 | 164.6 |
| Oklahoma | 64.9 | 44.4 | 117.4 | 80.2 | 53.4 | 36.5 |
| Oregon | 92.1 | 55.4 | 307.9 | 185.4 | 86.5 | 52.1 |
| Pennsylvania | 1,305.0 | 687.5 | 1,797.6 | 947.0 | 451.7 | 238.0 |
| Rhode Island | 145.1 | 79.6 | 3,374.0 | 1,851.6 | 643.9 | 353.4 |
| South Carolina | 567.0 | 401.2 | 1,034.7 | 732.0 | 388.4 | 274.8 |
| South Dakota | 23.1 | 13.5 | 261.9 | 153.7 | 105.4 | 61.9 |
| Tennessee | 80.0 | 53.1 | 117.3 | 77.9 | 40.8 | 27.1 |
| Texas | 1,926.5 | 1,171.3 | 368.1 | 223.8 | 227.3 | 138.2 |
| Utah | 36.0 | 24.0 | 117.1 | 78.3 | 48.2 | 32.2 |
| Vermont | 48.8 | 27.6 | 1,743.1 | 984.3 | 369.8 | 208.8 |
| Virginia | 214.6 | 107.3 | 326.2 | 163.1 | 123.3 | 61.6 |
| Washington | 453.2 | 226.6 | 913.8 | 456.9 | 281.4 | 140.7 |
| West Virginia | 110.7 | 82.7 | 938.3 | 700.7 | 198.0 | 147.8 |
| Wisconsin | 193.4 | 115.8 | 587.8 | 352.0 | 149.7 | 89.7 |
| Wyoming | 0.6 | 0.3 | 7.9 | 4.0 | 4.2 | 2.1 |

Notes: DSH is disproportionate share hospital. FY is fiscal year. Non-elderly low-income individuals are defined as individuals under age 65 with family incomes less than 200 percent of the federal poverty level. Totals reflect a federal medical assistance percentage (FMAP) without adjustments made in the American Rescue Plan Act (P.L. 117-2). For further discussion of methodology and limitations, see Appendix 3B.

Source: MACPAC, 2022, analysis of the CMS Medicaid Budget Expenditure, Keisler-Starkey and Bunch 2020, and Census 2020.



TABLE 3A-8. FY 2022 DSH Allotments as a Percentage of Hospital Uncompensated Care, by State, FY 2019

| State | FY 2022 federal DSH allotment (millions) | FY 2022 federal DSH allotment as a percentage of hospital uncompensated care in the state, FY 2019 | FY 2022 DSH allotment (state and federal, millions) | FY 2022 total DSH allotment as a percentage of hospital uncompensated care in the state, FY 2019 |
|----------------------|--|--|--|--|
| Total | \$13,435.5 | 31.9% | \$23,473.9 | 55.8% |
| Alabama | 376.7 | 50.0 | 520.5 | 69.0 |
| Alaska | 25.0 | 46.7 | 49.9 | 93.4 |
| Arizona | 124.0 | 25.8 | 177.2 | 36.9 |
| Arkansas | 52.8 | 21.3 | 73.8 | 29.7 |
| California | 1,342.8 | 49.5 | 2,685.6 | 98.9 |
| Colorado | 113.3 | 26.1 | 226.6 | 52.2 |
| Connecticut | 245.0 | 100.9 | 490.0 | 201.9 |
| Delaware | 11.1 | 13.1 | 19.2 | 22.7 |
| District of Columbia | 75.0 | 115.0 | 107.2 | 164.3 |
| Florida | 245.0 | 6.0 | 401.4 | 9.8 |
| Georgia | 329.2 | 13.3 | 492.4 | 19.9 |
| Hawaii | 11.9 | 17.3 | 22.3 | 32.3 |
| Idaho | 20.1 | 9.0 | 28.7 | 12.9 |
| Illinois | 263.4 | 13.7 | 515.5 | 26.9 |
| Indiana | 261.8 | 29.1 | 394.9 | 43.9 |
| lowa | 48.2 | 21.4 | 77.6 | 34.4 |
| Kansas | 50.5 | 12.2 | 84.0 | 20.3 |
| Kentucky | 177.6 | 48.8 | 244.1 | 67.1 |
| Louisiana | 839.9 | 205.2 | 1,234.8 | 301.7 |
| Maine | 128.6 | 66.1 | 201.0 | 103.2 |
| Maryland | 93.4 | 17.0 | 186.8 | 34.0 |
| Massachusetts | 373.6 | 73.9 | 747.2 | 147.9 |
| Michigan | 324.6 | 50.5 | 495.7 | 77.1 |
| Minnesota | 91.5 | 25.7 | 181.1 | 50.8 |
| Mississippi | 186.8 | 31.0 | 238.5 | 39.5 |
| Missouri | 580.3 | 43.7 | 874.5 | 65.9 |
| Montana | 13.9 | 15.6 | 21.4 | 24.1 |
| Nebraska | 34.7 | 10.7 | 60.0 | 18.4 |



