Report to Congress on Medicaid and CHIP

JUNE 2017

MACPAC | Medicaid and CHIP Payment and Access Commission

MACPAC

About MACPAC

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

MACPAC serves as an independent source of information on Medicaid and CHIP, publishing issue briefs and data reports throughout the year to support policy analysis and program accountability. The Commission's authorizing statute, 42 U.S.C. 1396, outlines a number of areas for analysis, including:

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

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

Report to Congress on Medicaid and CHIP

JUNE 2017

MACPAC
Medicaid and CHIP Payment and Access Commission

June 15, 2017

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

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

Dear Mr. Vice President and Mr. Speaker:

On behalf of the Medicaid and CHIP Payment and Access Commission (MACPAC), I am pleased to submit the June 2017 *Report to Congress on Medicaid and CHIP*. This report examines three present-day responsibilities of the partnership between the states and the federal government: spending on Medicaid's mandatory and optional populations and services, the program's response to the opioid epidemic, and federal and state activities to ensure program integrity in Medicaid managed care.

Chapter 1 responds to a request from the chairmen of the Senate Committee on Finance, the House Energy and Commerce Committee, and the Energy and Commerce subcommittees on Health and Oversight and Investigations for an in-depth look at Medicaid coverage of optional eligibility groups and benefits and the resources associated with them.

The Commission found that in fiscal year 2013—the most recent year for which data are available—almost half of Medicaid benefit spending was on mandatory populations receiving mandatory services; less than one-third of enrollees across the country were eligible on an optional basis and less than one-third of spending was on services for them.

This analysis describes the decisions states have made within the parameters available to them. In the Commission's view, however, mandatory and optional designations are not synonymous with necessary or unnecessary, or important and less important. As noted in the committees' request letter, prescription drug coverage is optional but all states cover it because it is integral to the delivery of medical care. Similarly, home and community-based services, though optional, may help avoid or delay the need for and cost of institutional care, which is a mandatory service. Other optional services, such as behavioral therapy for substance use disorder, can reduce the need for mandatory inpatient care.

Medicaid plays a singular role in covering vulnerable populations, such as adults with physical and intellectual disabilities, people with severe mental illness and addictions, children with special health care needs, and frail elderly. These populations are covered through a mix of mandatory and optional eligibility pathways. People with disabilities account for the largest

share of optional Medicaid spending for long-term services and supports—services that other payers (including Medicare) rarely cover.

Chapter 2 describes state Medicaid programs' responses to the opioid epidemic, which disproportionately affects Medicaid beneficiaries. Adults with Medicaid coverage are prescribed pain relievers at higher rates than those with other sources of insurance. They have a higher rate of opioid use disorder than privately insured individuals and a higher risk of overdose and other negative outcomes, from both prescription opioids and illegal opioids such as heroin and illicitly manufactured fentanyl.

State Medicaid programs are responding to the opioid crisis by innovating in the delivery of care and covering many components of medication-assisted treatment, the recommended treatment for opioid use disorders under current evidence-based guidelines. But because many of these services are optional, there is considerable variation in available services across states and many Medicaid enrollees with an opioid use disorder are still not receiving treatment. States are also working with other state agencies to prevent misuse of prescription opioids. The chapter concludes by describing barriers to care.

Chapter 3 presents our in-depth examination of program integrity activities in Medicaid managed care, an important issue now that managed care is Medicaid's primary delivery system, accounting for nearly half of program spending and about 60 percent of beneficiaries in 2015. Our analysis draws on interviews with 10 states, 3 managed care organizations, and relevant federal agencies. This inquiry found that while many program integrity practices are perceived to be effective, there are few mechanisms for measuring return on investment or for sharing best practices. We also note the need for greater coordination between managed care and program integrity functions, as well as better data on managed care encounters.

Many stakeholders we interviewed believe the 2016 update to federal managed care regulations will strengthen managed care program integrity and lead to greater consistency across states. However, given that the states are still implementing major portions of the rule, it is too early to assess its ultimate effect.

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 June 15.

Sincerely,

Penny Thompson, MPA
Chair

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In addition, MACPAC would like to thank the following individuals for their generous contributions of time, expertise, and insight that were essential as MACPAC prepared the June 2017 *Report to Congress on Medicaid and CHIP*:

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Executive Summary: June 2017 Report to Congress on Medicaid and CHIP

Medicaid was established in 1965 as a partnership between the federal government and states to meet the health care needs of low-income Americans. Over more than 50 years, the program has evolved in terms of the populations it covers, the organization of its delivery systems, and in response to secular changes in the health care system and the broader society.

Originally limited to financing medical care for individuals receiving cash welfare payments, Medicaid now serves over 70 million low-income individuals, including children and their parents, pregnant women, frail elderly individuals, and people with disabilities. The changing composition of the program's beneficiaries reflects both changes in federal policy to expand eligibility as well as the actions of states to adopt new optional pathways. Similarly, the list of mandatory and optional services has evolved, reflecting changes in medical practice and the shift in long-term care from institutions to community and home-based settings.

Medicaid has also changed with the times, responding to health care emergencies and unforeseen events, as is evident from the program's role in the opioid epidemic. Changes to the delivery system, particularly substantial growth in managed care, created new challenges that require developing new approaches to program oversight and program integrity.

The June 2017 *Report to Congress on Medicaid and CHIP* focuses on three aspects of Medicaid's present-day responsibilities. Chapter 1 analyzes spending on Medicaid's mandatory and optional populations and services. Chapter 2 examines the opioid epidemic and how state Medicaid programs are responding. Chapter 3 assesses federal and state activities to ensure program integrity in Medicaid managed care.

CHAPTER 1: Mandatory and Optional Enrollees and Services in Medicaid

Chapter 1 responds to a request from the chairmen of the U.S. Senate Committee on Finance, the House Energy and Commerce Committee, and the Energy and Commerce subcommittees on Health and Oversight and Investigations. Expressing concern about Medicaid's ability to meet the future needs of beneficiaries and a desire to better understand optional coverage under Medicaid, the chairmen asked MACPAC for an in-depth look at Medicaid coverage of optional eligibility groups and benefits and the resources associated with them.

MACPAC's analysis finds that in fiscal year 2013—the most recent year for which data are available—almost half of Medicaid benefit spending was on mandatory populations receiving mandatory services, and about one-fifth of spending was for mandatory populations receiving optional services. Less than one-third of enrollees across the country were eligible on an optional basis, and less than one-third of spending was on services for them.

The largest share of both mandatory and optional spending was for people eligible on the basis of disability. Most spending on mandatory services for this population was for acute care, reflecting the high health needs of these enrollees. Most spending on optional services for this population was for long-term services and supports (LTSS), highlighting Medicaid's unique role as the largest payer of LTSS nationally as these services are rarely covered by other types of insurance, including Medicare.

The distribution of mandatory and optional enrollment and spending varies considerably across states, reflecting state decisions about the health needs of residents, the cost of paying for care, and other policy goals. For example, in Vermont, about 35 percent of enrollees were mandatory, while about 96 percent of enrollees

were mandatory in Nevada. The share of Medicaid spending on mandatory populations receiving mandatory services ranged from a high of 74 percent in Arizona to a low of 27 percent in North Dakota.

This analysis describes the decisions states have made within the parameters available to them. In the Commission's view, however, mandatory and optional designations are not synonymous with necessary or unnecessary, or important and less important. As noted in the committees' request letter, prescription drug coverage is optional but all states cover it because it is integral to the delivery of medical care. Similarly, home- and community-based services, though optional, may help avoid or delay the need for and cost of institutional care, which is a mandatory service. Other optional services such as behavioral therapy for substance use disorder can reduce the need for mandatory inpatient care.

Medicaid plays a singular role in covering vulnerable populations such as adults with physical and intellectual disabilities, people with severe mental illness and addictions, children with special health care needs, and frail elderly. These populations are covered through a mix of mandatory and optional eligibility pathways.

CHAPTER 2: Medicaid and the Opioid Epidemic

Chapter 2 describes the nationwide opioid epidemic and how state Medicaid programs are responding. The epidemic disproportionately affects Medicaid beneficiaries. For example, adults with Medicaid coverage are prescribed pain relievers at higher rates than those with other sources of insurance. They also have a higher rate of opioid use disorder than privately insured individuals, and a higher risk of overdose and other negative outcomes from both prescription opioids and illegal opioids such as heroin and illicitly manufactured fentanyl.

Medicaid beneficiaries receive inpatient and outpatient treatment at higher rates than people who are privately insured. For example, adults with an opioid use disorder and with Medicaid coverage are about three times more likely than privately insured adults to be admitted to a hospital for treatment or to receive treatment in a residential facility; they also are almost twice as likely as privately insured adults to receive outpatient care from a mental health center. Even so, there is more work to be done. Only about 32 percent of Medicaid enrollees with an opioid use disorder were receiving treatment in 2015.

State Medicaid programs are responding to the crisis by innovating in the delivery of care and covering many components of medication-assisted treatment (MAT), the recommended treatment for opioid use disorders under current evidence-based guidelines. States are using several legal authorities, including Section 1115 waivers, the health homes option, and the rehabilitation option to expand both the availability of treatment and the number of individuals eligible for such care, as well as to better organize and integrate physical health and substance use disorder delivery systems. But because many of these services are optional, there is considerable variation in available services across states. States are also focused on identifying opioid overprescribing to prevent the development of opioid use disorders. Approaches include the use of prescription drug monitoring programs, patient review and restriction programs, drug utilization reviews, and utilization management techniques.

The chapter concludes by describing barriers to care. These include barriers common to Medicaid in general, including lack of providers, difficulty securing timely appointments, and lack of enabling services such as transportation and translation or interpretation services. Other barriers are unique to substance use disorders. These include the stigma of having a substance use disorder and physical and mental side effects of treatment that affect adherence and outcomes. Systems of care for substance use disorder treatment are frequently

fragmented and poorly funded, which can create poor coordination among providers and gaps in the continuum of care. In addition, many states do not cover needed services. Other significant barriers include the supply of providers able to provide medication-assisted treatment, the Medicaid payment exclusion for institutions for mental diseases, and restrictive privacy rules that prohibit sharing of patient information among providers. Recent Congressional action affecting the Medicaid expansion to the new adult group also may affect access to services for adults without other sources of insurance coverage.

CHAPTER 3: Program Integrity in Medicaid Managed Care

Chapter 3 reports on the Commission's in-depth examination of program integrity activities in Medicaid managed care. Traditionally, most states operated Medicaid on a fee-for-service basis and program integrity activities were designed for a system that enrolled and paid providers directly for individual services. Today, however, comprehensive managed care is now the primary Medicaid delivery system in 29 states, accounting for nearly half of federal and state spending on Medicaid and about 60 percent of beneficiaries. This shift has important consequences for strategies to ensure program integrity.

The Commission's analysis is based, in part, on interviews with 10 states, 3 managed care organizations, and relevant agencies within the U.S. Department of Health and Human Services. We also heard from a panel of federal and state experts at our December 2016 public meeting. This inquiry found that, although many program integrity practices are perceived to be effective, there are few mechanisms for measuring return on investment or for sharing best practices. In addition, it identified a need for states to better coordinate their managed care oversight functions and their program integrity functions, as well as to collect better data on managed care encounters. State Medicaid personnel we interviewed indicated that additional guidance, training, and tools to support information sharing would further strengthen their managed care program integrity efforts.

Many stakeholders we interviewed believe the 2016 update to federal managed care regulations will strengthen managed care program integrity and lead to greater consistency across states. However, at the time this report goes to print, the Centers for Medicare & Medicaid Services is still in the process of developing subregulatory guidance and implementing major portions of the rule, and the full effect of the new rule may not be known for several years.

Based on these findings, program integrity recommendations that the Commission made in 2012 remain relevant for managed care. That is, CMS should enhance states' abilities to detect and deter fraud and abuse by developing methods for better quantifying the effectiveness of program integrity activities, improving dissemination of best practices, and enhancing training. Looking ahead, the Commission's future work in this area may focus on how states validate encounter data for rate setting, how they can encourage managed care organizations to invest in prepayment auditing, and how states and plans can better share provider screening data and measure the effectiveness of specific program integrity practices. The Commission also may consider how well current program integrity rules apply to managed LTSS as well as to new value-based purchasing models, including accountable care organizations.

Chapter 1:

Mandatory and Optional Enrollees and Services in Medicaid

Mandatory and Optional Enrollees and Services in Medicaid

Key Points

- Medicaid is a partnership between the federal government and states. Federal requirements mandate coverage of certain populations and benefits. Within these parameters, states create policy regarding many other program features, including which optional eligibility pathways and services to cover. State decisions reflect the health needs of residents, the cost of paying for care, and other policy goals.
- At the request of the chairmen of MACPAC's congressional committees of jurisdiction, this chapter examines Medicaid enrollment of and spending on mandatory and optional populations and services.
- Consistent with previous studies, our analysis finds that, in fiscal year 2013, seven in ten enrollees were mandatory. The largest share of mandatory enrollees were children living in families with low incomes.
- The share of individuals enrolled under mandatory and optional pathways varies by eligibility group. For example, the vast majority of child enrollees were mandatory, while slightly more than half of adults eligible on a basis other than disability were optional.
- Slightly less than half (47.4 percent) of Medicaid benefit spending was for mandatory populations receiving mandatory services and 21.1 percent was for mandatory populations receiving optional services. The remaining 31.5 percent of spending was for optional populations receiving mandatory or optional services.
- Nationally, the largest share of both mandatory and optional spending was for people eligible on the basis of disability. The majority of spending on their mandatory services was for acute care, reflecting their high health needs. The majority of spending on optional services for these enrollees was for long-term services and supports, which may be provided in lieu of more expensive institutional services.
- The distribution of mandatory and optional enrollment and spending varies by state, reflecting state decisions to adopt optional pathways and services and population characteristics. In Vermont, about 35 percent of enrollees were mandatory, while about 96 percent of enrollees were mandatory in Nevada. The share of Medicaid spending on mandatory populations receiving mandatory services ranged from a high of 74.1 percent in Arizona to a low of 27.1 percent in North Dakota.
- MACPAC's findings are useful in understanding how federal requirements affect state program design and how state choices affect patterns of spending. But mandatory and optional categories are more an artifact of the program's history and do not provide guidance on how to make the program more efficient or set priorities for spending.

CHAPTER 1: Mandatory and Optional Enrollees and Services in Medicaid

Since its enactment in 1965, Medicaid has been structured as a partnership between the federal and state governments. Federal law establishes broad requirements for the program, including mandated coverage of certain populations and benefits, and mechanisms for accountability for the use of federal dollars. Within these federal parameters, states make additional policy decisions regarding many program features, including determining which optional eligibility pathways and services to cover. They also administer the program on a day-to-day basis. Financing is shared, with the federal government matching state spending on allowable expenses based on a formula related to state per capita income. This division of responsibilities reflects that of the Kerr-Mills program, which previously provided federal support to states in funding health services for the indigent (Smith and Moore 2015).

Over time, Medicaid has evolved in terms of the populations and services it covers. Originally focused on financing medical care for individuals receiving cash welfare payments, the program now serves over 70 million low-income individuals, including children and their parents, pregnant women, frail elderly individuals, and people with disabilities (MACPAC 2016a). These changes reflect federal policy decisions to extend coverage to additional populations and to allow states to expand coverage to others in need. Medicaid's list of mandatory and optional benefits has also evolved, reflecting the advancement of medical care, changes in disease patterns, and the longer lifespan of people with disabilities and chronic diseases. Within the federal framework, states vary in the extent to which they have adopted eligibility pathways and optional benefits, reflecting state policy decisions related to the health needs of their residents, and the cost of paying for their care.

At the specific request of the chairmen of MACPAC's congressional committees of jurisdiction, this chapter examines Medicaid enrollment of and spending on mandatory and optional populations and services. The requesters raise concerns about the program's ability to meet the needs of beneficiaries and seek to better understand the optional eligibility groups and optional benefits covered by states and the resources associated with them.

This chapter begins by describing the federal requirements and state options for Medicaid eligibility and benefits. It then describes the congressional request that prompted this analysis. Following a brief overview of the methodology and some of its limitations, we present the detailed results of our analysis.

Briefly, consistent with previous studies, our analysis finds that in fiscal year (FY) 2013:

- Seven in ten (71.1 percent) beneficiaries were mandatory, and 28.9 percent were optional. The largest share of mandatory enrollees were children.
- The share of individuals enrolled under mandatory and optional pathways varies by eligibility group. For example, of 32.2 million child enrollees, 86.0 percent were mandatory. By contrast, slightly more than half (55.2 percent) of adults eligible on a basis other than disability were optional, including 4.6 million beneficiaries who were receiving family planning services only.
- The distribution of mandatory and optional enrollment varies by state, reflecting both state decisions to adopt optional pathways and the demographics of each state. For example, in Vermont, about one-third (34.8 percent) of enrollees were mandatory, while almost all (95.8 percent) enrollees were mandatory in Nevada. Maine had the largest

share of enrollees eligible on the basis of age and West Virginia had the largest share of enrollees eligible on the basis of disability.

- About half (47.4 percent) of Medicaid benefit spending was for mandatory populations receiving mandatory services. Approximately 21 percent of spending was for mandatory populations receiving optional services. The remaining 31.5 percent of spending was for optional populations receiving mandatory or optional services.
- Across states, the share of Medicaid spending on mandatory populations receiving mandatory services ranged from a high of 74.1 percent in Arizona to a low of 27.1 percent in North Dakota.
- Nationally, the largest share of both mandatory spending (34.1 percent) and optional spending (56.8 percent) was for people eligible on the basis of disability.
- Acute services, including inpatient hospital and physician services, accounted for the largest share of mandatory spending (40.8 percent); and long-term services and supports (LTSS) accounted for the largest share of optional spending (52.2 percent).