TABLE 3A-8. (continued)

| State | FY 2022 federal DSH allotment (millions) | FY 2022 federal DSH allotment as a percentage of hospital uncompensated care in the state, FY 2019 | FY 2022 DSH allotment (state and federal, millions) | FY 2022 total DSH allotment as a percentage of hospital uncompensated care in the state, FY 2019 |
|----------------|--|--|--|--|
| Total | \$13,435.5 | 31.9% | \$23,473.9 | 55.8% |
| Nevada | 56.7 | 20.7 | 90.5 | 33.1 |
| New Hampshire | 196.1 | 118.7 | 392.2 | 237.5 |
| New Jersey | 788.5 | 71.4 | 1,577.1 | 142.9 |
| New Mexico | 25.0 | 15.8 | 33.9 | 21.4 |
| New York | 1,967.5 | 82.7 | 3,935.1 | 165.3 |
| North Carolina | 361.4 | 20.1 | 534.1 | 29.8 |
| North Dakota | 11.7 | 12.0 | 21.8 | 22.4 |
| Ohio | 497.6 | 42.4 | 776.3 | 66.2 |
| Oklahoma | 44.4 | 5.8 | 64.9 | 8.4 |
| Oregon | 55.4 | 13.5 | 92.1 | 22.5 |
| Pennsylvania | 687.5 | 78.5 | 1,305.0 | 149.1 |
| Rhode Island | 79.6 | 113.7 | 145.1 | 207.1 |
| South Carolina | 401.2 | 44.8 | 567.0 | 63.3 |
| South Dakota | 13.5 | 10.0 | 23.1 | 17.0 |
| Tennessee | 53.1 | 4.7 | 80.0 | 7.1 |
| Texas | 1,171.3 | 16.8 | 1,926.5 | 27.7 |
| Utah | 24.0 | 6.5 | 36.0 | 9.8 |
| Vermont | 27.6 | 49.2 | 48.8 | 87.1 |
| Virginia | 107.3 | 9.2 | 214.6 | 18.3 |
| Washington | 226.6 | 41.2 | 453.2 | 82.4 |
| West Virginia | 82.7 | 38.7 | 110.7 | 51.8 |
| Wisconsin | 115.8 | 26.8 | 193.4 | 44.7 |
| Wyoming | 0.3 | 0.3 | 0.6 | 0.5 |

Notes: DSH is disproportionate share hospital. FY is fiscal year. Uncompensated care is calculated using 2019 Medicare cost reports, which define uncompensated care as charity care and bad debt. Because of recent changes in Medicare cost report definitions that changed uncompensated care reporting for 2015 and subsequent years, these data are not comparable with data for prior years. Totals reflect a federal medical assistance percentage (FMAP) without adjustments made in the American Rescue Plan Act (P.L. 117-2). For further discussion of methodology and limitations, see Appendix XB.

Source: MACPAC, 2022, FY 2019 Medicare Cost Reports, the CMS Medicaid Budget Expenditure System, and AHA 2021.



TABLE 3A-9. FY 2022 DSH Allotment per Deemed DSH Hospital Providing at Least One Essential Community Service, by State

| | FY 2022 unr allotment | | FY 2022 unr allotment per hospital (| deemed DSH | FY 2022 unr allotment per hospital prov one essentia service (| deemed DSH iding at least I community |
|----------------------------|---------------------------|------------|--|------------|--|---|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$32.0 | \$18.3 | \$35.1 | \$20.1 |
| Alabama | 520.5 | 376.7 | 65.1 | 47.1 | 74.4 | 53.8 |
| Alaska | 49.9 | 25.0 | 25.0 | 12.5 | 25.0 | 12.5 |
| Arizona | 177.2 | 124.0 | 6.3 | 4.4 | 6.3 | 4.4 |
| Arkansas | 73.8 | 52.8 | 73.8 | 52.8 | 73.8 | 52.8 |
| California ¹ | 2,685.6 | 1,342.8 | 206.6 | 103.3 | 335.7 | 167.9 |
| Colorado | 226.6 | 113.3 | 32.4 | 16.2 | 32.4 | 16.2 |
| Connecticut | 490.0 | 245.0 | 245.0 | 122.5 | 245.0 | 122.5 |
| Delaware | 19.2 | 11.1 | 6.4 | 3.7 | 6.4 | 3.7 |
| District of Columbia | 107.2 | 75.0 | 17.9 | 12.5 | 26.8 | 18.8 |
| Florida | 401.4 | 245.0 | 16.7 | 10.2 | 18.2 | 11.1 |
| Georgia | 492.4 | 329.2 | 19.7 | 13.2 | 22.4 | 15.0 |
| Hawaii | 22.3 | 11.9 | 11.1 | 6.0 | 11.1 | 6.0 |
| Idaho | 28.7 | 20.1 | 4.1 | 2.9 | 4.8 | 3.4 |
| Illinois | 515.5 | 263.4 | 43.0 | 21.9 | 46.9 | 23.9 |
| Indiana | 394.9 | 261.8 | 35.9 | 23.8 | 39.5 | 26.2 |
| Iowa | 77.6 | 48.2 | 8.6 | 5.4 | 8.6 | 5.4 |
| Kansas | 84.0 | 50.5 | 7.6 | 4.6 | 9.3 | 5.6 |
| Kentucky | 244.1 | 177.6 | 6.1 | 4.4 | 7.2 | 5.2 |
| Louisiana | 1,234.8 | 839.9 | 30.1 | 20.5 | 35.3 | 24.0 |
| Maine | 201.0 | 128.6 | 201.0 | 128.6 | 201.0 | 128.6 |
| Maryland | 186.8 | 93.4 | 18.7 | 9.3 | 23.4 | 11.7 |
| Massachusetts ² | 747.2 | 373.6 | _ | _ | _ | _ |
| Michigan | 495.7 | 324.6 | 29.2 | 19.1 | 31.0 | 20.3 |
| Minnesota | 181.1 | 91.5 | 15.1 | 7.6 | 15.1 | 7.6 |