In the Commission's view, these findings do not provide clear direction for states or the federal government in considering how to make the program more efficient or how to set priorities for spending. Although it is useful to understand how federal requirements affect state program design as well as how states' own choices regarding eligibility and benefits affect patterns of spending, the designation of mandatory and optional categories is more an artifact of the program's history than a clear statement of value. The findings also illustrate the vital role Medicaid plays in providing services to low-income people with complex health needs who use LTSS, services rarely covered by other forms of insurance.

Background

As discussed above, federal statute and regulations mandate the coverage of certain populations and benefits and define the optional populations and services states may cover. States make policy decisions regarding their program's parameters within these federal requirements. Below we describe in detail the mandatory and optional eligibility pathways, and the distinction between mandatory and optional benefits.

Eligibility

Medicaid eligibility is typically defined in terms of both categorical eligibility (the populations covered) and financial eligibility (the income levels or thresholds at which individuals within these populations can be covered). In general, states must cover children and pregnant women up to specified income levels; parents with dependent children with incomes up to the state's 1996 Aid to Families with Dependent Children (AFDC) standards; individuals who are either elderly or disabled and receive Supplemental Security Income (SSI); and certain low-income Medicare enrollees (Table 1-1). In some cases, states have the option to cover individuals in these groups with incomes higher than the federal minimum standard. States can also extend Medicaid to other groups of people, such as those with high medical expenses.[1] (For more detail on the federal eligibility requirements and state options, see MACPAC's fact sheet: *Federal Requirements and State Options: Eligibility*.)

Historical eligibility. At enactment, Medicaid was limited to three groups of low-income individuals: families (including children, parents, and pregnant women), people age 65 and older, and people under age 65 with disabilities. Medicaid eligibility for these groups was automatically linked to eligibility for certain federal cash assistance programs. In addition to covering these three groups of mandatory categorically needy individuals, states

TABLE 1-1. Mandatory and Optional Medicaid Eligibility Groups

Mandatory eligibility groups	Optional eligibility groups
• Poverty-related infants, children, and pregnant women and deemed newborns • Low-income families (with income below the state's 1996 AFDC limit) • Families receiving transitional medical assistance • Children with Title IV-E adoption assistance, foster care, or guardianship care and children aging out of foster care • Elderly and disabled individuals receiving SSI and aged, blind, and disabled individuals in 209(b) states[1] • Certain working individuals with disabilities • Certain low-income Medicare enrollees (e.g., QMBs, SLMBs, QIs)	• Low-income children, pregnant women, and parents above federal minimum standards • Elderly and disabled individuals with incomes above federal minimum standards or who receive long-term services and supports in the community • Medically needy • Adults without dependent children[2] • HCBS and Section 1115 waiver enrollees • Enrollees covered only for specific diseases or services, such as breast and cervical cancer or family planning services

Notes: AFDC is Aid to Families with Dependent Children. SSI is Supplemental Security Income. QMB is Qualified Medicare Beneficiary. SLMB is Specified Low-Income Medicare Beneficiary. QI is Qualifying Individual. HCBS is home- and community-based services. AFDC is the cash assistance program that was replaced by Temporary Assistance to Needy Families (TANF) by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA, P.L. 104-193).

[1] Section 209(b) states can establish more restrictive criteria, both financial (such as income or assets limits) and non-financial (such as the definition of disability) criteria for determining eligibility than the SSI program. However, these criteria may not be more restrictive than those in effect in the state on January 1, 1972.

[2] Although this group is defined by statute as mandatory, the U.S. Supreme Court ruling in *National Federation of Independent Business v. Sebelius*, 132 S. Ct. 2566 (2012), effectively made coverage of the group optional for states.

Source: MACPAC, 2017, analysis of the Social Security Act and the *Code of Federal Regulations*.

could also choose to cover optional groups of medically needy individuals—those who fell within one of the population categories eligible for federal cash assistance (aged, blind or disabled, and families with dependent children) but whose higher incomes made them ineligible for such assistance. Individuals in the medically needy groups could have their medical expenses deducted from their income when determining eligibility for Medicaid.

Over the years, the direct link to cash assistance has been eliminated from some, but not all, eligibility pathways. Medicaid eligibility for individuals who receive SSI benefits and for children in Title IV-E foster care remains tied to eligibility for those programs. Eligibility for low-income families and children, however, is now based on the federal poverty level (FPL), a change resulting from the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA, P.L. 104-193).

Expanding eligibility. Federal policymakers have also expanded eligibility to individuals in certain low-income populations whose incomes are higher than those receiving cash assistance. For example, under the original statute, states were required to cover aged and blind and disabled individuals if

they received cash assistance under the existing state-based welfare system (Paradise et al. 2015). In 1972, with the enactment of the SSI program for individuals age 65 and older and people with disabilities (Social Security Amendments of 1972, P.L. 92-603), states were required to provide Medicaid to these individuals as well, raising the income eligibility threshold to approximately 74 percent FPL in most states.[2]

Additionally, between 1984 and 1990, Congress expanded Medicaid for low-income pregnant women and children, first through optional pathways and then requiring their coverage. In 1986, states were allowed to cover young children through age five and pregnant women with incomes up to 100 percent FPL (Omnibus Reconciliation Act of 1986, P.L. 99-509). In 1988, Congress required states that had not expanded optionally to phase in coverage for these pregnant women and infants (MCCA, Medicare Catastrophic Coverage Act of 1988, P.L. 100-360). In 1989, the income threshold was increased to 133 percent FPL for children under age six and pregnant women, and in 1990, Congress required states to phase in coverage for older children (age 6–18) with family incomes up to 100 percent FPL (OBRA 1989, Omnibus Reconciliation Act of 1989, P.L. 101-239; OBRA 1990, Omnibus Reconciliation Act of 1990, P.L. 101-508). In the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended), Congress made the threshold uniform across age groups, requiring coverage for children of all ages with incomes up to 133 percent FPL.

Federal law also expanded requirements for states to help low-income Medicare enrollees pay their Medicare premiums and cost-sharing obligations. In 1988, the MCCA required states to begin phasing in coverage of Medicare premiums and cost sharing for qualified Medicare beneficiaries (QMBs) with incomes up to 100 percent FPL. This was followed by the requirement to cover Medicare premiums for low-income Medicare beneficiaries with incomes between 101 and 120 percent FPL (referred to as Specified Low-Income Medicare Beneficiaries or SLMBs) under OBRA 1990.

More recently, the ACA expanded Medicaid eligibility to all adults under age 65 who are not pregnant or disabled (including parents and adults without dependent children) with incomes up to 133 percent FPL. To offset the cost to states, the federal government provided full funding for the first three years of the expansion (2014–2016). A subsequent U.S. Supreme Court ruling in June 2012, however, effectively made the expansion optional for states.[3] As of May 2017, 31 states and the District of Columbia have adopted the expansion.

Adding optional pathways. Congress has also established optional eligibility pathways which states can use to expand coverage to other groups, such as people with disabilities, specific health conditions, or particular service needs. For example, states have been given the option to cover people with disabilities who are receiving services in the community who would not otherwise be eligible or who would be eligible for Medicaid if they were in an institution (OBRA 1981, Omnibus Reconciliation Act of 1981, P.L. 97-35; ACA). In 1997, states were given the option of providing coverage to working individuals with disabilities who lost SSI as a result of their earnings (Balanced Budget Act of 1997, P.L. 105-33). Two years later, states were given authority to allow working people with disabilities to buy into Medicaid (Ticket to Work and Work Incentives Improvement Act of 1999, P.L. 106-170).

Additional options exist for serving children with disabilities. For example, the Katie Beckett option allows states to cover children under age 19 who are disabled and living at home (Tax Equity and Fiscal Responsibility Act of 1982, P.L. 97-248). The more recent option established under the Family Opportunity Act allows children with disabilities and family incomes below 300 percent FPL to buy into Medicaid (DRA, Deficit Reduction Act of 2005, P.L. 109-171).

States can also choose to cover individuals needing particular services, such as family planning services and supplies. In limited

situations, they can cover individuals with a particular diagnosis, such as breast or cervical cancer (ACA, Breast and Cervical Cancer Treatment and Prevention Act of 2000, P.L. 106-354).

States have also used Section 1115 waivers to expand coverage. For example, prior to enactment of the ACA, states could apply for a Section 1115 waiver to receive federal Medicaid funds to expand Medicaid eligibility to childless adults under age 65 who were not eligible on the basis of disability and to cover family planning services for individuals not eligible for full Medicaid benefits.

Adoption of optional eligibility pathways among states varies considerably; for a state-by-state breakdown, see Appendix 1A, Tables 1A-1 and 1A-2.

Benefits

States have considerable flexibility in the design of the benefit package for their Medicaid enrollees within federal guidelines. Certain benefits, such as inpatient and outpatient hospital services, physician services, and services at rural health clinics and federally qualified health centers (FQHCs) are mandatory under federal law, but many benefits may be provided at state option (Table 1-2). States also have the flexibility to design the scope of their benefits and how they are administered, including the delivery system and utilization management techniques, such as defining medical necessity. (For more detail on the federal benefit requirements and state options, see MACPAC's factsheet: *Federal Requirements and State Options: Benefits*.)

As the practice of medicine has evolved and the health needs of Medicaid-eligible populations have changed, Congress has added services to the Medicaid statute and provided states with the option to cover these. States have also made changes in their benefit design, for example, adopting or abolishing coverage for particular services, adjusting preferred drug lists, and establishing prior authorization requirements. These changes reflect both the needs of enrollees and state decisions regarding available resources.

Adding new benefits. New benefits have been added for a variety of reasons. For example, hospice care, an optional benefit, did not exist at the time of the program's enactment. Some of the added services, such as those received at FQHCs and freestanding birth centers, or those provided by nurse-midwives, primarily reflect an expansion of the types of providers from whom enrollees can obtain services. Others, such as home- and community-based services (HCBS) and family planning services and supplies, could initially be offered only under a waiver. Targeted case management, primary care case management, and health homes reflect a shift towards more integrated care.

Some of the most significant changes to the benefit structure reflect the shift from serving people with disabilities in institutions to serving them in community settings. In 1971, Congress established optional benefits to cover services provided in intermediate care facilities and intermediate care facilities for people with intellectual and developmental disabilities that were previously financed with state-only funds (Paradise et al. 2015). States were given a new waiver authority under Section 1915(c) to provide HCBS to individuals who would otherwise be served in an institution in 1981 (OBRA 1981). In *Olmstead v. L.C.*, 527 S. Ct. 581 (1999), the U.S. Supreme Court ruled that individuals with disabilities have the right to reside in the least restrictive environment possible, leading to an increased focus on providing HCBS (Paradise et al. 2015, HCFA 2000). Section 1915(i), established under the DRA and expanded by the ACA, allows states to offer HCBS as part of the state plan benefit package instead of through a waiver (CMS 2014a). And although coverage of HCBS benefits is optional, states must cover many of these services to meet their legal and strategic goals as they rebalance the delivery of LTSS between institutions and the community. As an example of the change, in FY 1995, less than one-fifth (18 percent) of Medicaid LTSS spending

TABLE 1-2. Mandatory and Optional Medicaid Benefits

Mandatory benefits	Optional benefits
• Inpatient hospital • Outpatient hospital • Rural health clinic • Federally qualified health center (FQHC) • Laboratory and X-ray • Nursing facility services (age 21 and older) • Family planning services and supplies • Tobacco cessation counseling and prescription drugs for pregnant women • Physician services • Nurse-midwife services • Certified pediatric and family nurse practitioner services • Freestanding birth centers • Home health • Medical transportation[1] • Early and periodic screening, diagnostic, and treatment (EPSDT) services	• Prescription drugs • Dental services • Intermediate care facilities for individuals with intellectual disabilities (ICF/ID) • Services in an institution for mental disease (IMD)[2] • Clinic services • Occupational therapy • Physical therapy • Speech, hearing, and language disorder services • Targeted case management • Prosthetic devices • Hospice services • Eyeglasses • Dentures • Other diagnostic, screening, preventive, and rehabilitative services • Respiratory care services • Home- and community-based services (HCBS, § 1915(i)) • Community supported living arrangements • Personal care services • Private duty nursing services • Primary care case management • Health homes for enrollees with chronic conditions • Other licensed practitioner services (e.g., podiatrist, optometrist) • Services for certain diseases (tuberculosis, sickle cell disease) • Chiropractic services • Program for All-Inclusive Care for the Elderly (PACE) services • Services furnished in a religious, non-medical health care institution

Notes: Although the benefit category may be covered, the amount and scope of coverage available can vary by state and plan. Benefit categories are broad and may not include coverage of specific benefits. Some benefits are available only when determined medically necessary. As such, although a benefit may be covered, this does not guarantee that an individual will be able to obtain it.

[1] Although medical transportation is not listed as a required benefit in the statute, states must ensure necessary transportation for beneficiaries to and from Medicaid-covered services (42 CFR 431.53).

[2] Services provided in an institution for mental disease are optional services that states can cover for children under age 21 or adults age 65 and older. Services provided to adults age 21–64 are not eligible for federal matching funds.

Source: MACPAC, 2017, analysis of the Social Security Act and the *Code of Federal Regulations*.

occurred in non-institutional settings; by FY 2014, the percentage had risen to more than half (Eiken et al. 2016).

Scope of coverage. When determining their benefit packages, states consider the health needs of beneficiaries and the cost of services; as a result, some optional services are covered widely, and others less so. For example, all states cover prescription drugs, reflecting the integral role of pharmaceuticals in treating and slowing the progression of disease. Coverage for other services, such as chiropractic services or health homes that coordinate care for enrollees with chronic diseases, are less common (KCMU 2014). For details on state adoption of optional benefits, see Appendix 1A, Tables 1A-3 and 1A-4.

In general, states must offer the same coverage to all enrollees (the comparability rule) and offer the same benefits throughout the state (the statewideness rule), but there are exceptions for states that implement managed care or expand HCBS in certain geographic areas. States also have flexibility in defining how much of a service an enrollee can receive. For adults, states may limit the extent to which a covered benefit is available by defining both medical necessity criteria and the amount, duration, and scope of services. As such, state coverage of a particular benefit does not guarantee that an individual will be able to obtain it. However, under the early and periodic screening, diagnostic, and treatment (EPSDT) requirements for children under age 21, states must provide any necessary service named in the Medicaid statute—including optional services not otherwise covered by the state—without caps or other limits that are unrelated to medical necessity (Box 1-1).[4]

Alternative benefit plans. As an alternative to traditional Medicaid benefits, states were given authority under the DRA to enroll state-specified groups in benchmark and benchmark-equivalent benefit packages. States can offer what are now known as alternative benefit plans (ABPs) to all enrollees and are required to enroll the new adult eligibility group covered through the ACA in ABPs. However, some groups are excluded from mandatory enrollment.[5] As of 2012, 12 states had adopted the use of ABPs in Medicaid. Most of these states used Secretary-approved coverage, typically covering the standard Medicaid benefit package, and in some cases additional services, such as chronic care management, targeted to the population enrolled in the plan (Herz 2012). Similarly, most states expanding coverage to the new adult group offer Secretary-approved benefit packages aligned with their traditional Medicaid benefit package with some modifications. For example, North Dakota's ABP offers traditional state plan benefits except that it does not include adult dental coverage (Lilienfeld 2014).

Congressional Request

The analysis presented in this chapter was requested by the chairmen of MACPAC's committees of jurisdiction in a letter dated January 11, 2017 (Appendix 1B). The letter describes Medicaid as an important safety-net program, providing health coverage and LTSS to the nation's most vulnerable patients. The requesters go on to note that growth in federal Medicaid expenditures is a major concern and as the program extends its reach, both as a result of legislative and demographic changes, they express their concern about Medicaid's ability to meet the needs of these individuals. They comment that beneficiaries already face challenges in accessing high-quality services and that additional strains to the system will further erode access and quality.

Within this context, the requesters see the need to have a better understanding of the optional eligibility groups and optional benefits that states are covering, the resources associated with these, and how state choices may be affecting spending growth. Specifically, the letter requests that MACPAC determine the following for each state:

- the intersection of the coverage of optional eligibility groups and the receipt of optional benefits for those groups to show the extent

BOX 1-1. Mandatory Coverage of Early and Periodic Screening, Diagnostic, and Treatment Services for Children under Age 21

All children under age 21 enrolled in Medicaid through the categorically needy pathway are entitled to the early and periodic screening, diagnostic, and treatment (EPSDT) benefit. The requirement to cover EPSDT services was introduced in the Social Security Act Amendments of 1967. These amendments were part of a larger package of reforms aimed at improving the availability and quality of children's health care (Rosenbaum et al. 2005). Subsequent legislative changes in the Omnibus Reconciliation Act of 1989 (OBRA 1989, P.L. 101-239) strengthened the standards for identification of children in need of screening, as well as the standards for the screening services themselves. These changes also clarified that vision, dental, and hearing services must be covered, as well as any treatments necessary to correct or ameliorate the conditions discovered during screening. Services identified as medically necessary must be covered whether or not these services are covered under the state plan. Litigation has also played a role in shaping the EPSDT benefit (Perkins 2014).

States are allowed to create some limits on services for children for the purposes of utilization management. For example, even though states may not require prior authorization for screening services, they may require prior authorization for certain treatment services. States may also base coverage decisions on the cost effectiveness of a treatment. Although a state cannot deny a medically necessary service based only on cost, it can consider cost as part of the prior authorization process, for example, approving a less-expensive, but equally effective service. However, when making these decisions, the state must also consider the child's quality of life and must meet the requirement to cover services in the most appropriate integrated setting (CMS 2014b).

States must also inform all Medicaid-eligible families about the EPSDT benefit; they must screen children at reasonable intervals, cover diagnosis and treatment for any health problems found, and report certain data regarding EPSDT participation annually to the Centers for Medicare & Medicaid Services.

to which, for example, optional populations in [a] given state are receiving optional benefits;

- the number of people covered by each state who qualify for Medicaid through an optional eligibility category; and
- the federal and state expenditures for each category of (a) optional populations and (b) optional benefits in each state.