TABLE 3A-9. (continued)

| | FY 2022 unreduced DSH allotment (millions) | | FY 2022 unreduced DSH allotment per deemed DSH hospital (millions) | | FY 2022 unreduced DSH allotment per deemed DSH hospital providing at least one essential community service (millions) | |
|----------------|---|------------|--|---------|---|---------|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$32.0 | \$18.3 | \$35.1 | \$20.1 |
| Mississippi | 238.5 | 186.8 | 15.9 | 12.5 | 18.3 | 14.4 |
| Missouri | 874.5 | 580.3 | 36.4 | 24.2 | 38.0 | 25.2 |
| Montana | 21.4 | 13.9 | 3.1 | 2.0 | 3.6 | 2.3 |
| Nebraska | 60.0 | 34.7 | 4.6 | 2.7 | 4.6 | 2.7 |
| Nevada | 90.5 | 56.7 | 30.2 | 18.9 | 30.2 | 18.9 |
| New Hampshire | 392.2 | 196.1 | 98.1 | 49.0 | 98.1 | 49.0 |
| New Jersey | 1,577.1 | 788.5 | 65.7 | 32.9 | 68.6 | 34.3 |
| New Mexico | 33.9 | 25.0 | 4.8 | 3.6 | 5.6 | 4.2 |
| New York | 3,935.1 | 1,967.5 | 85.5 | 42.8 | 87.4 | 43.7 |
| North Carolina | 534.1 | 361.4 | 24.3 | 16.4 | 25.4 | 17.2 |
| North Dakota | 21.8 | 11.7 | 10.9 | 5.9 | 10.9 | 5.9 |
| Ohio | 776.3 | 497.6 | 43.1 | 27.6 | 45.7 | 29.3 |
| Oklahoma | 64.9 | 44.4 | 4.6 | 3.2 | 5.4 | 3.7 |
| Oregon | 92.1 | 55.4 | 9.2 | 5.5 | 9.2 | 5.5 |
| Pennsylvania | 1,305.0 | 687.5 | 33.5 | 17.6 | 38.4 | 20.2 |
| Rhode Island | 145.1 | 79.6 | 145.1 | 79.6 | 145.1 | 79.6 |
| South Carolina | 567.0 | 401.2 | 40.5 | 28.7 | 51.5 | 36.5 |
| South Dakota | 23.1 | 13.5 | 1.8 | 1.0 | 1.9 | 1.1 |
| Tennessee | 80.0 | 53.1 | 4.7 | 3.1 | 7.3 | 4.8 |
| Texas | 1,926.5 | 1,171.3 | 22.1 | 13.5 | 22.7 | 13.8 |
| Utah | 36.0 | 24.0 | 6.0 | 4.0 | 7.2 | 4.8 |
| Vermont | 48.8 | 27.6 | 48.8 | 27.6 | 48.8 | 27.6 |
| Virginia | 214.6 | 107.3 | 42.9 | 21.5 | 42.9 | 21.5 |
| Washington | 453.2 | 226.6 | 28.3 | 14.2 | 34.9 | 17.4 |
| West Virginia | 110.7 | 82.7 | 9.2 | 6.9 | 9.2 | 6.9 |



TABLE 3A-9. (continued)

| | FY 2022 unr allotment | educed DSH (millions) | FY 2022 unreduced DSH allotment per deemed DSH hospital (millions) | | FY 2022 unreduced DSH allotment per deemed DSH hospital providing at least one essential community service (millions) | |
|-----------|------------------------------|--------------------------|--|---------|---|---------|
| State | Total (state and federal) | Federal | Total (state and federal) | Federal | Total (state and federal) | Federal |
| Total | \$23,473.9 | \$13,435.5 | \$32.0 | \$18.3 | \$35.1 | \$20.1 |
| Wisconsin | 193.4 | 115.8 | 10.7 | 6.4 | 10.7 | 6.4 |
| Wyoming | 0.6 | 0.3 | 0.2 | 0.1 | 0.2 | 0.1 |

Notes: DSH is disproportionate share hospital. FY is fiscal year. Excludes 90 DSH hospitals that did not submit a Medicare cost report. Deemed DSH status was estimated based on available data on Medicaid inpatient and low-income utilization rates. Our definition of community services includes the following services based on the limits of available data: burn services, dental services, graduate medical education, HIV/AIDS care, inpatient psychiatric services (through psychiatric subunit or stand-alone psychiatric hospital), neonatal intensive care units, obstetrics and gynecology services, primary care services, substance use disorder services, and trauma services. Totals reflect a federal medical assistance percentage (FMAP) without adjustments made by the American Rescue Plan Act (P.L. 117-2). For further discussion of methodology and limitations, see Appendix 3B.