The letter requests that the analysis be completed within six months, or by July 11, 2017. MACPAC issued a response to this letter on January 23, 2017, stating that the analysis would be completed within the time frame requested.[6]

Methodology and Limitations

Building on prior analyses, MACPAC examined enrollment and spending for mandatory and optional individuals and services using Medicaid Statistical Information System (MSIS) and CMS-64 data for FY 2013, the most recent year for which such data are available (Courtot et al. 2012).[7] Because these data sources do not specifically

identify individuals and services as mandatory or optional, MACPAC determined the mandatory and optional status based upon a review of the statutory and regulatory citations in comparison with the MSIS data dictionary definitions.

Note that in our determinations of whether an individual or service is mandatory or optional, we refer only to the federal requirements, and do not attempt to take into account state-specific requirements, such as state-mandated benefits or consent decrees that require coverage of certain benefits. Neither do we account for state variations in the breadth of coverage, such as amount, duration, and scope. To the greatest extent possible, this analysis reflects assumptions and adjustments that MACPAC routinely makes in MACStats and outlined in its technical guide.

Appendix 1C provides additional details on the methodology and limitations.

Classification of enrollees

We retained Medicaid's eligibility categories (i.e., aged, blind or disabled, adult, child), but classified individuals within each category as mandatory or optional based on their maintenance assistance status (MAS) and basis of eligibility (BOE) designations in MSIS. This approach resulted in each individual being assigned to one of the following classifications: mandatory aged, optional aged, mandatory blind or disabled, optional blind or disabled, mandatory adult, optional adult, mandatory child, or optional child.

As discussed in more detail in Appendix 1-C, some of the MSIS-defined MAS/BOE groups contain multiple eligibility pathways that can all be identified as either mandatory or optional, while other groups include both mandatory and optional eligibility pathways. For the MAS/BOE groups with uniform or almost uniform eligibility pathways, all enrollees were categorized as either mandatory or optional; for MAS/BOE groups with mixed eligibility pathways, enrollees were divided between mandatory and optional based on certain assumptions. For example, children were randomly assigned by age to either mandatory or optional status based on the share of children within their state in families with incomes at or below the federal minimum standard and those with family incomes above the federal minimum standard but below the state eligibility threshold for 2013.

Because our analysis is based on data from FY 2013, we are not able to analyze spending or enrollment for the new adult group established by the ACA. As noted above, this group is mandatory under the statute, but was effectively made optional by a 2012 U.S. Supreme Court decision.

Classification of services

Services were classified as mandatory or optional using the MSIS code for the type of service. Spending that was not directly related to Medicaid services (including supplemental payments and payments under Section 1115 waivers for costs not otherwise matchable) was classified separately using CMS-64 data. Almost all services for children, including those received through managed care, were considered mandatory because of the EPSDT requirement; services received by children under HCBS waivers were considered optional.

Classification of managed care expenditures

MSIS includes records of each capitated payment made on behalf of an enrollee to a managed care plan, as well as records of each service received by the enrollee from a provider under contract with a managed care plan (also referred to as encounter data). Because the amount paid by the managed care plan for a specific service is not available from the encounter data in MSIS, we had to make an assumption about the distribution of managed care spending on mandatory and optional services. We assumed that it would mirror the distribution of spending in fee-for-service (FFS) arrangements at the state and eligibility group (e.g., adults) level. For states where the managed care penetration rate for

a particular group exceeded 75 percent, we applied the national distribution of mandatory and optional FFS spending.

For most enrollees, all services received through managed care were assumed to be acute care services. However, in states with a large proportion of LTSS users in managed LTSS (MLTSS), the proportions of FFS spending used to determine the proportion of mandatory and optional managed care spending for the aged and blind or disabled groups included both acute and LTSS spending. Capitation payments also include an amount to cover plans' administrative costs. These costs would be apportioned as mandatory or optional in the same manner as other services received under managed care. Additionally, prescription drug rebates that were collected on managed care utilization were also allocated to managed care expenditures and apportioned as mandatory or optional in the same manner as other services.

Limitations

MACPAC has described the limitations associated with administrative data, including their timeliness and accuracy, in several prior reports (MACPAC 2013, 2011). In addition, as these data were not designed to identify the mandatory or optional status of enrollees and services, we had to make a number of assumptions. Despite these limitations, there is not an alternative source for this analysis. In this study, some constraints regarding this classification, and the approach taken to account for these constraints, are particularly worth noting.

Level of specificity regarding enrollees' eligibility pathways. As discussed above, MACPAC classified individuals as mandatory or optional enrollees using a combination of MAS and BOE designations. Each MAS/BOE combination contains multiple eligibility pathways, some of which are mandatory and some optional. However, there is no way to associate an individual with a specific eligibility pathway under a MAS/BOE combination in MSIS. As a result, this analysis makes several assumptions about the distribution of enrollees within these MAS/BOE groups, and altering these assumptions could lead to different results. A new version of the MSIS, referred to as the transformed MSIS (T-MSIS), will include more granular information on eligibility, including whether the eligibility pathway is mandatory or optional. At this time, however, states are still in the process of transitioning to T-MSIS reporting and such data could not be used for this analysis.

Limited encounter data for managed care enrollees. As discussed above, because the amount paid by the managed care plan for a specific service is not available from the encounter data, assumptions must be made regarding how much spending under managed care was for mandatory and how much was for optional services. As noted above, we assumed that the distribution of managed care spending on mandatory and optional services mirrored the distribution of spending in FFS arrangements at an eligibility group and state level. However, it is possible that due to differences in populations covered and services provided in managed care, the FFS proportions are not an accurate model for the distribution of mandatory and optional spending under managed care. On the other hand, while there may be a shift in the type of service received under a managed care arrangement relative to FFS, for example from inpatient hospital to physician services, that does not necessarily result in a shift in the share of mandatory and optional spending, because both of these services would be considered mandatory. This analysis attempts to account for this variation by applying the FFS distribution by population and by factoring in state-level penetration of managed care, including MLTSS.

Data cannot take into account the substitution of services. Some optional services are provided in lieu of other services. As an example, many home- and community-based services are optional. However, were these services not covered, some individuals would require mandatory services in an institution. This would result in an increase in the share of mandatory spending and could also

increase the level of spending. The analysis also cannot project how service use and spending would change in response to changes in covered benefits.

Given the complexity of the analysis, we requested feedback on our methods from a number of experts. We modified some of our original assumptions based on this input. Even with such changes, the experts we consulted pointed out some of the same limitations identified by the Commission and confirmed that our assumptions were reasonable.

Results

Overall, the findings show that approximately 70 percent of enrollees were mandatory, and almost half of benefit spending was on mandatory services for these enrollees. Less than one-third of enrollees were eligible on an optional basis, and less than one-third of spending was on services to them. This division reflects federal and state policy decisions as well as the characteristics of state populations and health care markets, as discussed in more detail below.

In FY 2013, children comprised the largest population enrolled in Medicaid, illustrating the dominant role that Medicaid plays in providing coverage to the majority of low-income children (MACPAC 2016b). The largest share of spending was for people with disabilities, despite the fact that they made up a smaller share of enrollment. This highlights the unique position of Medicaid as the largest payer nationally of LTSS (MACPAC 2016c).

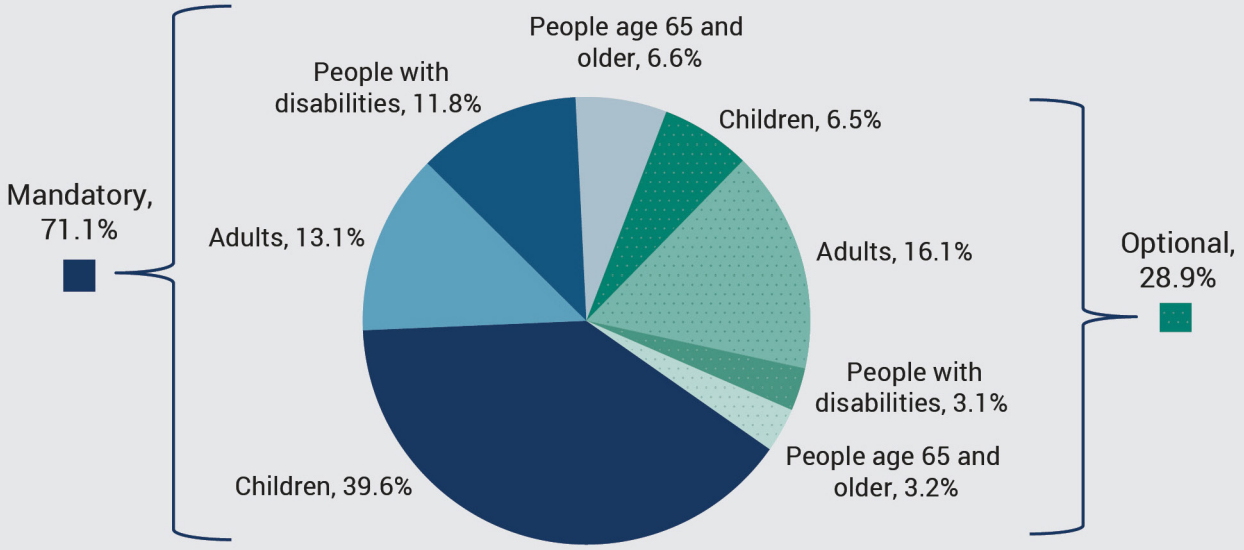
Enrollment of mandatory and optional populations

In 2013, 71.1 percent of Medicaid enrollees were mandatory, and 28.9 percent of enrollees were optional (Figure 1-1). The largest share of mandatory enrollees were children (39.6 percent), followed by adults, including pregnant women and parents (13.1 percent), then people eligible on the basis of disability (11.8 percent), and people over age 65 (6.6 percent). Adults made up the largest share of optional enrollees (16.1 percent), followed by children (6.5 percent). People eligible on the basis of disability (3.1 percent) and people age 65 and older (3.2 percent) made up relatively equal shares of optional enrollees.

Enrollment by population. The number of enrollees eligible under mandatory and optional pathways varied by eligibility group (Figure 1-2). As discussed above, to be eligible for Medicaid through a mandatory pathway, an individual must be eligible on a categorical basis and have income (and in some cases, assets) below an established threshold.

- Overall, 32.2 million (46.1 percent) enrollees were children, the vast majority (86.0 percent) of whom were mandatory.[8] These mandatory children live in families with low incomes—up to 133 percent FPL for young children (through age five) and up to 100 percent FPL for older children (age 6–18).[9]
- Adults eligible on a basis other than disability, including pregnant women and parents, together numbering 20.4 million, represented about 30 percent of enrollees overall. Approximately 55 percent of adult enrollees were optional. In addition, a large share (40.9 percent or 4.6 million) of these optional adult beneficiaries were receiving family planning services only (Box 1-2).
- Fifteen percent (10.4 million) of enrollees were people eligible on the basis of disability. Almost 80 percent of these enrollees were mandatory, including those who receive SSI payments based on their low incomes (approximately 74 percent of FPL), as well as some who are working. Optional enrollees in this eligibility category include those who have slightly higher incomes (less than or equal to 100 percent FPL for non-working individuals,

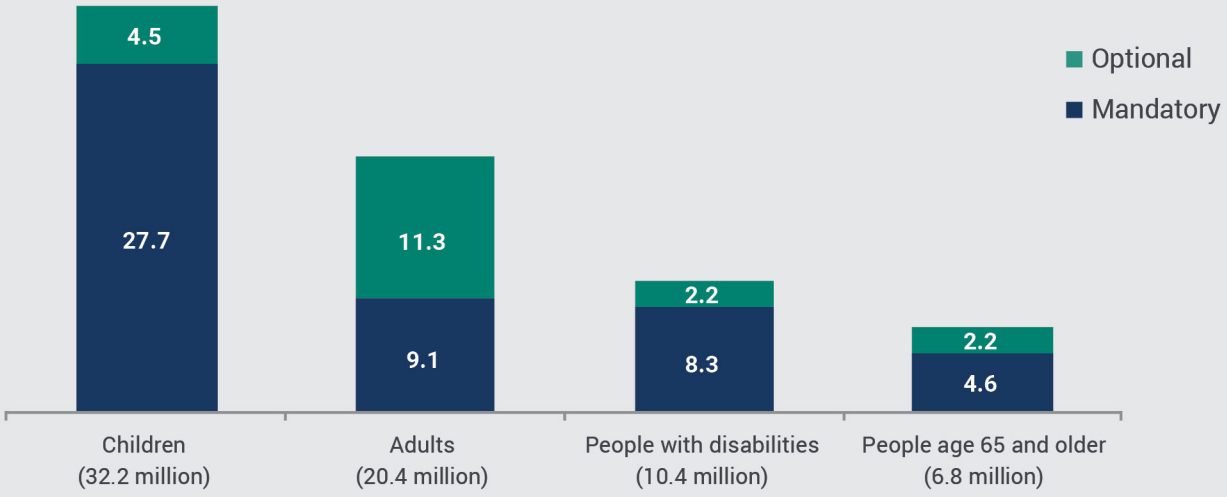
FIGURE 1-1. Share of Mandatory and Optional Medicaid Enrollees by Eligibility Group, FY 2013



Notes: FY is fiscal year. Excludes approximately 3,000 children who could not be classified as mandatory or optional due to missing information. Excludes Idaho, Louisiana, and Rhode Island due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

Source: MACPAC, 2017, analysis of Medicaid Statistical Information System (MSIS) data as of December 2015.

FIGURE 1-2. Number of Mandatory and Optional Medicaid Enrollees by Eligibility Group, FY 2013 (millions)



Notes: FY is fiscal year. Excludes approximately 3,000 children who could not be classified as mandatory or optional due to missing information. Excludes Idaho, Louisiana, and Rhode Island due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

Source: MACPAC, 2017, analysis of Medicaid Statistical Information System (MSIS) data as of December 2015.

BOX 1-2. Medicaid Eligibility for Adults

Prior to passage of the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended), the only adults under age 65 eligible to receive Medicaid benefits, aside from those eligible on the basis of disability, were low-income pregnant women and parents. Specifically, states are required to cover pregnant women with incomes up to 133 percent of the federal poverty level (FPL). Parents and caretaker relatives with dependent children are also eligible for Medicaid, although often at much lower income thresholds, which typically are tied to historical eligibility standards for cash assistance.

As a result, non-disabled adults without dependent children were generally excluded from Medicaid unless the state covered them under a Section 1115 waiver. A number of states also used Section 1115 waivers to cover family planning services and supplies for adults who would not otherwise qualify for Medicaid.

The ACA expanded Medicaid eligibility to all adults under age 65 (including parents and adults without dependent children) with incomes up to 133 percent FPL. However, the U.S. Supreme Court ruling in *National Federation of Independent Business v. Sebelius*, 132 S. Ct. 2566 (2012), effectively made the expansion optional for states. As of May 2017, 31 states and the District of Columbia have chosen to adopt the adult expansion. However, because the data presented here are from fiscal year 2013, they do not reflect changes in enrollment composition as a result of implementation of the ACA.

perhaps more for those who have jobs) and those receiving HCBS.

- Approximately 10 percent (6.8 million) of enrollees were people age 65 and older. Almost seven in ten (67.5 percent) were eligible under a mandatory pathway. Similar to people eligible on the basis of disability, individuals age 65 and older are mandatory if they qualify for SSI. Optional enrollees in this group include those with incomes less than or equal to 100 percent FPL and individuals receiving HCBS, who would not otherwise be eligible.

There were approximately 10.7 million people dually eligible for Medicaid and Medicare in FY 2013, distributed across the eligibility groups of people eligible on the basis of disability and those age 65 and older (not shown in Figure 1-2).[10] Of these, approximately 70 percent were mandatory. Included in this 70 percent are 2.9 million so-called partial duals—dually eligible beneficiaries who receive assistance with Medicare premiums and cost sharing through the Medicare Savings Programs (MSPs) but who are not eligible for full Medicaid benefits. The balance of mandatory beneficiaries comprised 4.6 million dually eligible beneficiaries eligible for full Medicaid benefits through a mandatory pathway, who may or may not receive assistance through the MSPs.

It is important to note that because FY 2013 is the most recent year for which complete data are available, these figures do not reflect changes in enrollment composition as a result of the ACA Medicaid expansion to the new adult group. Post-ACA implementation data from MSIS are not yet available, but data from CMS-64 reports show that in FY 2015, there were 11.8 million enrollees in the new adult group and spending for this group totaled $75 billion (MACPAC 2017).[11] As noted previously, this population is mandatory under the

statute; however, a 2012 U.S. Supreme Court ruling effectively made their coverage optional.

Considerable enrollment in the new adult group since the ACA was implemented has likely added to the number of optional enrollees in states adopting the expansion. On the other hand, the ACA also resulted in increased enrollment among already eligible mandatory and optional populations (often referred to as the woodwork or welcome mat effect). The available data cannot provide information on how the distribution of mandatory and optional enrollment may have shifted as a result of these increases. Furthermore, we do not have details on the utilization of services by enrollees in the new adult group to analyze the composition of mandatory and optional services.

Enrollment by state. The distribution of mandatory and optional enrollment varies by state, reflecting both state decisions to adopt optional pathways and the demographics and income of each state. (State-by-state enrollment data are presented in Appendix 1A, Table 1A-5.) For example, in Vermont, 34.8 percent of enrollees were mandatory, compared to 95.8 percent in Nevada. The share of enrollees in each eligibility group also differed—Maine had the largest share (16.9 percent) of enrollees eligible on the basis of age and West Virginia had the largest share (28.3 percent) of enrollees eligible on the basis of disability.

Spending on mandatory and optional populations and services

In FY 2013, federal and state Medicaid spending totaled $401 billion.[12] Nationally, almost half (47.4 percent, $190.1 billion) of this spending was for mandatory populations receiving mandatory services (Table 1-3). Approximately 21 percent of spending ($84.6 billion) was for optional services for mandatory populations. The remaining 31.5 percent of spending was for optional populations, and was about evenly split between spending on mandatory and optional services.

Spending by population. Spending on enrollees eligible on the basis of disability comprised the largest share of spending overall (42.4 percent, $170.2 billion). This was followed by spending on those age 65 and older (23.1 percent), children (19.0 percent), and adults (15.5 percent). Spending for mandatory and optional enrollees and services varied by eligibility group, although people eligible on the basis of disability also accounted for the largest share of mandatory spending (34.1 percent, $86.6 billion) and optional spending (56.8 percent, $83.5 billion) (Figure 1-3).

TABLE 1-3. Medicaid Spending on Mandatory and Optional Populations and Services, FY 2013 (billions)

Mandatory enrollment and mandatory services		Mandatory enrollment and optional services		Optional enrollment and mandatory services		Optional enrollment and optional services	
Dollars	Percent	Dollars	Percent	Dollars	Percent	Dollars	Percent
$190.1	47.4%	$84.6	21.1%	$64.2	16.0%	$62.3	15.5%

Notes: FY is fiscal year. Medicare premiums are not reported in the Medicaid Statistical Information System (MSIS). The Medicare premium amounts reported in CMS-64 reports are distributed proportionately across dually eligible beneficiaries identified in the MSIS for each state. As such, Medicare premiums are included in the total spending and are considered to be mandatory. In FY 2013, spending on Medicare premiums totaled $13.4 billion. Medicare coinsurance and deductibles are reported under individual service types throughout the MSIS and are therefore included in mandatory and optional spending when examined by service type. Excludes $2.3 million in spending associated with the approximately 3,000 children who could not be classified as mandatory or optional. Excludes Idaho, Louisiana, and Rhode Island due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

Source: MACPAC, 2017, analysis of MSIS data as of December 2015 and analysis of CMS-64 Financial Management Report net expenditure data from the Centers for Medicare & Medicaid Services as of June 2016.

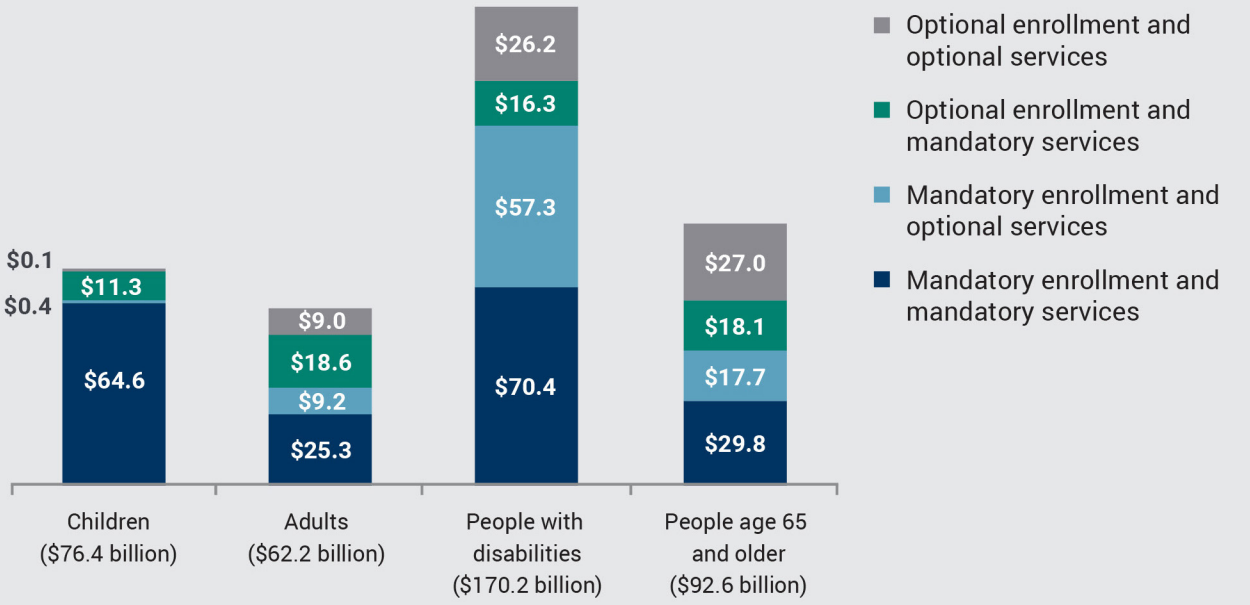
- Almost all spending on children (99.3 percent), regardless of mandatory or optional enrollment status, was mandatory because of the requirement to cover EPSDT services. Approximately $530 million was spent on optional services for children, primarily on services provided through HCBS waivers, most of this on mandatory enrollees.
- Just over half (55.6 percent) of all spending on adults was for those enrolled through a mandatory eligibility pathway. Spending for adults was more likely to be for mandatory services than for optional services, regardless of enrollment status. Specifically, for those enrolled on a mandatory basis, 73.4 percent of spending was for mandatory services; for those enrolled on an optional basis, 67.3 percent of spending was for mandatory services. This is likely the case because adults may be more likely to use mandatory services. For example, pregnant women are likely to use inpatient hospital and physician services, both mandatory services.
- The majority (75.0 percent) of spending for people eligible on the basis of disability was for those enrolled on a mandatory basis. For these individuals, spending on mandatory (55.1 percent) and optional (44.9 percent) services was more evenly divided. Spending for optional beneficiaries eligible on the basis of disability, however, was more likely to be on optional services (61.6 percent) than mandatory services (38.4 percent). The use of optional services, such as HCBS, physical therapy, or community supported living arrangements, may be more common among individuals with disabilities enrolled through optional pathways, which likely explains why the distribution skews toward optional services.
- Approximately half (51.4 percent) of spending for people age 65 and older was for those enrolled under a mandatory eligibility pathway. Spending on services for mandatory enrollees age 65 and older was higher for mandatory services (62.7 percent) than for optional services (37.3 percent). The opposite was true for optional enrollees—optional spending made up the majority (59.9 percent) of spending. This may reflect the higher use of nursing facility care (a mandatory service) for mandatory enrollees age 65 and older, as well as the shift to provide HCBS to optional individuals who would otherwise be ineligible for coverage.[13]

Overall, $143.3 billion was spent on dually eligible individuals in FY 2013 and just over half (53.7 percent) was spent on those whose eligibility was mandatory.[14] As noted above, these individuals were distributed across the eligibility groups of people eligible on the basis of disability and those age 65 and older.

Spending by service. In terms of mandatory and optional spending by type of service, the majority (40.8 percent) of mandatory spending was for acute services, including inpatient hospital and physician services; over one-third (37.0 percent) of mandatory spending was for managed care; and 16.9 percent was for mandatory LTSS. The majority (52.2 percent) of optional spending was for LTSS. Spending on optional managed care represented 27.2 percent of optional spending, followed by spending on optional acute services (20.6 percent). Included in acute spending, spending on FFS prescription drugs accounted for just 2.0 percent of overall spending. For adults, people eligible on the basis of disability, and people age 65 and older, where drug spending is optional, FFS spending on prescription drugs accounted for about 3.4 percent of optional spending.[15]

Overall, people eligible on the basis of disability and people age 65 and older accounted for almost all (98.0 percent) spending on LTSS. However, much of this spending was optional—about half of LTSS spending for people age 65 and older was mandatory, and just 21.0 percent of LTSS for people eligible on the basis of disability was mandatory. As discussed above, this use of optional HCBS

FIGURE 1-3. Medicaid Spending on Mandatory and Optional Populations and Services by Eligibility Group, FY 2013 (billions)



Notes: FY is fiscal year. Medicare premiums are not reported in the Medicaid Statistical Information System (MSIS). The Medicare premium amounts reported in CMS-64 reports are distributed proportionately across dually eligible beneficiaries identified in the MSIS for each state. As such, Medicare premiums are included in the total spending and are considered to be mandatory. Medicare coinsurance and deductibles are reported under individual service types throughout the MSIS and are therefore included in mandatory and optional spending when examined by service type. Excludes $2.3 million in spending associated with the approximately 3,000 children who could not be classified as mandatory or optional. Includes federal and state spending. Excludes Idaho, Louisiana, and Rhode Island due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

Source: MACPAC, 2017, analysis of MSIS data as of December 2015 and analysis of CMS-64 Financial Management Report net expenditure data from the Centers for Medicare & Medicaid Services as of June 2016.

may be in lieu of services received in institutions. People eligible on the basis of disability also accounted for the largest share (44.4 percent) of spending on acute care and the largest share (33.7 percent) of spending on managed care payments. This is likely because they have higher needs and higher service use, and not because they are enrolled in managed care in greater numbers.

Spending by service type varied across the enrollee populations, but did not vary based on mandatory or optional status (Table 1-4). As noted above, the vast majority of services for children are mandatory because of requirements to cover EPSDT services, including 100 percent of non-waiver acute care services and managed care capitation payments. For both mandatory and optional populations of children, spending on mandatory services was about evenly split between acute services and managed care, with little spent on mandatory LTSS. All of the optional spending for children was for services provided through HCBS waivers.[16] As with children, spending on mandatory services for adults was about evenly split between acute services and managed care, regardless of mandatory or optional enrollment status.

On the other hand, the majority of spending on mandatory services for people eligible on the basis of disability was for acute services and the majority of spending on optional services was for LTSS, regardless of enrollment status. For those age 65 and older, the majority of both mandatory and optional spending was for LTSS—most likely for nursing facilities and HCBS.

Spending by state. Across states, the share of spending on mandatory populations receiving mandatory services ranged from a high of 74.1 percent in Arizona to a low of 27.1 percent in North Dakota. Spending on optional services for mandatory enrollees ranged from 5.4 percent in Arizona to 39.0 percent in Tennessee. Spending on optional enrollees had similar ranges; New Hampshire had the largest share (31.1 percent) of spending on mandatory services for optional enrollees and North Dakota had the largest share (48.2 percent) of spending on optional services for optional enrollees. (State-by-state spending data are presented in Appendix 1A, Table 1A-6.) Similar to the variation seen in enrollment, these differences in spending reflect state choices and the demographic and health status characteristics of state residents. They also reflect differences in provider payment policies as well as geographic differences in the cost of medical care.

Overall, the results from this study mirror those of an earlier analysis by the Kaiser Commission on Medicaid and the Uninsured (KCMU) and the Urban Institute, which found that in 2007, 70 percent of

TABLE 1-4. Medicaid Spending on Mandatory and Optional Services by Enrollment Status and Eligibility Group, FY 2013

Enrollment status	Mandatory services					Optional services			
	Total	Managed care	Acute services	LTSS	Medicare premiums	Total	Managed care	Acute services	LTSS
Mandatory	**$190.1**	**38.9%**	**42.3%**	**13.8%**	**5.0%**	**$84.6**	**30.9%**	**20.3%**	**48.8%**
Children	**64.6**	54.6	43.7	1.7	0.0	**0.4**	0.4	–	99.6
Adults	**25.3**	45.5	53.7	0.3	0.5	**9.2**	68.6	30.4	1.0
People with disabilities	**70.4**	33.0	48.6	13.2	5.3	**57.3**	26.2	20.0	53.8
People age 65 and older	**29.8**	13.5	14.8	52.9	18.8	**17.7**	27.4	16.6	56.0
Optional	**$64.2**	**31.5%**	**36.3%**	**26.0%**	**6.2%**	**$62.3**	**22.2%**	**21.0%**	**56.8%**
Children	**11.3**	46.7	49.7	3.5	0.0	**0.1**	1.0	–	99.0
Adults	**18.6**	50.6	48.5	0.5	0.4	**9.0**	63.6	35.6	0.9
People with disabilities	**16.3**	23.9	46.0	20.8	9.3	**26.2**	12.2	24.1	63.7
People age 65 and older	**18.1**	9.3	6.6	70.9	13.2	**27.0**	18.2	13.2	68.6

Notes: FY is fiscal year. LTSS is long-term services and supports. Medicare premiums are not reported in the Medicaid Statistical Information System (MSIS). The Medicare premium amounts reported in CMS-64 reports are distributed proportionately across dually eligible beneficiaries identified in the MSIS for each state. As such, Medicare premiums are included in the total spending and are considered to be mandatory, but not in the distribution by service type. Medicare coinsurance and deductibles are reported under individual service types throughout the MSIS and are therefore included in mandatory and optional spending when examined by service type. Excludes $2.3 million in spending associated with the approximately 3,000 children who could not be classified as mandatory or optional. Includes federal and state spending. Excludes Idaho, Louisiana, and Rhode Island due to data reliability concerns regarding the completeness of monthly claims and enrollment data.

Dash (–) indicates zero; 0.0 percent indicates a value less than 0.05 percent that rounds to zero.

Source: MACPAC, 2017, analysis of MSIS data as of December 2015 and analysis of CMS-64 Financial Management Report net expenditure data from the Centers for Medicare & Medicaid Services as of June 2016.

enrollees were mandatory (Courtot et al. 2012). That study found that 40 percent of spending was for mandatory services for these mandatory enrollees, somewhat lower than our finding of 47 percent.[17]

Discussion

These findings show that almost half of total federal and state Medicaid spending is on mandatory services for mandatory enrollees. Mandatory coverage requirements, whether defined in terms of enrollee populations or services, reflect a set of decisions made by Congress over time regarding the core features of the program that must be implemented by every state. These include providing services to ensure the healthy growth and development of low-income children, to ensure that low-income pregnant women receive adequate prenatal care, and to improve access to care.

A significant amount (about one-third) of spending is on optional enrollees; that spending is about evenly split between mandatory and optional services. Like many other aspects of the Medicaid program, states vary considerably in the optional populations and the optional benefits they cover and the amount of spending attributable to each. These variations reflect both deliberate state choices when considering the health needs of their residents and the cost of paying for their care. For example, states consider the budgetary impact when expanding coverage to an optional population, including the costs of providing benefits and the number of people who may be eligible. In addition, they consider other policy goals, such as reducing the number of uninsured residents or the desire to ensure access to particular services, such as family planning. Similar to eligibility decisions, state adoption of optional services reflects multiple considerations, including the needs of the populations, the appropriate services to meet these needs, and the costs—both for the optional service and for the service it may be replacing. For example, as discussed above, providing HCBS, an optional benefit, may be less costly than providing mandatory services in an institution. State decisions to adopt certain benefits also vary over time; for example, states change Medicaid coverage of adult dental benefits on a regular basis, cutting these benefits when budgets are tight and expanding them when more funds are available (MACPAC 2015). By contrast, states are less likely to cut optional eligibility pathways once they have been introduced (MACPAC 2016d). Variations across states also reflect demographic and economic factors beyond Medicaid, such as the age of state residents, the underlying cost of medical care, and the health care infrastructure in the state. A deeper analysis of these state choices and their relationship to spending is beyond the scope of this analysis.

Although this analysis gives a sense of the scope and scale of how federal requirements affect states and how states exercise flexibility, it does not provide a clear picture of what should be considered fundamental and what might be considered useful but not necessary. With respect to benefits, for example, some of the optional services exist to encourage use of a more efficient setting or approach to meeting the needs of some beneficiaries, as in the HCBS example discussed previously. Other optional services, such as prescription drugs, are now integral to the practice of medical care and are needed to avoid other costs associated with conditions that can be treated pharmaceutically. In addition, some services are substitutes for each other; for example, coverage of behavioral therapy for someone with mental illness or a substance use disorder (which would be an optional service) may reduce the need for hospitalization (which would be a mandatory service).

In short, the statutory structure of mandatory and optional benefits and eligibility is not particularly useful in drawing conclusions about who is most in need and the necessity of certain kinds of care.

In thinking about Medicaid's role and the future direction of the program, it is also important

to consider the consequences of eliminating optional benefits and pathways. Medicaid plays a singular role in the U.S. health system in several key respects, including coverage of LTSS for frail elderly, adults with physical and intellectual disabilities, people with severe mental illness and addictions, and children with special health care needs. Many of these individuals do not have access to other sources of coverage. For others, coverage from an employer or in the individual or exchange market does not pay for the services, such as LTSS, they most need. If eligibility pathways or optional benefits for these vulnerable populations are eliminated, the costs of addressing their needs will be shifted elsewhere, either within the program or, more likely, to other agencies of state government.

From the Commission's perspective this analysis is most valuable for understanding the types of services that are being used by different populations. Other work the Commission is undertaking—examining delivery system reform, rebalancing long-term services and supports, and monitoring access—can help to inform discussions on the extent to which those services are being provided in a manner that is efficient, ensures access, and promotes appropriate health and functional outcomes.

Endnotes

[1] Prior to the ACA, states typically expanded eligibility by using less restrictive approaches to counting income and assets. However, with the introduction of a consistent income counting methodology for many populations—modified adjusted gross income (MAGI)—states are no longer able to do this.

[2] Section 209(b) states can establish more restrictive criteria than the SSI program—both financial (such as income or assets limits) and non-financial (such as the definition of disability)—to determine eligibility. However, these criteria may not be more restrictive than those in effect in the state on January 1, 1972.

[3] *National Federation of Independent Business v. Sebelius*, 132 S. Ct. 2566 (2012).

[4] Although EPSDT services are considered optional for medically needy children, if a state's medically needy coverage for any group includes services provided in institutions for mental diseases (IMD) or intermediate care facilities for individuals with intellectual disabilities (ICF/ID), then the state must include certain other services outlined in the statute, including EPSDT services (§1902(a)(10)(C)(iv) of the Act). If the EPSDT benefit is elected for the medically needy population, it must be made available to all Medicaid eligible individuals under age 21.

[5] Groups that are exempt from mandatory enrollment in ABPs include certain parents, pregnant women, individuals dually enrolled in Medicaid and Medicare, those who qualify for Medicaid on the basis of blindness or disability, enrollees receiving hospice care, those who are medically frail or have special medical needs, and children enrolled through child-welfare involved pathways (§1937(b) of the Social Security Act).