Source: MACPAC, 2022, analysis of state plan rate year 2017 as-filed Medicaid DSH audits, the CMS Medicaid Budget Expenditure System, FYs 2017-2019, FYs 2017-2019 Medicare Cost Reports, and AHA 2021.

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⁻ Dash indicates that the category is not applicable.

¹ Analysis excludes 17 hospitals that received funding under California's Global Payment Program demonstration waiver under Section 1115 of the Social Security Act (the Act), which uses DSH funding to pay hospitals using a different mechanism. These hospitals appear to meet deemed DSH criteria in FY 2017.

² Massachusetts does not make DSH payments to hospitals because the state's demonstration waiver under Section 1115 of the Social Security Act allows it to use all of its DSH funding for the state's safety-net care pool instead; for this reason, no hospitals in the state can be categorized as DSH or deemed DSH hospitals.



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, uncompensated care, and DSH hospitals with high levels of uncompensated care that provide access to essential services. We also modeled DSH allotment reductions and simulated DSH payments under a variety of scenarios. In the following sections, 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 (SPRY) 2017 DSH audit reports, the most recent data available, to examine historic DSH spending and the distribution of DSH spending among a variety of hospital types. These data were provided by the Centers for Medicare & Medicaid Services (CMS) on an as-filed basis and are subject to change as CMS completes its internal review of state DSH audit reports.

Overall, 2,598 hospitals receiving DSH payments are represented in our analyses of DSH audit data. We did not include audit data provided by states for hospitals that did not receive DSH payments. (Ninety-seven 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 appear only once in the data set.

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. (Eighty-seven 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. In total, 2,598 DSH hospitals were included in these analyses. We excluded 55 DSH hospitals without matching 2019 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 quartiles or below the lowest quartile. (Under this criterion, 442 hospitals were excluded from our analysis of FY 2019 margins.) Operating margins were 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, included additional types of hospital revenue, such as state or local subsidies and revenue from other facets of hospital operations (e.g., parking lot receipts).



Definition of Essential Community Services

MACPAC's authorizing statute requires that our analysis include data identifying hospitals with high levels of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations, such as graduate medical education and the continuum of primary through quaternary care, including the provision of trauma care and public health services (§ 1900 of the Social Security Act (the Act)).

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

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

Deemed DSH hospital status

According to the Act, hospitals must meet one of two criteria to qualify as a deemed DSH hospital: (1) a Medicaid inpatient utilization rate greater than one standard deviation above the mean for hospitals in the state or (2) a low-income utilization rate greater than 25 percent (§ 1923(b) (1) of the Act). Because deemed DSH hospitals are statutorily required to receive DSH payments, we excluded from our analysis hospitals that did not receive DSH payments in 2017.

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 17 percent 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.

Both California and Massachusetts distribute DSH funding through waivers authorized under Section 1115 of the Act. Consequently, Massachusetts does not have any hospitals that submit Medicaid DSH audits, while California has 17 public hospitals that do not submit Medicaid DSH audits. For these two states, MACPAC used Medicare cost report data to estimate deemed DSH status. Twenty-five additional hospitals were included from California and Massachusetts using this methodology.

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 2019 Medicare cost reports and the 2019 AHA annual survey (Table 3B-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.



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

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

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

Projections of DSH Allotments

DSH allotment reductions from FY 2024 were calculated using data from Medicaid DSH audits, Medicare cost reports, and U.S. Census Bureau uninsured data using a methodology devised by Dobson DaVanzo & Associates, LLC (Dobson and DaVanzo 2016). DSH allotments for FY 2024 were calculated by increasing FY 2022 allotments based on the Consumer Price Index projections for All Urban Consumers and applying an \$8 billion reduction, consistent with the current schedule of DSH allotment reductions in statute (CBO 2021). MACPAC estimated the Medicaid inpatient factor and the uncompensated care factor using

SPRY 2017 Medicaid DSH audits. MACPAC used 2019 American Community Survey (ACS) data to estimate the uninsured percentage factor. We did not use a budget neutrality factor adjustment in this report because budget neutrality information for FY 2024 was not available.

Unreduced allotments increase each year for all states except Tennessee, whose DSH allotment is specified in statute (§ 1923(f)(6)(A)(vi) of the Act). Per the final rule, DSH allotment reductions are limited to 90 percent of each state's unreduced DSH allotment (CMS 2019). This reduction cap limits the reductions for Rhode Island in FY 2024, and its excess reduction amounts are proportionately allocated among the remaining states that do not exceed the reduction cap.

Uninsured Rate

Each year, the Census Bureau releases its annual report on health insurance coverage in the United States. The most recent report presents statistics on coverage based on information collected in the Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC). In prior years, the report also presented information from the



ACS. The two surveys differ in the timing of data collection, the reference period, the time frame of the resulting health insurance coverage estimates, and the uses of the data.