[6] MACPAC's January 23, 2017 response is available at https://www.macpac.gov/publication/macpac-response-to-request-for-report-on-medicaid-optional-eligibility-groups-and-benefits/.

[7] The Kaiser Commission on Medicaid and the Uninsured and the Urban Institute have undertaken similar analyses, with the most recent published in 2012. That analysis used 2007 MSIS data and CMS-64 reports to estimate the proportion of enrollment and spending attributable to mandatory (referred to as federal core) and optional (referred to as state expansion) enrollees. They assigned beneficiaries to either mandatory or optional status for the four major eligibility groups: the elderly, individuals with disabilities, non-disabled adults and pregnant women, and non-disabled children. Using MSIS service codes, they also allocated spending as either mandatory or optional.

[8] In FY 2013, there were approximately 3.1 million enrollees in Medicaid programs funded by the State Children's Health Insurance Programs (CHIP). Spending for CHIP-funded Medicaid enrollees totaled $4.1 billion. Almost all of these enrollees were optional and almost all of the spending was for mandatory services.

[9] Prior to the ACA, the mandatory eligibility levels for children in Medicaid differed by age; states were required to cover infants and children through age 5 in Medicaid in families with incomes less than or equal to 133 percent FPL and children age 6–18 in families with incomes less than or equal to 100 percent FPL. The ACA aligned minimum Medicaid eligibility for children at 133 percent FPL, requiring some states to shift older children (age 6–18) from separate CHIP programs into Medicaid in 2014.

[10] Almost all (98.4 percent) of dually eligible beneficiaries were people eligible on the basis of age (6.3 million) or on the basis of a disability (4.3 million).

[11] The 11.8 million enrollees in the new adult group represent average monthly enrollment or full-year equivalent.

[12] This analysis excludes $15.5 billion in disproportionate share hospital (DSH) payments (which would be considered mandatory spending) and $10.8 billion and certain non-DSH supplemental payments made under Section 1115 waiver expenditure authority (which would be considered optional spending). Section 1115 wavier authority payments include those made under uncompensated care pools, delivery system reform incentive payments, designated state health programs, and other non-DSH supplemental payments.

[13] States have the option to cover individuals who are not otherwise eligible for Medicaid (under Section 1915(i)) or who would be eligible for Medicaid if they were institutionalized (under Sections 1915(c) and (d) waivers) who are receiving services under HCBS waivers (§§ 1902(a)(10)(ii)(VI) and 1902(a)(10)(ii)(XXII) of the Social Security Act, 42 CFR 435.217, 42 CFR 435.219).

[14] Of the spending on dually eligible beneficiaries, $13.4 billion was spent on Medicare premiums, which are considered mandatory spending.

[15] This number does not include spending for prescription drugs that occurred under managed care. MACPAC estimates that about 59 percent of net prescription drug spending (i.e., after rebates) was under managed care (MACPAC 2016e). The figure does, however, include drug rebates that states receive.

[16] The vast majority of this spending (99.4 percent) was for HCBS waiver services. The remainder of optional spending (0.6 percent) was for managed care payments which had an HCBS waiver flag. Using the available data, we cannot determine what share of the capitation payment went toward HCBS services.

[17] Although the overall findings of the two studies align, there are some shifts in spending at the state level, with the majority of states showing a shift from spending on mandatory services for mandatory populations in 2007 to spending on optional populations in 2013. Because the data reported from the earlier work do not include enrollment figures or more detailed spending information, it is not possible to determine whether the shift is due to methodological differences or to changes in state policy. However, between 2007 and 2013, there was a considerable increase in the use of HCBS waivers and rebalancing the use of institutional and home- and community-based services (Eiken et al. 2016). This may explain some of the shift from mandatory to optional spending.

References

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2014a. *Fact sheet: Summary of key provisions of the final rule for 1915(i) home and community-based services (HCBS) state plan option*. Baltimore, MD: CMS. https://www.medicaid.gov/medicaid/hcbs/downloads/1915i-fact-sheet.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2014b. *EPSDT—A guide for states: Coverage in the Medicaid benefit for children and adolescents.* Washington, DC: CMS. https://www.medicaid.gov/medicaid/benefits/downloads/epsdt_coverage_guide.pdf.

Courtot, B., E. Lawton, and S. Artiga. 2012. *Medicaid enrollment and expenditures by federal core requirements and state options.* Washington, DC: Kaiser Commission on Medicaid and the Uninsured. https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8239.pdf.

Eiken, S., K. Sredle, B. Burwell, and P. Saucier. 2016. *Medicaid expenditures for long-term services and supports (LTSS) in FY 2014: Managed LTSS reached 15 percent of LTSS spending.* Bethesda, MD: Truven Health Analytics. https://www.medicaid.gov/medicaid/ltss/downloads/ltss-expenditures-2014.pdf.

Health Care Financing Administration (HCFA), U.S. Department of Health and Human Services. 2000. Letter from Timothy Westmoreland and Thomas Perez to state Medicaid directors regarding "Olmstead decision and Medicaid." January 14, 2000. https://downloads.cms.gov/cmsgov/archived-downloads/smdl/downloads/smd011400c.pdf.

Herz, E. 2012. *Traditional versus benchmark benefits under Medicaid.* August 3. Report no. R42478. Washington, DC: Congressional Research Service.

Kaiser Commission on Medicaid and the Uninsured (KCMU). 2014. Medicaid benefits database. Washington, DC: KCMU. http://kff.org/data-collection/medicaid-benefits/.

Lilienfeld, M. 2014. *Alternative benefit plans for the Medicaid expansion population: Trends in approved benefit plans and tools for advocates*. Washington, DC: National Health Law Program. http://www.healthlaw.org/issues/medicaid/medicaid-expansion-toolbox/alternative-benefit-plans-for-the-medicaid-expansion-population#.V5J0vjXO5sB.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2017. Analysis of CMS-64 financial management reports net expenditure data and CMS-64 enrollment reports from the Centers for Medicare & Medicaid Services, as of April 2017.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016a. Exhibit 14: Medicaid enrollment by state, eligibility, group and dually eligible status. In *MACStats: Medicaid and CHIP data book*. December 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/EXHIBIT-14.-Medicaid-Enrollment-by-State-Eligibility-Group-and-Dually-Eligible-Status-FY-2013.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016b. Exhibit 2: Characteristics of non-institutionalized individuals by age and source of health coverage, 2015. In *MACStats: Medicaid and CHIP data book*. December 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/EXHIBIT-2.-Characteristics-of-Non-Institutionalized-Individuals-by-Age-and-Source-of-Health-Coverage-2015.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016c. Chapter 1: Trends in Medicaid spending. In *Report to Congress on Medicaid and CHIP*. June 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2016/06/Trends-in-Medicaid-Spending.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016d. Chapter 2: Addressing growth in Medicaid spending: State options. In *Report to Congress on Medicaid and CHIP*. June 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2016/06/Addressing-Growth-in-Medicaid-Spending-State-Options.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016e. *Medicaid Spending for prescription drugs*. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2016/01/Medicaid-Spending-for-Prescription-Drugs.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015. Chapter 2: Coverage of Medicaid dental benefits for adults. In *Report to Congress on Medicaid and CHIP*. June 2015. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/06/Medicaid-Coverage-of-Dental-Benefits-for-Adults.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2013. Chapter 4: Update on Medicaid and CHIP data for policy analysis and program accountability. In *Report to the Congress on Medicaid and CHIP*. June 2013. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Update_on_Medicaid_and_CHIP_Data_for_Policy_Analysis_and_Program_Accountability.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2011. Chapter 6: Improving Medicaid and CHIP data for policy analysis. In *Report to the Congress on Medicaid and CHIP*. March 2011. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Improving_Medicaid_and_CHIP_Data_for_Policy_Analysis_and_Program_Accountability.pdf.

Paradise, J., B. Lyons, and D. Rowland. 2015. *Medicaid at 50*. Washington, DC: Kaiser Commission on Medicaid and the Uninsured. http://files.kff.org/attachment/report-medicaid-at-50.

Perkins, J. 2014. *Fact sheet: Medicaid EPSDT case trends and docket.* Washington, DC: National Health Law Program. http://www.healthlaw.org/component/jsfsubmit/showAttachment?tmpl=raw&id=00Pd000000AORPTEA5.

Rosenbaum, S., D. Mauery, P. Shin, and J. Hidalgo. 2005. *National security and U.S. child health policy: The origins and continuing role of Medicaid and EPSDT.* Washington, DC: Department of Health Policy, School of Public Health and Health Services, The George Washington University. http://hsrc.himmelfarb.gwu.edu/cgi/viewcontent.cgi?article=1033&context=sphhs_policy_briefs.

Schneider, A., R. Elias, R. Garfield, et al. 2002. *The Medicaid resource book.* Washington, DC: Kaiser Commission on Medicaid and the Uninsured. http://kff.org/medicaid/report/the-medicaid-resource-book/.

Smith, D. and J. Moore. 2015. *Medicaid politics and policy.* New Brunswick, NJ: Transaction Publishers.

APPENDIX 1A: State Summary Tables

TABLE 1A-1. State Adoption of Optional Medicaid Eligibility Pathways: Coverage for Children, Adults, and Qualified Immigrants

State	Children					Adults	Qualified immigrants		
	Chafee option (Independent foster care adolescents up to age 21)	Former foster care youth up to age 26, from other states	Ribicoff children up to age 21[1]	Katie Beckett children (or children with comparable coverage)	Family Opportunity Act buy-in	New adult group	Coverage of all qualified immigrants after 5 years of residency[2]	CHIPRA/ICHIA option (qualified children)[3]	CHIPRA/ICHIA option (qualified pregnant women)[3]
Alabama	–	–	–	–	–	–	–	–	–
Alaska	–	–	Y	Y	–	Y	Y	–	–
Arizona	Y	–	–	–	–	Y	Y	–	–
Arkansas	–	–	–	Y	–	Y	Y	–	–
California	Y	Y	–	–	–	Y	Y	Y	Y
Colorado	Y	–	–	–	Y	Y	Y	Y	Y
Connecticut	Y	–	Y	Y	–	Y	Y	Y	Y
Delaware	–	–	–	Y	–	Y	Y	Y	Y
District of Columbia	–	–	Y	Y	–	Y	Y	Y	Y
Florida	Y	–	–	–	–	–	Y	Y	–
Georgia	Y	Y	–	Y	–	–	Y	–	–
Hawaii	–	–	–	–	–	Y	Y	Y	Y
Idaho	–	–	–	Y	–	–	Y	–	–
Illinois	–	–	–	–	–	Y	Y	Y	–
Indiana	Y	–	–	–	–	Y	Y	–	–
Iowa	Y	–	Y	–	Y	Y	Y	Y	–
Kansas	Y	–	–	–	–	–	Y	–	–
Kentucky	–	Y	–	–	–	Y	Y	Y	–

TABLE 1A-1. (continued)

State	Children					Adults	Qualified immigrants		
	Chafee option (Independent foster care adolescents up to age 21)	Former foster care youth up to age 26, from other states	Ribicoff children up to age 21[1]	Katie Beckett children (or children with comparable coverage)	Family Opportunity Act buy-in	New adult group	Coverage of all qualified immigrants after 5 years of residency[2]	CHIPRA/ICHIA option (qualified children)[3]	CHIPRA/ICHIA option (qualified pregnant women)[3]
Louisiana	Y	Y	–	–	Y	Y	Y	–	–
Maine	–	–	Y	Y	–	–	Y	Y	Y
Maryland	Y	–	Y	–	–	Y	Y	Y	Y
Massachusetts	Y	Y	–	Y	–	Y	Y	Y	Y
Michigan	Y	Y	–	Y	–	Y	Y	–	–
Minnesota	–	–	Y	Y	–	Y	Y	Y	Y
Mississippi	Y	–	–	Y	–	–	–	–	–
Missouri	Y	–	–	–	–	–	Y	–	–
Montana	–	Y	–	–	–	Y	Y	Y	–
Nebraska	–	–	–	Y	–	–	Y	Y	Y
Nevada	Y	–	–	Y	–	Y	Y	–	–
New Hampshire	–	–	–	Y	–	Y	Y	–	–
New Jersey	Y	–	Y	–	–	Y	Y	Y	Y
New Mexico	Y	Y	–	–	–	Y	Y	Y	Y
New York	–	Y	–	–	–	Y	Y	Y	Y
North Carolina	Y	–	Y	–	–	–	Y	Y	Y
North Dakota	–	–	Y	–	Y	Y	–	–	–
Ohio	Y	–	Y	–	–	Y	Y	Y	Y
Oklahoma	Y	–	–	Y	–	–	Y	–	–
Oregon	Y	–	–	–	–	Y	Y	Y	–
Pennsylvania	–	Y	Y	–	–	Y	Y	Y	Y

TABLE 1A-1. (continued)

State	Children					Adults	Qualified immigrants		
	Chafee option (Independent foster care adolescents up to age 21)	Former foster care youth up to age 26, from other states	Ribicoff children up to age 21[1]	Katie Beckett children (or children with comparable coverage)	Family Opportunity Act buy-in	New adult group	Coverage of all qualified immigrants after 5 years of residency[2]	CHIPRA/ICHIA option (qualified children)[3]	CHIPRA/ICHIA option (qualified pregnant women)[3]
Rhode Island	Y	–	–	Y	–	Y	Y	Y	–
South Carolina	Y	–	–	Y	–	–	Y	–	–
South Dakota	Y	Y	–	Y	–	–	Y	–	–
Tennessee	–	–	Y	–	–	–	Y	–	–
Texas	Y	–	–	–	Y	–	–	Y	–
Utah	Y	Y	–	–	–	–	Y	Y	–
Vermont	–	–	Y	Y	–	Y	Y	Y	Y
Virginia	–	Y	–	–	–	–	–	Y	Y
Washington	Y	–	–	–	–	Y	Y	Y	Y
West Virginia	–	–	–	Y	–	Y	Y	Y	Y
Wisconsin	Y	Y	–	Y	–	–	Y	Y	Y
Wyoming	Y	–	–	–	–	–	–	–	Y
States adopting optional pathway	**30**	**14**	**14**	**22**	**5**	**32**	**45**	**31**	**23**

Notes: CHIPRA is the Children's Health Insurance Program Reauthorization Act. ICHIA is the Legal Immigrant Children's Health Improvement Act. For more detail on the federal eligibility requirements and state options, see MACPAC's March 2017 fact sheet, *Federal Requirements and State Options: Eligibility*, at https://www.macpac.gov/wp-content/uploads/2017/03/Federal-Requirements-and-State-Options-Eligibility.pdf.

– Dash indicates that state has not adopted this optional eligibility pathway.

[1] Under the Ribicoff option, states may cover all children or a state-defined reasonable classification of children under age 21 up to the state's 1996 Aid to Families with Dependent Children (AFDC) levels. Poverty-related pathways may have superseded this eligibility pathway.

[2] The count of states listed as adopting coverage of all qualified immigrants after five years of residency shows coverage as of December 2015. Any state that covers some, but not all, qualified immigrants after five years is listed as not adopting this pathway.

TABLE 1A-1. (continued)

[3] States were given the option to cover lawfully residing immigrant children and pregnant women without imposing a five-year waiting period under Section 214 of the CHIP Reauthorization Act of 2009 (CHIPRA, P.L. 111-3). The provision became known by an acronym, ICHIA, based on the name of the original legislation proposed in 2007.

Sources: Broder, T., A. Moussavian, and J. Blazer. 2015. *Overview of immigrant eligibility for federal programs*. Los Angeles, CA: National Immigration Law Center, https://www.nilc.org/issues/economic-support/overview-immeligfedprograms/; Brooks, T., K. Wagnerman, S. Artiga, et al. 2017. *Medicaid and CHIP eligibility, enrollment, renewal and cost-sharing policies as of January 2017: Findings from a 50-state survey*. Washington, DC: Kaiser Family Foundation. http://kff.org/report-section/medicaid-and-chip-eligibility-enrollment-renewal-and-cost-sharing-policies-as-of-january-2017-tables/; Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services (HHS). 2016. *CMCS information bulletin from Vikki Wachino regarding "Section 1115 demonstration opportunity to allow Medicaid coverage to former foster care youth who have moved to a different state."* November 21, 2016. Baltimore, MD: CMS. https://www.medicaid.gov/federal-policy-guidance/downloads/cib112116.pdf; Fox, H., M. McManus, and A. Michelman. 2013. *Many low-income older adolescents likely to remain uninsured in 2014*. Washington, DC: National Alliance to Advance Adolescent Health, http://www.thenationalalliance.org/pdfs/FS10.%20Uninsurance_Fact%20Sheet.pdf; Medicaid and CHIP Payment and Access Commission (MACPAC). 2016. Analysis of Medicaid State Plan Amendments and Section 1115 Medicaid demonstration waiver documents. https://www.macpac.gov/wp-content/uploads/2016/02/Expansion-Map-OCT-2016.png; Schneider, A., R. Elias, R. Garfield, et al. 2002. *The Medicaid resource book*. Washington, DC: Kaiser Commission on Medicaid and the Uninsured. http://kff.org/medicaid/report/the-medicaid-resource-book/; Kids Waivers. 2016. The full list. http://www.kidswaivers.org/full-list; O'Malley Watts, M., E. Cornachione, and M. Musumeci. 2016. *Medicaid financial eligibility for seniors and people with disabilities in 2015*. Washington, DC: Kaiser Commission on Medicaid and the Uninsured, http://kff.org/medicaid/report/medicaid-financial-eligibility-for-seniors-and-people-with-disabilities-in-2015/; and Pergamit, M., M. McDaniel, V. Chen, et al. 2012. *Providing Medicaid to youth formerly in foster care under the Chafee option: Informing implementation of the Affordable Care Act*. Washington, DC: Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services (HHS). https://aspe.hhs.gov/basic-report/providing-medicaid-youth-formerly-foster-care-under-chafee-option.

TABLE 1A-2. State Adoption of Optional Medicaid Eligibility Pathways: Coverage for Elderly, Disabled, Medically Needy, and Specific Diseases or Services

State	Elderly and disabled						Medically needy				Specific diseases or services[1]			
	Special income group	Buy-in for working disabled	State supplemental payments	§ 1915(i) HCBS state plan option	PACE	Expanded MSP income and asset levels	Medically needy children	Medically needy adults	Medically needy elderly	Medically needy disabled	Tuberculosis treatment services	Breast or cervical cancer treatment services	Family planning services and supplies	
													State plan	Waiver
Alabama	Y	–	Y	–	Y	Y	–	–	–	–	–	Y	–	Y
Alaska	Y	Y	Y	–	–	–	–	–	–	–	–	Y	–	–
Arizona	Y	Y	–	–	–	Y	–	–	–	–	–	Y	–	–
Arkansas	Y	Y	–	–	Y	–	Y	Y	Y	Y	–	Y	–	–
California	–	Y	Y	Y	Y	–	Y	Y	Y	Y	Y	Y	Y	–
Colorado	Y	Y	Y	Y	Y	–	–	–	–	–	–	Y	–	–
Connecticut	Y	Y	Y	Y	–	Y	Y	Y	Y	Y	Y	Y	Y	–
Delaware	Y	Y	Y	Y	Y	Y	–	–	–	–	–	Y	–	–
District of Columbia	Y	Y	Y	Y	–	Y	Y	Y	Y	Y	–	Y	–	–
Florida	Y	–	Y	–	Y	–	Y	Y	Y	Y	–	Y	–	Y
Georgia	Y	Y	Y	–	–	–	Y	Y	Y	Y	–	Y	–	Y
Hawaii	–	–	Y	–	–	–	Y	Y	Y	Y	–	Y	–	–
Idaho	Y	Y	Y	Y	–	–	–	–	–	–	–	Y	–	–
Illinois	–	Y	Y	–	–	–	Y	Y	Y	Y	–	Y	–	–
Indiana	Y	Y	Y	Y	Y	Y	–	–	–	–	–	Y	Y	–
Iowa	Y	Y	Y	Y	Y	–	Y	Y	Y	Y	–	Y	–	Y
Kansas	Y	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	–	–
Kentucky	Y	Y	Y	–	–	–	Y	Y	Y	Y	–	Y	–	–
Louisiana	Y	Y	Y	Y	Y	–	Y	Y	Y	Y	–	Y	Y	–
Maine	Y	Y	Y	–	–	Y	Y	Y	Y	Y	–	Y	Y	–
Maryland	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	–	Y	–	Y

TABLE 1A-2. (continued)

State	Elderly and disabled						Medically needy				Specific diseases or services[1]			
	Special income group	Buy-in for working disabled	State supplemental payments	§ 1915(i) HCBS state plan option	PACE	Expanded MSP income and asset levels	Medically needy children	Medically needy adults	Medically needy elderly	Medically needy disabled	Tuberculosis treatment services	Breast or cervical cancer treatment services	Family planning services and supplies	
													State plan	Waiver
Massachusetts	Y	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	–	–
Michigan	Y	Y	Y	Y	Y	–	Y	Y	Y	Y	–	Y	–	–
Minnesota	Y	Y	Y	–	–	Y	Y	Y	Y	Y	–	Y	Y	–
Mississippi	Y	Y	–	Y	–	Y	–	–	–	–	–	Y	–	Y
Missouri	Y	–	Y	–	–	–	–	–	–	–	–	Y	–[1]	–
Montana	Y	Y	Y	Y	–	–	Y	Y	Y	Y	–	Y	–	Y
Nebraska	–	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	–	–
Nevada	Y	Y	Y	Y	–	–	–	–	–	–	–	Y	–	–
New Hampshire	Y	Y	Y	–	–	–	Y	Y	Y	Y	–	Y	Y	–
New Jersey	Y	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	–	–
New Mexico	Y	Y	Y	–	Y	–	–	–	–	–	–	Y	Y	–
New York	–	Y	Y	–	Y	Y	Y	Y	Y	Y	–	Y	Y	–
North Carolina	–	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	Y	–
North Dakota	–	Y	–	–	Y	–	Y	Y	Y	Y	–	Y	–	–
Ohio	Y	Y	Y	–	Y	–	–	–	–	–	–	Y	–	–
Oklahoma	Y	–	Y	–	Y	–	–	–	–	–	–	Y	Y	–
Oregon	Y	Y	–	Y	Y	Y	–	–	–	–	–	Y	–	Y
Pennsylvania	Y	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	Y	–
Rhode Island	Y	Y	Y	–	Y	–	Y	Y	Y	Y	Y	Y	–	Y
South Carolina	Y	–	Y	–	Y	–	–	–	–	–	Y	Y	Y	–
South Dakota	Y	Y	Y	–	–	–	–	–	–	–	–	Y	–	–
Tennessee	Y	–	–	–	Y	–	Y	–	–	–	–	Y	–	–

TABLE 1A-2. (continued)

State	Elderly and disabled						Medically needy				Specific diseases or services[1]			
	Special income group	Buy-in for working disabled	State supplemental payments	§ 1915(i) HCBS state plan option	PACE	Expanded MSP income and asset levels	Medically needy children	Medically needy adults	Medically needy elderly	Medically needy disabled	Tuberculosis treatment services	Breast or cervical cancer treatment services	Family planning services and supplies	
													State plan	Waiver
Texas	Y	Y	Y	Y	Y	–	–	–	–	–	Y	Y	–[1]	–
Utah	Y	Y	Y	–	–	–	Y	Y	Y	Y	–	Y	–	–
Vermont	Y	Y	Y	–	–	Y	Y	Y	Y	Y	–	Y	–[1]	–
Virginia	Y	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	Y	–
Washington	Y	Y	Y	–	Y	–	Y	Y	Y	Y	–	Y	–	Y
West Virginia	Y	Y	–	–	–	–	Y	Y	Y	Y	–	Y	–	–
Wisconsin	Y	Y	Y	Y	Y	–	Y	Y	Y	Y	Y	Y	Y	–
Wyoming	Y	Y	Y	–	Y	–	–	–	–	–	–	Y	–	Y
States adopting optional pathway	**44**	**44**	**44**	**17**	**31**	**13**	**33**	**32**	**32**	**32**	**6**	**51**	**15**	**11**

Notes: HCBS is home- and community-based services. MSP is Medicare Savings Program. PACE is Program of All-Inclusive Care for the Elderly. For more detail on the federal eligibility requirements and state options, see MACPAC's March 2017 fact sheet, *Federal Requirements and State Options: Eligibility*, at https://www.macpac.gov/wp-content/uploads/2017/03/Federal-Requirements-and-State-Options-Eligibility.pdf.

– Dash indicates that state has not adopted this optional eligibility pathway.

[1] Missouri, Texas, and Vermont have state-funded family planning programs. In Missouri and Texas, women age 18 and older with incomes under 185 percent of the federal poverty level are eligible. In Missouri, women losing Medicaid postpartum are also eligible for the family planning program. In Vermont, anyone with income below 200 percent of the federal poverty level is eligible. (Guttmacher Institute 2017)

Sources: Brooks, T., K. Wagnerman, S. Artiga, et al. 2017. *Medicaid and CHIP eligibility, enrollment, renewal and cost-sharing policies as of January 2017: Findings from a 50-state survey.* Washington, DC: Kaiser Commission on Medicaid and the Uninsured. http://kff.org/report-section/medicaid-and-chip-eligibility-enrollment-renewal-and-cost-sharing-policies-as-of-january-2017-tables/; California Department of Health Care Services (CDHCS). 2017. Medi-Cal. Sacramento, CA: CDHCS. http://www.dhcs.ca.gov/services/medi-cal/Pages/default.aspx. https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/Downloads/MAX_IB12_CHIPData.pdf. Centers for Disease Control and Prevention (CDC). 2016. National Breast and Cervical Cancer Early Detection Program (NBCCEDP). Atlanta, GA: CDC. https://www.cdc.gov/cancer/nbccedp/about.htm. Connecticut Department of Public Health. 2013. Tuberculosis Medicaid program. http://www.ct.gov/dph/cwp/view.asp?a=3136&Q=492600&PM=1; Guttmacher Institute. 2017. *Medicaid family planning eligibility expansions.* Washington, DC: Guttmacher Institute. https://www.guttmacher.org/state-policy/explore/medicaid-family-planning-eligibility-expansions; Center for Health Law and Policy Innovation (CHLPI), Harvard Law School. 2015. *The Medicaid tuberculosis option: an opportunity for policy reform.* Jamaica Plain, MA: CHLPI. http://www.chlpi.org/wp-content/uploads/2014/01/Issue-Brief-June-2015-The-Medicaid-Tuberculosis-Option.pdf; Kaiser Commission on Medicaid and the Uninsured (KCMU). 2016. Medicaid Benefits: Program of All-Inclusive Care for the Elderly (PACE). Washington, DC: KCMU. http://kff.org/medicaid/state-indicator/program-of-all-inclusive-care-for-the-elderly-2/?currentTimeframe=0; Kaiser Commission

TABLE 1A-2. (continued)

on Medicaid and the Uninsured (KCMU). 2015. Section 1915(i) Home and Community-Based Services state plan option. Washington, DC: KCMU. http://kff.org/medicaid/state-indicator/section-1915i-home-and-community-based-services-state-plan-option/?currentTimeframe=0&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D; Kaiser Commission on Medicaid and the Uninsured (KCMU). 2012. *The medically needy program: spending and enrollment update.* Washington, DC: KCMU. https://kaiserfamilyfoundation.files.wordpress.com/2013/01/4096.pdf; O'Malley Watts, M., E. Cornachione, and M. Musumeci. 2016. *Medicaid financial eligibility for seniors and people with disabilities in 2015.* Washington, DC: Kaiser Commission on Medicaid and the Uninsured. http://kff.org/medicaid/report/medicaid-financial-eligibility-for-seniors-and-people-with-disabilities-in-2015/; Pozsik, C., National TB Controllers Association. 2007. Presentation on Medicaid reimbursement for TB services. www.borderhealth.org/files/res_902.ppt; Social Security Administration (SSA). 2010. State assistance programs for SSI recipients, January 2010. Baltimore, MD: SSA. https://www.ssa.gov/policy/docs/progdesc/ssi_st_asst/2010/index.html; South Carolina Healthy Connections Medicaid. 2014. New tuberculosis benefit. https://www.scdhhs.gov/press-release/new-tuberculosis-benefit; South Dakota Department of Social Services. 2015. Medicaid state plan. https://dss.sd.gov/medicaid/medicaidstateplan.aspx; Texas Department of State Health Services. 2017. Tuberculosis (TB). https://www.dshs.texas.gov/idcu/disease/tb/; Wisconsin Department of Health Services (DHS). 2015. Medicaid and BadgerCare Plus – Tuberculosis (TB) only related services plan fact sheet. https://www.dhs.wisconsin.gov/library/P-10022.htm.

TABLE 1A-3. State Adoption of Optional Medicaid Benefits: Acute Services

State	Chiropractic services	Dental services	Eyeglasses	Health homes for enrollees with chronic conditions	Occupational therapy services	Optometry services	Other diagnostic, screening, preventive, and rehabilitative services	Physical therapy services	Prescribed drugs	Prosthetic devices	Speech, hearing, and language disorder services	Targeted case management services
Alabama	–	–	Mandatory	Yes	–	Mandatory	–	–	Mandatory	Mandatory	–	Mandatory
Alaska	–	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Arizona	–	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Arkansas	Both	Both	Both	–	–	Both	–	–	Both	Both	–	Both
California	Both	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Colorado	–	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Connecticut	–	Both	Both	Yes	–	Both	Both	–	Both	Both	–	Both
Delaware	–	–	–	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–
District of Columbia	–	Both	Both	Yes	–	Both	Both	Both	Both	Both	–	Mandatory
Florida	Both	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Georgia	–	Both	Both	–	–	Both	Both	–	Both	Both	–	Both
Hawaii	–	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Idaho	Mandatory	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Illinois	–	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Indiana	Mandatory	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–
Iowa	Both	Both	Both	Yes	Both	Both	Both	Both	Both	Both	Both	Both
Kansas	–	Both	Both	–	Both	Both	–	Both	Both	Both	Both	Both
Kentucky[1]	Other	Other	–	–	–	Other	Other	–	Other	Other	–	Other
Louisiana	–	Mandatory	–	–	–	Both	Both	–	Both	Both	–	Both
Maine	Both	Both	Both	Yes	Both	Both	Both	Both	Both	Both	Both	Both
Maryland	–	Both	–	Yes	–	Both	Both	Both	Both	Both	–	Both
Massachusetts	Both	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both

TABLE 1A-3. (continued)

State	Chiropractic services	Dental services	Eyeglasses	Health homes for enrollees with chronic conditions	Occupational therapy services	Optometry services	Other diagnostic, screening, preventive, and rehabilitative services	Physical therapy services	Prescribed drugs	Prosthetic devices	Speech, hearing, and language disorder services	Targeted case management services
Michigan	Both	Both	Both	Yes	–	Both	Both	–	Both	Both	Both	Both
Minnesota[1]	Other	Other	Other	Yes	Other	Other	Other	Other	Other	Other	Other	Other
Mississippi	Mandatory	Mandatory	Mandatory	–	–	Mandatory	Mandatory	–	Mandatory	–	–	Mandatory
Missouri	–	Mandatory	Mandatory	Yes	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Montana[1]	–	Other	Other	–	Other	Other	Other	Other	Other	Other	Other	Other
Nebraska	Both	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Nevada	–	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
New Hampshire	–	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
New Jersey	Both	Both	Both	Yes	–	Both	Both	–	Both	Both	–	Both
New Mexico	–	Mandatory	Mandatory	Yes	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
New York	–	Both	Both	Yes	Both	Both	Both	Both	Both	Both	Both	Both
North Carolina	Both	Both	–	Yes	–	Both	Both	–	Both	Both	–	Both
North Dakota	Both	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both
Ohio	Mandatory	Mandatory	Mandatory	Yes	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Oklahoma	–	Mandatory	–	Yes	–	Mandatory	Mandatory	–	Mandatory	Mandatory	–	Mandatory
Oregon[1]	Other	Other	Other	–	Other	Other	Other	Other	Other	Other	Other	Other
Pennsylvania	Both	Both	Both	–	–	Both	Both	–	Both	Mandatory	–	Both
Rhode Island[1]	–	Other	Other	Yes	–	Other	Other	–	Other	Other	–	Other
South Carolina	Mandatory	–	Mandatory	–	–	Mandatory	Mandatory	–	Mandatory	Mandatory	–	Mandatory
South Dakota	Mandatory	Mandatory	Mandatory	Yes	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
Tennessee[1]	–	–	Other	–	Other	Other	Other	Other	Other	Other	Other	Other
Texas	Both	Both	Both	–	Both	Both	Both	Both	Both	Both	Both	Both

TABLE 1A-3. (continued)

State	Chiropractic services	Dental services	Eyeglasses	Health homes for enrollees with chronic conditions	Occupational therapy services	Optometry services	Other diagnostic, screening, preventive, and rehabilitative services	Physical therapy services	Prescribed drugs	Prosthetic devices	Speech, hearing, and language disorder services	Targeted case management services
Utah[1]	Other	Other	Other	–	Other	Other	Other	Other	Other	Other	Other	Other
Vermont[1]	Other	Other	–	Yes	Other	Other	Other	Other	Other	Other	Other	Other
Virginia	–	Both	–	–	–	Both	Both	–	Both	Both	Both	Both
Washington	–	Both	–	Yes	Mandatory	Both	Both	Mandatory	Both	Both	Mandatory	Both
West Virginia[1]	Other	Other	Other	Yes	Other	Other	Other	Other	Other	Other	Other	Other
Wisconsin	Both	Both	Both	–	Both	Both	–	Both	Both	Both	Both	Both
Wyoming	–	Mandatory	Mandatory	–	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
States adopting optional benefit	**26**	**47**	**42**	**20**	**34**	**51**	**45**	**36**	**51**	**50**	**38**	**49**

Notes: Mandatory indicates that the state provides a benefit to mandatory populations. Other indicates that the state offers different benefit packages to different populations. Both indicates that the state provides the benefit to both mandatory and optional populations. A dash (–) indicates that the state does not provide the benefit at all. Although the benefit category may be covered, the amount or scope of coverage available can vary by state and plan. Benefit categories are broad and may not include coverage of specific benefits. For example, dental services might include emergency dental services only, or might cover preventative or restorative services. Some benefits are only available when determined medically necessary. For more detail on the federal benefit requirements and state options, see MACPAC's March 2017 fact sheet, *Federal Requirements and State Options: Benefits*, at https://www.macpac.gov/wp-content/uploads/2017/03/Federal-Requirements-and-State-Options-Benefits.pdf.

[1] Kentucky, Minnesota, Montana, Oregon, Rhode Island, Tennessee, Utah, Vermont, and West Virginia offer different benefit packages to different populations. For additional details on how these tiered benefit packages are structured, please see the Medicaid benefits database (KCMU 2014).

Source: Kaiser Commission on Medicaid and the Uninsured (KCMU). 2014. Medicaid benefits database. Washington, DC: KCMU, http://kff.org/data-collection/medicaid-benefits/.