CPS collects data from February through April about whether the respondent was insured on any day in the prior year. As a result, people who lost coverage during the pandemic are not included in the uninsured rates of the ASEC. By contrast, the ACS presents a point-in-time profile of the population's health insurance coverage status by collecting data samples from different households on a monthly basis throughout the calendar year. The survey asks whether a person is covered at the time of the interview. ACS's data collection methodology and larger sample size also allow it to provide state-level estimates, while CPS ASEC can be used only for national-level trends.

The COVID-19 pandemic affected survey collection for the 2019 CPS ASEC. The response rate for the 2019 CPS basic household survey was 10 percentage points lower in March 2020 compared with the same period in 2019 (Keisler-Starkey and Bunch 2021). For the CPS ASEC specifically, the Census Bureau estimates that the response rate was 61.1 percent in 2020, down from 67.6 percent in 2019 (Rothbaum 2020). Furthermore, families with higher income and more educational attainment were more likely than families with lower income and less educational attainment to respond to the 2019 CPS ASEC (Rothbaum and Bee 2020).

There were also challenges with 2020 ACS data that MACPAC typically uses to calculate state-level uninsured and non-elderly low-income rates. The 2020 ACS response rates for March through September 2020 were severely affected by the COVID-19 pandemic, and the standard 2020 ACS one-year data do not meet the Census Bureau's Statistical Data Quality Standards (Census 2021a). Instead, the Census Bureau released experimental estimates from the one-year data as a replacement for the standard estimates (Census 2021a). Due to the experimental nature of 2020 ACS data, we are using 2019 data to estimate DSH allotment

reductions, state-level uninsured rates, and statelevel non-elderly low-income rates instead of the most recent available data.

To examine any changes in the uninsured rate during the pandemic, we analyzed the Census Household Pulse Survey (HPS), a survey used to measure the social and economic effects of the pandemic on households that began collecting data on trends in April 2020. The HPS is a 20-minute survey released approximately every two weeks over several phases. Data collection for Phase 1 of the HPS began on April 23, 2020, and Phase 3.2 of the survey concluded on October 11, 2021. Due to the timing of the HPS release, our analyses for the third quarter of 2021 includes only July 2021.

There were methodological changes between Phase 1 and subsequent phases of the HPS. This resulted in significant changes in coverage and respondent characteristics between the results of Phase 1 and Phases 2 and 3 (Census 2021b). Therefore, we did not statistically compare Phase 1 data with data from other phases.

We also applied an insurance hierarchy to assign individuals to a coverage source and weighted estimates based on demographic differences (Census 2021b). The HPS insurance coverage estimates were calculated using an insurance hierarchy in the following order. Medicare; private with no Medicare; Medicaid with no Medicare or private; other type of insurance with no Medicare, private, or Medicaid; and uninsured.

Endnote

⁴⁵The American Rescue Plan Act of 2021 (ARPA, P.L. 117-2) temporarily increased FY 2022 federal DSH allotments because of the COVID-19 pandemic for the remainder of the public health emergency. ARPA increased these allotments by estimating the total amount of DSH available to states (state share and federal allotment) for FY 2022 and calculated the federal share with an enhanced 6.2 percentage point federal medical assistance percentage



(FMAP) for each state. MACPAC estimated FY 2021's non-ARPA allotment using a similar method and used these estimates to project FY 2024's DSH allotment reductions.

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Appendix



Authorizing Language (§ 1900 of the Social Security Act)

Medicaid and CHIP Payment and Access Commission

- (a) ESTABLISHMENT.—There is hereby established the Medicaid and CHIP Payment and Access Commission (in this section referred to as "MACPAC").
- (b) DUTIES.-
 - (1) REVIEW OF ACCESS POLICIES FOR ALL STATES AND ANNUAL REPORTS.—MACPAC shall—
 - (A) review policies of the Medicaid program established under this title (in this section referred to as "Medicaid") and the State Children's Health Insurance Program established under title XXI (in this section referred to as "CHIP") affecting access to covered items and services, including topics described in paragraph (2);
 - (B) make recommendations to Congress, the Secretary, and States concerning such access policies;
 - (C) by not later than March 15 of each year (beginning with 2010), submit a report to Congress containing the results of such reviews and MACPAC's recommendations concerning such policies; and
 - (D) by not later than June 15 of each year (beginning with 2010), submit a report to Congress containing an examination of issues affecting Medicaid and CHIP, including the implications of changes in health care delivery in the United States and in the market for health care services on such programs.
 - (2) SPECIFIC TOPICS TO BE REVIEWED.—Specifically, MACPAC shall review and assess the following:
 - (A) MEDICAID AND CHIP PAYMENT POLICIES.—Payment policies under Medicaid and CHIP, including—
 - 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—
 - employ and fix the compensation of an Executive Director (subject to the approval of the Comptroller General of the United States) and such other personnel as may be necessary to carry out its duties (without regard to the provisions of title 5, United States Code, governing appointments in the competitive service);
 - (2) seek such assistance and support as may be required in the performance of its duties from appropriate Federal and State departments and agencies;
 - (3) enter into contracts or make other arrangements, as may be necessary for the conduct of the work of MACPAC (without regard to section 3709 of the Revised Statutes (41 USC 5));
 - (4) make advance, progress, and other payments which relate to the work of MACPAC;
 - (5) provide transportation and subsistence for persons serving without compensation; and
 - (6) prescribe such rules and regulations as it deems necessary with respect to the internal organization and operation of MACPAC.