TABLE 1A-4. State Adoption of Optional Medicaid Benefits: Long-Term Services and Supports

State	Home- and community-based services	Hospice services	Inpatient hospital and nursing facility services for individuals age 65 and older in IMDs	Inpatient psychiatric services for individuals under 21	ICF services for individuals with intellectual disabilities	Personal care services	Private duty nursing services	PACE services	Services furnished in a religious non-medical health care institution
Alabama	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–	Mandatory	–
Alaska	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–	–
Arizona	Both	Both	Both	Both	Both	Both	Both	–	Both
Arkansas	Both	Both	–	Both	Mandatory	Mandatory	Both	Mandatory	–
California	Both	Both	Both	Both	Both	Both	–	Both	Both
Colorado	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	Mandatory	–
Connecticut	Both	–	Both	Both	Both	–	–	–	–
Delaware	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	Mandatory	–
District of Columbia	Both	–	Both	Both	Both	Both	Both	–	–
Florida	Both	Both	Mandatory	Both	Mandatory	–	–	Both	Both
Georgia	Both	Both	–	Mandatory	Mandatory	–	–	–	–
Hawaii	Both	–	–	Both	Both	–	–	–	–
Idaho	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–	–
Illinois	Both	Both	Both	Both	Both	–	–	–	–
Indiana	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	–	Mandatory
Iowa	Both	Both	Mandatory	Mandatory	Mandatory	–	–	Both	–
Kansas	Both	Both	Both	Both	Both	–	–	Both	–
Kentucky[1]	Other	Other	Other	Other	Other	–	–	–	–
Louisiana	Both	Both	Both	Both	Both	Both	–	Mandatory	–
Maine	Both	Both	Both	Both	Both	Both	Both	–	–
Maryland	Both	Both	Both	Both	Both	Both	–	Both	–
Massachusetts	Both	–	Both	Both	Both	Both	Both	Both	–
Michigan	Both	Both	Both	Both	–	Both	–	Both	–

TABLE 1A-4. (continued)

State	Home- and community-based services	Hospice services	Inpatient hospital and nursing facility services for individuals age 65 and older in IMDs	Inpatient psychiatric services for individuals under 21	ICF services for individuals with intellectual disabilities	Personal care services	Private duty nursing services	PACE services	Services furnished in a religious non-medical health care institution
Minnesota[1]	Other	Other	Other	Other	Other	Other	Other	–	–
Mississippi	Mandatory	Mandatory	–	Mandatory	Mandatory	–	–	–	–
Missouri	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	–
Montana[1]	Other	Other	Other	Other	Other	Other	–	–	–
Nebraska	Both	Both	Both	Both	Both	Both	Both	–	–
Nevada	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–
New Hampshire	Both	–	Both	Both	–	Both	Both	–	–
New Jersey	Both	–	Mandatory	Mandatory	Mandatory	Both	–	Mandatory	Mandatory
New Mexico	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	–
New York	Both	–	Both	Both	Both	Both	Both	Both	–
North Carolina	Both	Both	Both	Both	Both	Both	Both	Both	–
North Dakota	Both	Both	Both	Both	Both	Both	Both	Both	–
Ohio	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	Mandatory	Mandatory
Oklahoma	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	Mandatory	–
Oregon[1]	Other	Other	Other	Other	–	Other	Other	Other	–
Pennsylvania	Both	–	Both	Both	Both	–	–	Both	–
Rhode Island[1]	Other	–	Other	Other	Other	Other	Other	Other	–
South Carolina	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–	Mandatory	–
South Dakota	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–	–
Tennessee[1]	Other	Other	Other	Other	Other	–	Other	Other	Other
Texas	Both	Both	Both	Both	Both	Both	–	Both	Mandatory
Utah[1]	Other	Other	Other	Other	Other	Other	Other	–	–

TABLE 1A-4. (continued)

State	Home- and community-based services	Hospice services	Inpatient hospital and nursing facility services for individuals age 65 and older in IMDs	Inpatient psychiatric services for individuals under 21	ICF services for individuals with intellectual disabilities	Personal care services	Private duty nursing services	PACE services	Services furnished in a religious non-medical health care institution
Vermont[1]	Other	Other	Other	Other	Other	–	Other	Other	–
Virginia	Both	–	Mandatory	Mandatory	Mandatory	–	–	Both	–
Washington	Both	Both	Both	Both	Both	Mandatory	Both	Mandatory	–
West Virginia[1]	Other	Other	–	Other	Other	Other	–	–	–
Wisconsin	Both	Both	Both	Both	Both	Both	Both	Both	Both
Wyoming	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory	–	–	Mandatory	–
States adopting optional benefit	**51**	**41**	**46**	**51**	**48**	**31**	**23**	**31**	**11**

Notes: IMD is institutions for mental diseases. ICF is intermediate care facility. PACE is Program of All-Inclusive Care for the Elderly. Mandatory indicates that the state provides a benefit to mandatory populations. Other indicates that the state offers different benefit packages to different populations. Both indicates that the state provides the benefit to both mandatory and optional populations. A dash (–) indicates that the state does not provide the benefit at all. Although the benefit category may be covered, the amount or scope of coverage available can vary by state and plan. Benefit categories are broad and may not include coverage of specific benefits. For example, dental services might include emergency dental services only, or might cover preventative or restorative services. Some benefits are only available when determined medically necessary. For more detail on the federal benefit requirements and state options, see MACPAC's March 2017 fact sheet, *Federal Requirements and State Options: Benefits*, at https://www.macpac.gov/wp-content/uploads/2017/03/Federal-Requirements-and-State-Options-Benefits.pdf.

[1] Kentucky, Minnesota, Montana, Oregon, Rhode Island, Tennessee, Utah, Vermont, and West Virginia offer different benefit packages to different populations. For additional details on how these tiered benefit packages are structured, please see the Medicaid benefits database (KCMU 2014).

Source: Kaiser Commission on Medicaid and the Uninsured (KCMU). 2014. Medicaid benefits database. Washington, DC: KCMU, http://kff.org/data-collection/medicaid-benefits/.

TABLE 1A-5. Mandatory and Optional Enrollment in Medicaid, by State, FY 2013

State	Mandatory		Optional	
	Number	Percent	Number	Percent
Alabama	1,019,798	84.1%	192,495	15.9%
Alaska	113,056	83.2	22,830	16.8
Arizona	1,445,777	86.0	235,376	14.0
Arkansas	477,003	68.5	219,133	31.5
California	7,318,779	62.3	4,423,210	37.7
Colorado	790,061	88.2	106,144	11.8
Connecticut	604,811	70.5	253,675	29.5
Delaware	190,897	73.4	69,279	26.6
District of Columbia	129,978	52.9	115,688	47.1
Florida	3,676,953	85.3	636,059	14.7
Georgia	1,807,203	89.8	205,789	10.2
Hawaii[1]	149,787	49.9	150,666	50.1
Illinois	1,795,397	59.1	1,243,138	40.9
Indiana[2]	941,641	75.3	308,354	24.7
Iowa	409,508	64.6	224,706	35.4
Kansas	401,699	90.8	40,602	9.2
Kentucky	778,025	83.9	148,856	16.1
Maine	244,914	66.1	125,640	33.9
Maryland	722,580	63.4	416,249	36.6
Massachusetts	781,810	51.2	744,998	48.8
Michigan	1,530,384	66.8	760,726	33.2
Minnesota	627,013	54.3	527,176	45.7
Mississippi	713,301	90.8	72,665	9.2
Missouri	820,278	73.1	301,554	26.9
Montana	118,335	83.1	24,095	16.9
Nebraska	147,525	56.2	114,841	43.8
Nevada	403,760	95.8	17,878	4.2
New Hampshire	79,909	48.2	85,989	51.8
New Jersey[3]	929,966	78.1	260,255	21.9
New Mexico	419,078	63.5	240,579	36.5
New York	3,193,283	53.2	2,805,766	46.8

TABLE 1A-5. (continued)

State	Mandatory		Optional	
	Number	Percent	Number	Percent
North Carolina	1,583,722	79.2%	416,686	20.8%
North Dakota	67,924	77.9	19,236	22.1
Ohio	1,737,605	65.7	907,124	34.3
Oklahoma	595,404	62.6	355,649	37.4
Oregon	628,675	82.7	131,538	17.3
Pennsylvania	1,897,481	73.9	669,718	26.1
South Carolina	716,642	65.7	374,657	34.3
South Dakota	110,994	82.8	23,014	17.2
Tennessee	1,418,642	91.1	138,081	8.9
Texas	4,781,021	91.2	459,073	8.8
Utah	310,049	79.7	78,844	20.3
Vermont	71,761	34.8	134,470	65.2
Virginia	854,551	75.3	280,986	24.7
Washington	904,851	63.7	516,021	36.3
West Virginia	378,570	86.5	58,834	13.5
Wisconsin	758,412	60.5	495,382	39.5
Wyoming	81,271	91.1	7,982	8.9

Notes: Idaho, Louisiana, and Rhode Island were excluded due to data reliability concerns regarding the completeness of monthly claims and enrollment data. Excludes approximately 3,000 children who could not be classified as mandatory or optional due to missing information.

[1] Hawaii reports adult coverage under its Section 1115 waiver and does not report enrollment under the adult Medicaid Assistance Status/Basis of Eligibility category.

[2] Indiana uses restricted benefits flag 5 to identify pregnant women who receive only pregnancy-related services and non-citizens eligible only for emergency services.

[3] In 2013, New Jersey covered some optional parents in Medicaid using Title XXI funding. As such, these parents are excluded from expenditures reported here.

Source: MACPAC, 2017, analysis of Medicaid Statistical Information System data as of December 2015.

TABLE 1A-6. Share of Medicaid Spending on Mandatory and Optional Populations and Services, by State, FY 2013

State	Mandatory enrollment and mandatory services	Mandatory enrollment and optional services	Optional enrollment and mandatory services	Optional enrollment and optional services
Alabama	67.3%	15.2%	15.3%	2.2%
Alaska	50.9	34.2	12.3	2.5
Arizona	74.1	5.4	18.2	2.3
Arkansas	55.5	19.6	18.7	6.2
California	47.8	24.3	9.7	18.3
Colorado	65.3	23.3	8.6	2.8
Connecticut	39.9	21.0	23.4	15.7
Delaware	38.6	31.1	15.6	14.7
District of Columbia	34.1	26.5	15.8	23.5
Florida	60.5	15.6	16.8	7.2
Georgia	65.0	16.9	13.8	4.2
Hawaii	29.3	21.4	27.8	21.5
Illinois	37.9	7.0	18.5	36.6
Indiana	51.2	17.8	23.3	7.7
Iowa	43.7	22.3	19.6	14.4
Kansas	54.3	23.0	13.2	9.5
Kentucky	58.7	21.9	13.5	5.9
Maine	42.9	18.0	25.7	13.4
Maryland	43.1	24.2	13.1	19.6
Massachusetts	31.4	21.7	23.5	23.4
Michigan	46.2	20.4	21.6	11.8
Minnesota	30.5	29.4	20.9	19.1
Mississippi	66.2	14.2	15.2	4.4
Missouri	47.5	25.7	18.6	8.2
Montana	52.9	15.8	16.5	14.8
Nebraska	27.5	19.4	13.9	39.2
Nevada	71.5	16.2	8.3	4.0
New Hampshire	29.8	16.2	31.1	22.9
New Jersey[1]	46.6	22.3	15.7	15.3

TABLE 1A-6. (continued)

State	Mandatory enrollment and mandatory services	Mandatory enrollment and optional services	Optional enrollment and mandatory services	Optional enrollment and optional services
New Mexico	50.8%	20.0%	25.1%	4.1%
New York	32.4	21.4	14.3	31.9
North Carolina	53.8	14.4	18.1	13.7
North Dakota	27.1	19.8	4.8	48.2
Ohio	48.3	24.3	18.7	8.7
Oklahoma	52.7	13.4	26.3	7.7
Oregon	43.4	29.6	14.4	12.5
Pennsylvania	48.0	19.6	22.3	10.0
South Carolina	50.3	21.0	21.5	7.2
South Dakota	53.3	25.2	16.0	5.5
Tennessee	43.7	39.0	4.8	12.5
Texas	66.5	21.1	8.2	4.1
Utah	53.1	18.0	12.4	16.6
Virginia	44.9	28.1	15.9	11.1
Washington	45.1	25.6	19.4	9.8
West Virginia	47.5	23.2	12.7	16.6
Wisconsin	34.3	23.2	23.4	19.2
Wyoming	49.9	20.4	16.1	13.7

Notes: Idaho, Louisiana, Rhode Island, and Vermont were excluded due to data reliability concerns regarding the completeness of monthly claims and enrollment data. Includes federal and state spending. Medicare premiums are not reported in the Medicaid Statistical Information System (MSIS). The Medicare premium amounts reported in CMS-64 reports are distributed proportionately across dually eligible beneficiaries identified in the MSIS for each state. As such, Medicare premiums are included in the total spending and are considered to be mandatory. Medicare coinsurance and deductibles are reported under individual service types throughout the MSIS and are therefore included in mandatory and optional spending when examined by service type. Excludes $2.3 million in spending associated with the approximately 3,000 children who could not be classified as mandatory or optional.

[1] In 2013, New Jersey covered some optional parents in Medicaid using Title XXI funding. As such, these parents are excluded from expenditures reported here.

Source: MACPAC, 2017, analysis of Medicaid Statistical Information System data as of December 2015 and analysis of CMS-64 Financial Management Report net expenditure data from the Centers for Medicare & Medicaid Services as of June 2016.

APPENDIX 1B: Congressional Request for a Study on Mandatory and Optional Populations and Services in Medicaid

Congress of the United States
Washington, DC 20515

January 11, 2017

Commissioners
The Medicaid and CHIP Payment and Access Commission
1800 M Street N.W.
Suite 650
Washington, DC 20036

Dear Commissioners:

Today Medicaid is an important safety net program that provides health coverage and long-term care services for some of our nation's most vulnerable patients. As legislative expansions and demographic developments require the Medicaid program to do more and more, we are concerned that the Medicaid safety net faces increased strain in the years to come, which could cause further access and health care quality problems for beneficiaries.

Medicaid is the world's largest health insurance program–covering more than 77 million Americans in 2016 and the Congressional Budget Office (CBO) estimates Medicaid will provide health care or long-term care for up to 98 million Americans in 2017. [1] The program already consumes more general revenue from the federal government than Medicare and a recent tally estimates that the size of the population covered by Medicaid is greater than the entire population of the 29 least populous States, *combined.*[2] In fact, if Medicaid enrollment were its own country, Medicaid would be the 21st most populous country in the world – larger than France, Italy, or the United Kingdom.

The growth of the Medicaid program continues a longstanding trend within the program. Medicaid program expenditures and enrollment are both about three times larger than they were under President Clinton in 1997.[3] CBO warns that the federal share of Medicaid outlays is expected to roughly double over the coming decade, increasing from $371 billion in 2015 to more than $624 billion in 2026. That means that by 2026, total federal and state expenditures on Medicaid will cost about $1 trillion *each year.*[4]

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[1] https://www.cbo.gov/sites/default/files/recurringdata/51301-2016-03-medicaid.pdf
[2] https://energycommerce.house.gov/news-center/blog-posts/ec-shares-handy-medicaid-overview-tool
[3] https://www.macpac.gov/wp-content/uploads/2015/01/Figure-1.-Medicaid-Enrollment-and-Spending-FY-1966-FY-2013.pdf
[4] Federal Medicaid spending has grown by more than 2,500 percent since 1980.

Troublingly, there is already a growing range of literature showing that many Medicaid beneficiaries are indeed facing challenges related to access and quality. With Medicaid expenditures growing, many States face difficult choices about which benefits and populations are served. Due to these budget pressures, some States have been forced to make changes which result in more children and individuals with intellectual and developmental disabilities being placed on waiting lists—thus ultimately delaying or even denying care to some of the most vulnerable patients served by Medicaid.[5]

In this environment, we believe it is important to better understand the optional eligibility groups and optional benefits States are covering. Clearly, some optional benefits – such as prescription drug coverage – are important for virtually all beneficiaries. Yet other benefits may be more necessary as a covered benefit for a subset of beneficiaries. However, this information is not easily discernable in one source for each state. Instead, this information exists across multiple, disaggregated sources that make meaningful review a challenge. The information currently available from the Centers for Medicare & Medicaid Services is limited to a list of mandatory and optional eligibility groups, as well as mandatory and optional benefits.[6]

Congress in particular needs to have the most comprehensive and current information available, especially given that CBO warns that federal spending for mandatory programs and net interest will exceed total federal revenues by the 2027 – 2036 period. Without action, the unrestrained spending on Medicaid, which increases for each benefit and individual covered, could crowd out funding for other critical State and federal priorities like education, criminal justice enforcement, and transportation.[7]

To better inform Congressional oversight, we request MACPAC immediately initiate work to report on optional eligibility groups covered and optional benefits in each State Medicaid program for the most recent year data is available. Specifically, we request that MACPAC's work specify the following for each State:

- The intersection of the coverage of optional eligibility groups and the receipt of optional benefits for those groups to show the extent to which, for example, optional populations in given State are receiving optional benefits.
- The number of people covered by each State who qualify for Medicaid through an optional eligibility category.
- The Federal and State expenditures for each category of (a) optional populations; and, (b) optional benefits in each State.

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[5] http://kff.org/health-reform/state-indicator/waiting-lists-for-hcbs-waivers/
[6] Benefits: https://www.medicaid.gov/medicaid/benefits/list-of-benefits/index.html
Eligibility groups: https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/Downloads/List-of-Eligibility-Groups.pdf
[7] Source: Extended baseline projections in CBO's *July 2016 Long-Term Budget Outlook.*

Such comprehensive data would not only be helpful in informing Congressional efforts to best ensure that the Medicaid program continues to provide health care coverage and long-term care services for some of our nation's most vulnerable patients, but it would also assist researchers and other Medicaid stakeholders. This is a significant undertaking, but an appropriate and valuable use of MACPAC resources, which we believe can be completed within a six-month time frame.

Thank you for your timely consideration of our request. We respectfully request your reply to our request outlining your intended actions and timeframes, by January 25, 2017. Please contact Josh Trent of the Committee on Energy and Commerce Majority staff at 202-225-2927, or Kim Brandt of the Senate Finance Majority staff at 202-224-4515 with any questions.

Sincerely,

Orrin G. Hatch
Chairman
Committee on Finance
U.S. Senate

Greg Walden
Chairman
Committee on Energy and Commerce
U.S. House of Representatives

Tim Murphy
Chairman
Subcommittee on Oversight
and Investigations
U.S. House of Representatives

Michael C. Burgess, M.D.
Chairman
Subcommittee on Health
U.S. House of Representatives

APPENDIX 1C: Methodology

Building on a prior analysis using 2007 data that was conducted by the Kaiser Commission on Medicaid and the Uninsured and the Urban Institute, MACPAC conducted an analysis examining Medicaid enrollment and spending on mandatory and optional enrollees and services using the Medicaid Statistical Information System (MSIS) and the CMS-64 data for fiscal year (FY) 2013 (Courtot et al. 2012).

These data sources do not specifically identify individuals and services as mandatory or optional; therefore MACPAC determined the mandatory and optional status based upon a review of the statutory and regulatory citations in comparison with the MSIS data dictionary definitions (CMS 2014). MACPAC's determinations refer only to the federal requirements and do not attempt to take into account state-specific requirements, such as state-mandated benefits or consent decrees that require coverage of certain benefits. Neither do they account for state variation in the breadth of coverage, such as amount, duration, and scope.

To the greatest extent possible, this analysis reflects assumptions outlined in the technical guide to MACStats (MACPAC 2016a).

Classification of Enrollees

We retained Medicaid's eligibility categories (i.e., aged, blind or disabled, adult, or child), but classified individuals within each category as mandatory or optional based on the combination of their maintenance assistance status (MAS) and basis of eligibility (BOE) designation in MSIS (using the last best month of enrollment for eligibility determination). This approach resulted in each individual being assigned to one of the following classifications: mandatory aged, optional aged, mandatory blind or disabled, optional blind or disabled, mandatory adult, optional adult, mandatory child, or optional child (Table 1C-1). We excluded people covered under separate State Children's Health Insurance Programs (MAS-0, BOE-0) because the analysis is focused on Medicaid enrollees and services. Data for approximately 3,000 children were missing, so these children could not be classified as either mandatory or optional. Spending for these children was included in the overall distribution of spending, but excluded when spending was examined by population.

Upon review of the statutory and regulatory citations included in the MAS/BOE definitions, MACPAC found that some MAS/BOE groups contain multiple eligibility pathways that can all be identified as either mandatory or optional (for example, the medically needy—aged group (MAS-2, BOE-1) in which all pathways are optional), while some MAS/BOE groups include both mandatory and optional eligibility pathways (for example, the other eligibles—aged group (MAS-4, BOE-1)). For the MAS/BOE groups with uniform or almost uniform eligibility pathways, all enrollees were categorized as either mandatory or optional; for MAS/BOE groups with mixed eligibility pathways, enrollees were divided between mandatory and optional, as discussed in more detail below.

Classification of adult, aged, and blind or disabled enrollees

Individuals receiving cash assistance (MAS-1) were considered mandatory. The BOEs for all individuals in this category are mandatory except for adults age 65 and older and individuals who are blind or disabled who receive state supplemental payments (SSP) but do not also receive supplemental security income (SSI). From a preliminary search of SSPs, it appears that states are only providing payments to individuals also receiving SSI, so this may not be a widely used pathway.

Individuals in the medically needy category (MAS-2) were considered optional. All BOEs in this category are optional except for newborns born to medically needy pregnant women.

TABLE 1C-1. Maintenance Assistance Status (MAS) and Basis of Eligibility (BOE) Group Classifications

Eligibility category or group description	MSIS MAS/BOE group designations	Mandatory or optional classification
Individuals receiving only family planning services	All MAS/BOE groups and restricted-benefits flag 6	All assigned optional
Individuals entitled only to emergency Medicaid services due to immigration status	All MAS/BOE groups and restricted-benefits flag 2	All assigned mandatory
Partial dually eligible beneficiaries	All MAS/BOE groups and dual-eligible flags 1, 3, 5, or 6	All assigned mandatory
Individuals receiving cash assistance or eligible under § 1931—aged, blind or disabled, adults	MAS 1, BOE 1; MAS 1, BOE 2; MAS 1, BOE 5; MAS 1, BOE 7	All assigned mandatory
Medically needy—aged, blind or disabled, children, adults	MAS 2, BOE 1; MAS 2, BOE 2; MAS 2, BOE 4; MAS 2, BOE 5	All assigned optional
Section 1115 demonstration Medicaid expansion—aged, blind or disabled, children, adults	MAS 5, BOE 1; MAS 5, BOE 2; MAS 5, BOE 4; MAS 5, BOE 5	All assigned optional
Poverty related eligibility—aged, blind or disabled	MAS 3, BOE 1; MAS 3, BOE 2	All assigned optional
Poverty related eligibility—adults	MAS 3/5	Randomly assigned: 50 percent mandatory, 50 percent optional
Other eligibility—aged, blind or disabled, adults	MAS 4, BOE 1; MAS 4, BOE 2; MAS 4, BOE 5	Randomly assigned: 50 percent mandatory, 50 percent optional
Individuals receiving treatment for breast or cervical cancer	MAS 3, BOE A	All assigned optional
Children—cash assistance or § 1931, poverty related, other	MAS 1, BOE 4; MAS 1, BOE 6; MAS 3, BOE 4; MAS 4, BOE 4	Randomly assigned based on ACS-reported state share of children in families above or below federal and state income thresholds
Foster care children	MAS 4, BOE 8	Randomly assigned: 75 percent mandatory, 25 percent optional

Notes: MSIS is Medicaid Statistical Information System. ACS is the American Community Survey. MAS is maintenance assistance status. BOE is basis of eligibility. Table shows the MSIS-defined Medicaid eligibility groups, the MAS and BOE designations of individuals that fall within these groups, and MACPAC's assignment of beneficiaries into mandatory or optional coverage status.

Source: MACPAC, 2017, analysis of MSIS data dictionary, the Social Security Act, and the *Code of Federal Regulations*.

Individuals eligible under a Section 1115 waiver (MAS-5) were considered optional.

Individuals receiving breast or cervical cancer treatment (MAS-3, BOE-A) were considered optional.

Dually eligible beneficiaries (also known as partial duals) who receive assistance with Medicare premiums and cost-sharing through the Medicare Savings Programs (MSPs), were considered mandatory; other dually eligible individuals were considered mandatory or optional according to their MAS/BOE designation.

Other adult, aged, and blind or disabled enrollees (MAS-3 and MAS-4) were randomly assigned mandatory or optional status so that half of the enrollees in these groups were considered mandatory and half were considered optional. This is based on a review of statutory and regulatory eligibility pathways described in the MSIS data dictionary, which indicated that half of the categories in these MAS/BOE groups are mandatory and half are optional. Enrollment data within these groups are not available. Overall, 17.2 percent of adult, aged, and blind or disabled enrollees were randomly assigned. Two additional assumptions were made:

- The MAS-3, BOE-5 group includes both mandatory and optional eligibility pathways for pregnant women.[1] This MAS/BOE group also includes other adults eligible through the use of Section 1902(r)(2) disregards who would be considered optional and another optional adult pathway (funded under Title XXI) that is no longer available to states. Because it would be difficult to identify pregnant women and the eligibility threshold for defining the mandatory and optional status of the other adults, all enrollees in this MAS/BOE were randomly assigned.
- Because there is not an assigned MAS/BOE group for adults under age 65 newly eligible for Medicaid under the ACA's Medicaid expansion, we assumed that states would report these newly enrolled adults in MAS-3, BOE-5 or MAS-4, BOE-5. This new adult group is mandatory under the statute, but the U.S. Supreme Court ruling in *National Federation of Independent Business v. Sebelius*, 132 S. Ct. 2566 (2012), effectively made it an optional eligibility group. Seven states implemented early expansions to the new adult group in 2013. Additionally, some states were covering these adults under Section 1115 waivers. Because there is no way to identify these adults separately as optional, they were treated the same as all other adults in these two MAS/BOE groups.

The following populations that receive only limited benefits were categorized as follows:

- Individuals receiving only family planning services (restricted flag 6) were optional.
- Individuals receiving only emergency Medicaid services due to their immigration status (restricted flag 2) were mandatory.

Classification of children

Given the mixture of mandatory and optional eligibility pathways for children in the MAS/BOE groups, their mandatory and optional status was determined on a state-by-state basis based on the state distribution of family income relative to state eligibility thresholds. Specifically, mandatory and optional status under income-related pathways was determined based on the distribution of children's family income relative to the federal poverty level (FPL) and state eligibility thresholds using data from the 2013 American Community Survey (ACS). Children were randomly assigned by age to either mandatory or optional status, respectively, based on the share of children within the state in families with incomes at or below the federal minimum (100 percent or 133 percent FPL) and those with family incomes above the federal minimum, but below the state eligibility threshold for 2013. Although some income-related MAS/BOE groups include only mandatory children (e.g.,

MAS-1, BOE-4 and MAS-1, BOE-6), we took the same state-by-state approach to define all children enrolled in income-related MAS/BOE groups.

Children eligible for Medicaid on the basis of foster care assistance were randomly assigned so that 75 percent of enrollees were considered mandatory and 25 percent were optional. Prior research suggests that between 40 percent and 50 percent of children in foster care are receiving Title IV-E assistance (i.e., they are mandatory), and 75 percent of children eligible for Medicaid on the basis of adoption-related assistance are receiving Title IV-E benefits. Children in foster care account for about 25 percent of Title IV-E assistance (MACPAC 2015).

Classification of Services

MACPAC classified services as mandatory or optional using the MSIS type-of-service code.

Classification of services for children (under age 21)

Almost all services for children under age 21, including those received through managed care, were considered mandatory because of the requirement to provide early and periodic screening, diagnostic, and treatment (EPSDT) benefits. Three additional assumptions are made:

- Anyone under age 21 in the adult, disabled, or aged BOE groups was considered a child, and all of their services were considered mandatory because of the EPSDT requirement. This assumption mainly affects the classification of services provided to children enrolled through the disabled BOE.
- Although EPSDT services are considered optional for medically needy children, if a state's medically needy coverage for any group includes services provided by institutions for mental diseases (IMD) or intermediate care facilities for individuals with intellectual disabilities (ICF/ID), then the state must include certain other services outlined in the statute, including EPSDT services (§1902(a)(10)(C)(iv) of the Act). If the EPSDT benefit is elected for the medically needy population, it must be made available to all Medicaid eligible individuals under age 21. It was beyond the scope of this work to determine which states provide EPSDT to children in their medically needy programs, and thus all services provided to medically needy children were considered mandatory.
- Long-term services and supports (LTSS) provided to children, including services provided in inpatient psychiatric and ICF/ID facilities and personal care services, were considered mandatory under the same assumption that all medically necessary services would be covered under the EPSDT requirement. However, services received under a home- and community-based services (HCBS) waiver (based on MSIS program-type flag 6 or 7) were categorized as optional.

Classification of services for adult, aged, and blind or disabled enrollees (age 21 and older)

Acute services for adult, disabled, and aged enrollees (age 21 and older) were classified as mandatory or optional based upon the statutory and regulatory requirements for all adult enrollees except the medically needy (Table 1C-2). States can offer a more limited benefit package to medically needy individuals, but if a state covers institutional services (IMD or ICF/ID services) for any medically needy individual, it must also cover ambulatory services for that individual. States must provide prenatal care and delivery for medically needy pregnant women. Because of this, only inpatient services provided to women age 15–45 were considered mandatory for medically needy enrollees.

LTSS services for adult, disabled, and aged enrollees were classified as mandatory or optional based upon the statutory and regulatory requirements (Table 1C-2). All services received under an HCBS waiver (based on MSIS program-type flag 6 or 7) were categorized as optional regardless of their type-of-service code.

In most circumstances, spending under managed care was assumed to be for acute services. The state-specific proportion of mandatory and optional spending for each BOE group for non-LTSS services in fee-for-service plans was applied to the group's managed care spending (Table 1C-3). There were two exceptions to this approach:

- Seven states (Arizona, Delaware, Florida, Hawaii, New Mexico, Tennessee, and Wisconsin) had a large proportion of LTSS users in managed LTSS (MLTSS) as determined by MACPAC analysis of the Centers for Medicare & Medicaid Services (CMS) 2013 managed care enrollment report (CMS 2015). For these states and for the aged and blind or disabled groups, the proportion of mandatory and optional FFS spending was calculated using both acute and LTSS spending. In most states, the state-specific FFS distribution of acute and LTSS spending was applied, but national-level FFS distributions of acute and LTSS spending were applied to Hawaii's disabled and aged groups and Tennessee's disabled group, based on the large proportion of enrollees in managed care as discussed below.
- For states with more than 75 percent of adult, disabled, or aged enrollees in managed care, the national-level distribution of spending between mandatory and optional FFS acute care services was applied. The 75 percent threshold was determined based on MACPAC analysis of managed care enrollment at the BOE level, so the national-level distribution was not applied to all groups in these states (MACPAC 2016b). The national share was applied in 15 states for adults, in 3 states for the disabled, and in 1 state for the aged (note that this includes the national proportions applied above for high MLTSS states).

All services for adult, aged, and disabled enrollees receiving limited benefits (individuals receiving only family planning services and individuals receiving only emergency Medicaid services due to their immigration status, as defined above using the restricted benefits flag) were considered mandatory because they are only entitled to certain services as a result of their limited eligibility.

TABLE 1C-2. MSIS FFS Type-of-Service Values and Mandatory versus Optional Breakdown by Basis of Eligibility (BOE)

Type of service	Children (under age 21)	Adults age 21 and older, excluding medically needy and limited benefits			Medically needy adults, disabled, aged	Limited benefit adult, disabled, aged[1]
		Adults eligible on a basis other than disability	Adults eligible on the basis of disability (disabled)	Adults age 65 and older (aged)		
HCBS waiver services (program type 6 or 7)[2]	Optional	Optional	Optional	Optional	Optional	Mandatory
01—Inpatient hospital	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory for women age 15–64; optional for all others	Mandatory
02—Mental health services for the aged	Mandatory	Optional	Optional	Optional	Optional	Mandatory
04—Inpatient psychiatric facility for individuals under age 21[3]	Mandatory	Optional	Optional	Optional	Optional	Mandatory
05—ICF/ID	Mandatory	Optional	Optional	Optional	Optional	Mandatory
07—Nursing facility	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
08—Physician	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
09—Dental	Mandatory	Optional	Optional	Optional	Optional	Mandatory
10—Other practitioners	Mandatory	Optional	Optional	Optional	Optional	Mandatory
11—Outpatient hospital	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
12—Clinic	Mandatory	Optional	Optional	Optional	Optional	Mandatory
13—Home health	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
15—Lab and X-ray	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
16—Prescribed drugs	Mandatory	Optional	Optional	Optional	Optional	Mandatory

TABLE 1C-2. (continued)

Type of service	Children (under age 21)	Adults age 21 and older, excluding medically needy and limited benefits			Medically needy adults, disabled, aged	Limited benefit adult, disabled, aged[1]
		Adults eligible on a basis other than disability	Adults eligible on the basis of disability (disabled)	Adults age 65 and older (aged)		
19—Other services	Mandatory	Optional	Optional	Optional	Optional	Mandatory
24—Sterilizations	Mandatory	Mandatory for under age 65, optional for age 65 and older	Mandatory for under age 65, optional for age 65 and older	Mandatory for under age 65, optional for age 65 and older	Optional	Mandatory
25—Abortions[4]	Mandatory	Mandatory for under age 65, optional for age 65 and older	Mandatory for under age 65, optional for age 65 and older	Mandatory for under age 65, optional for age 65 and older	Optional	Mandatory
26—Transportation	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
30—Personal care	Mandatory	Optional	Optional	Optional	Optional	Mandatory
31—Targeted case management	Mandatory	Optional	Optional	Optional	Optional	Mandatory
33—Rehabilitation	Mandatory	Optional	Optional	Optional	Optional	Mandatory
34—PT, OT, ST, hearing	Mandatory	Optional	Optional	Optional	Optional	Mandatory
35—Hospice	Mandatory	Optional	Optional	Optional	Optional	Mandatory
36—Nurse-midwife	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
37—Nurse practitioner	Mandatory	Mandatory	Mandatory	Mandatory	Optional	Mandatory
38—Private duty nursing	Mandatory	Optional	Optional	Optional	Optional	Mandatory
39—Religious non-medical	Mandatory	Optional	Optional	Optional	Optional	Mandatory

TABLE 1C-2. (continued)

Notes: MSIS is Medicaid Statistical Information System. FFS is fee for service. HCBS is home- and community-based services. ICF/ID is intermediate care facilities for individuals with intellectual disabilities. PT is physical therapy. OT is occupational therapy. ST is speech therapy. Mandatory indicates that the services were classified as mandatory for the specified eligibility group. Optional indicates that the services were classified as optional for the specified eligibility group.

[1] Includes individuals receiving only family planning services and individuals receiving only emergency Medicaid services due to their immigration status. Although these individuals are entitled to a more limited benefit package, all services they receive are considered mandatory. However, we do not expect them to receive services under every type of service.

[2] These HCBS would be provided under a waiver.

[3] We do not expect individuals over the age of 21 to receive these services.

[4] Federal funds for abortions are available only in cases of life endangerment, rape, or incest, and states must cover abortions that meet these federal exceptions.

Source: MACPAC, 2017, analysis of MSIS data dictionary, the Social Security Act, and the *Code of Federal Regulations*.

TABLE 1C-3. MSIS Managed Care Type-of-Service Values and Mandatory versus Optional Breakdown by Basis of Eligibility

Type of managed care payment	Children (under age 21)	Adults age 21 and older, excluding medically needy and limited benefits			Medically needy adults, disabled, aged	Limited benefit adult, disabled, aged[1]
		Adults eligible on a basis other than disability	