(e) POWERS.-

- (1) OBTAINING OFFICIAL DATA.—MACPAC may secure directly from any department or agency of the United States and, as a condition for receiving payments under sections 1903(a) and 2105(a), from any State agency responsible for administering Medicaid or CHIP, information necessary to enable it to carry out this section. Upon request of the Chairman, the head of that department or agency shall furnish that information to MACPAC on an agreed upon schedule.
- (2) DATA COLLECTION. In order to carry out its functions, MACPAC shall-
 - (A) utilize existing information, both published and unpublished, where possible, collected and assessed either by its own staff or under other arrangements made in accordance with this section;
 - (B) carry out, or award grants or contracts for, original research and experimentation, where existing information is inadequate; and
 - (C) adopt procedures allowing any interested party to submit information for MACPAC's use in making reports and recommendations.



- (3) ACCESS OF GAO TO INFORMATION.—The Comptroller General of the United States shall have unrestricted access to all deliberations, records, and nonproprietary data of MACPAC, immediately upon request.
- (4) PERIODIC AUDIT.—MACPAC shall be subject to periodic audit by the Comptroller General of the United States.

(f) FUNDING.-

- (1) REQUEST FOR APPROPRIATIONS.—MACPAC shall submit requests for appropriations (other than for fiscal year 2010) in the same manner as the Comptroller General of the United States submits requests for appropriations, but amounts appropriated for MACPAC shall be separate from amounts appropriated for the Comptroller General of the United States.
- (2) AUTHORIZATION.—There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this section.
- (3) FUNDING FOR FISCAL YEAR 2010.-
 - (A) IN GENERAL.—Out of any funds in the Treasury not otherwise appropriated, there is appropriated to MACPAC to carry out the provisions of this section for fiscal year 2010, \$9,000,000.
 - (B) TRANSFER OF FUNDS.—Notwithstanding section 2104(a)(13), from the amounts appropriated in such section for fiscal year 2010, \$2,000,000 is hereby transferred and made available in such fiscal year to MACPAC to carry out the provisions of this section.
- (4) AVAILABILITY.—Amounts made available under paragraphs (2) and (3) to MACPAC to carry out the provisions of this section shall remain available until expended.



Biographies of Commissioners

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

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

Heidi L. Allen, PhD, MSW, is an associate professor at Columbia University School of Social Work, where she studies the impact of social policies on health and financial well-being. She is a former emergency department social worker and spent several years in state health policy, examining health system redesign and public health insurance

expansions. In 2014 and 2015, she was an American Political Science Association Congressional Fellow in Health and Aging Policy. Dr. Allen is also a standing member of the National Institutes of Health's Health and Healthcare Disparities study section. Dr. Allen received her doctor of philosophy in social work and social research and a master of social work in community-based practice from Portland State University.

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

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

Martha Carter, DHSc, MBA, APRN, CNM, is an independent consultant. She is the founder and former CEO of FamilyCare Health Centers, a community health center that serves four counties in south-central West Virginia. Dr. Carter practiced as a certified nurse-midwife in Kentucky, Ohio, and West Virginia for 20 years and is a member of the



West Virginia Alliance for Creative Health Solutions, a practice-led research and advocacy network. Dr. Carter was a Robert Wood Johnson Foundation Executive Nurse Fellow in 2005–2008 and received the Robert Wood Johnson Foundation Community Health Leader award in 1999. She holds a doctorate of health sciences from A.T. Still University in Mesa, Arizona, and a master of business administration from West Virginia University.

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

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

Robert Duncan, MBA, is chief operating officer of Connecticut Children's – Hartford. Prior to this, he served as executive vice president of Children's Wisconsin, where he oversaw the strategic

contracting for systems of care, population health, and the development of value-based contracts. He was also the president of Children's Community Health Plan, which insures individuals with BadgerCare Plus coverage and those on the individual marketplace, and Children's Service Society of Wisconsin. He has served as both the director of the Tennessee Governor's Office of Children's Care Coordination and the director of the Tennessee Children's Health Insurance Program, overseeing the state's efforts to improve the health and welfare of children across Tennessee. Earlier, he held various positions with Methodist Le Bonheur Healthcare. Mr. Duncan received his master of business administration from the University of Tennessee at Martin.

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

Dennis Heaphy, MPH, MEd, MDiv, is a health justice advocate and researcher at the Massachusetts Disability Policy Consortium, a Massachusetts-based disability rights advocacy organization. He is also a dually eligible Medicaid and Medicare beneficiary enrolled in One Care, a plan operating in Massachusetts under the CMS Financial Alignment Initiative. Mr. Heaphy is engaged in activities that advance equitable whole person-centered care for beneficiaries in Massachusetts and nationally. He is cofounder of Disability Advocates Advancing Our Healthcare Rights (DAAHR), a statewide coalition in Massachusetts. DAAHR was



instrumental in advancing measurable innovations that give consumers voice in One Care. Examples include creating a consumer-led implementation council that guides the ongoing development and implementation of One Care, an independent living LTSS coordinator role on care teams, and an independent One Care ombudsman. Previously, he worked as project coordinator for the Americans with Disabilities Act for the Massachusetts Department of Public Health (MDPH) and remains active on various MDPH committees that advance health equity. In addition to policy work in Massachusetts, Mr. Heaphy is on the advisory committee of the National Center for Complex Health & Social Needs and the Founders Council of the United States of Care. He is a board member of Health Law Advocates, a Massachusetts-based nonprofit legal group representing low-income individuals. He received his master of public health and master of divinity from Boston University and master of education from Harvard University.

Verlon Johnson, MPA, is senior vice president, corporate strategy, at CNSI, a Virginia-based health information technology firm that works with state and federal agencies to design technology-driven products and solutions that improve health outcomes and reduce health care costs. Ms. Johnson previously served as an associate partner and vice president at IBM Watson Health. Before entering private industry, she was a public servant for more than 20 years, holding numerous leadership positions, including associate consortium administrator for Medicaid and CHIP at CMS, acting regional director for the U.S. Department of Health and Human Services, acting CMS deputy director for the Center for Medicaid and CHIP Services (CMCS), interim CMCS Intergovernmental and External Affairs group director, and associate regional administrator for both Medicaid and Medicare. Ms. Johnson earned a master of public administration with an emphasis on health care policy and administration from Texas Tech University.

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

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

Laura Herrera Scott, MD, MPH, was vice president of clinical strategy and product at Anthem, where she developed payer and data alignment policies to support efforts to advance population health. She has held several leadership positions in the Maryland Department of Health and Mental Hygiene and the Veterans Health Administration. Dr. Herrera Scott's work has focused on payment reform and delivery system transformation to improve health status and outcomes in underserved communities. She received her degree in medicine from SUNY Health Science Center at Brooklyn and her master of public health from the Johns Hopkins Bloomberg School of Public Health.



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



Biographies of Staff

Asmaa Albaroudi, MSG, is a senior analyst. Prior to joining MACPAC, she was a Health and Aging Policy Fellow with the House Energy and Commerce Committee's Subcommittee on Health. Ms. Albaroudi also worked as the manager of quality and policy initiatives at the National PACE Association, where she provided research and analysis on federal and state regulations. She is currently a doctoral candidate at the University of Maryland-College Park's School of Public Health, where her research centers on long-term care. Ms. Albaroudi holds a master of science in gerontology and a bachelor of science in human development and aging from the University of Southern California.

Lesley Baseman, MPH, is a senior policy analyst. Prior to joining MACPAC, she was a public health fellow for Massachusetts State Senator Jo Comerford, where she worked on the Joint Committee on COVID-19 and the Joint Committee on Public Health. Ms. Baseman also worked as a data scientist and programmer at the RAND Corporation, where she focused on policy research pertaining to access to care for the uninsured and underinsured and quality of care in the Medicare program. She holds a master of public health in health policy from the Harvard T.H. Chan School of Public Health and a bachelor of arts in economics from Carleton College.

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

James Boissonnault, MA, is the chief operating officer. He was previously MACPAC's 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.

Caroline Broder is the director of communications. Prior to joining MACPAC, she led strategic communications for Steadfast Communications, working with health policy organizations and foundations to develop and implement communications strategies to reach both the public and policymakers. She has extensive experience working with researchers across a variety of disciplines to translate and communicate information for the public. She began her career as a reporter covering health and technology issues. Ms. Broder holds a bachelor of science in journalism from Ohio University.

Sean Dunbar, MS, is a principal analyst. Prior to joining MACPAC, he was a health policy director with the Anthem Public Policy Institute, where he directed its Medicaid-focused research and data analysis. Prior to joining Anthem, Mr. Dunbar worked at the Congressional Budget Office as an expert on policy and budget issues related to the State Children's Health Insurance Program (CHIP), Medicaid long-term services and supports, and a variety of Medicaid delivery system policies. He previously worked for Public Consulting Group as a consultant to public sector health and human services agencies at the state and county levels. He holds a master of science degree in health policy and management from the Harvard T.H. Chan School of Public Health and a bachelor of arts degree in government and international relations from Clark University.



Sabrina Epstein is a research assistant. Her previous work includes conducting COVID-19 research at the Johns Hopkins Disability Health Research Center and interning in the accessibility office at the National Endowment for the Arts. She graduated from Johns Hopkins University with a bachelor of arts in public health.

Moira Forbes, MBA, is the principal policy director focusing on payment policy and the design, implementation, and effectiveness of program integrity activities in Medicaid and CHIP. Previously, she served as director of the division of health and social service programs in the Office of Executive Program Information at the U.S. Department of Health and Human Services (HHS) and as a vice president in the Medicaid practice at The Lewin Group. She has extensive experience with federal and state policy analysis, Medicaid program operations, and delivery system design. Ms. Forbes was elected to the National Academy of Social Insurance in 2019. She has a master of business administration from The George Washington University and a bachelor of arts in Russian and political science from Bryn Mawr College.

Drew Gerber is a research assistant. Prior to joining MACPAC, he consulted with the Minnesota Department of Human Services on long-term services and supports financing options, and he served as project manager for the University of Minnesota's COVID-19 modeling effort. Mr. Gerber graduated from Northwestern University with a bachelor of science in journalism and global health, and he is currently completing a master of public health in health policy at the University of Minnesota.

Martha Heberlein, MA, is the research advisor and 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.

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

Joanne Jee, MPH, is a policy director and the congressional liaison 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.

Linn Jennings, MS, is an analyst. Prior to joining MACPAC, they worked as a senior data and reporting analyst at Texas Health and Human Services in the Women, Infants, and Children program and as a budget and policy analyst at the Wisconsin Department of Health in the Division of Medicaid. They hold a master of science in population health sciences with a concentration in health services research from the University of Wisconsin, Madison, and a bachelor of arts in environmental studies from Mount Holyoke College.

Allissa Jones, MTA, is the executive assistant. Prior to joining MACPAC, Ms. Jones worked as an intern for Kaiser Permanente, where she helped coordinate health and wellness events in the Washington, DC, area. Ms. Jones holds a



master of tourism administration from The George Washington University and a bachelor of science with a concentration in health management from Howard University.

Carolyn Kaneko is the graphic designer. Prior to joining MACPAC, she was design lead at the Artist Group, handling a wide variety of marketing projects. Her experience includes managing publication projects at all stages of design production and collaborating in the development of marketing strategies. Ms. Kaneko began her career as an in-house designer for an offset print shop. She holds a bachelor of arts in art from Salisbury University with a concentration in graphic design.

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

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

Nick Ngo is the chief information officer. Prior to MACPAC, Mr. Ngo was deputy director of information resources management for the Merit Systems Protection Board, where he spent 30 years. He began his career in the federal government as a computer programmer with the U.S. Department of the Interior. Mr. Ngo graduated from George Mason University with a bachelor of science in computer science.

Audrey Nuamah, MPH, is a senior analyst focusing on health equity-related projects. Prior to joining MACPAC, Ms. Nuamah worked as a program officer at the Center for Health Care Strategies, where she worked with state agencies and provider organizations to focus on cross agency partnerships, advance health equity, and engage complex populations. Prior to that, Ms. Nuamah worked for the Commissioner of Health at the New York State Department of Health. Ms. Nuamah holds a master of public health with a concentration in health policy and management from Columbia University Mailman School of Public Health and a bachelor of arts in health and societies from the University of Pennsylvania.

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



Steve Pereyra is the financial analyst. Prior to joining MACPAC, he worked as a finance associate for the nonprofit OAR, where he handled various accounting responsibilities and administered the donations database. He graduated from Old Dominion University with a bachelor of science in business administration.

Aaron Pervin, MPH, is a senior analyst focusing on disproportionate share hospital payment policies and financing of health IT. Prior to joining MACPAC, Mr. Pervin worked for the Commonwealth of Massachusetts at the Health Policy Commission, where his work focused on increasing the prevalence of alternative payment arrangements and delivery system reform at the state level. Mr. Pervin holds a master of public health from Harvard University and a bachelor of arts in political science from Reed College.

Ken Pezzella, CGFM, is the chief financial officer. He has more than 20 years of federal financial management and accounting experience in both the public and private sectors. Mr. Pezzella also has broad operations and business experience, and is a proud veteran of the U.S. Coast Guard. He holds a bachelor of science in accounting from Strayer University and is a certified government financial manager.

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

Melinda Becker Roach, MS, is a senior analyst. Prior to joining MACPAC, Ms. Roach was a program director at the National Governors Association (NGA) Center for Best Practices, as well as NGA's legislative director for health and human services. Ms. Roach previously served as a legislative advisor on personal staff in the U.S. House of Representatives. She holds a master of science in health policy and management from the Harvard

T.H. Chan School of Public Health and a bachelor of arts in history from Duke University.

Anne L. Schwartz, PhD, is the executive director. She previously served as deputy editor at *Health Affairs*; vice president at Grantmakers In Health, a national organization providing strategic advice and educational programs for foundations and corporate giving programs working on health issues; and special assistant to the executive director and senior analyst at the Physician Payment Review Commission, a precursor to the Medicare Payment Advisory Commission. Earlier, she held positions on committee and personal staff for the U.S. House of Representatives. Dr. Schwartz earned a doctorate in health policy from the School of Hygiene and Public Health at Johns Hopkins University.

Kristal Vardaman, PhD, MSPH, is a policy director. Previously, she was a senior analyst at GAO and a consultant at Avalere Health. Dr. Vardaman earned a doctorate in public policy and administration from The George Washington University. She also holds a master of science in public health from The University of North Carolina at Chapel Hill and a bachelor of science from the University of Michigan.

Eileen Wilkie is the senior 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 of arts in political science from the University of Notre Dame.

Amy Zettle, MPP, is a senior analyst. Prior to joining MACPAC, she served as the legislative director for the Health and Human Services Committee at the NGA. Ms. Zettle has been a federal affairs director at Cigna and a health care analyst at the Potomac Research Group. Ms. Zettle holds a master of public policy from the University of Maryland and a bachelor of arts in economics from John Carroll University.





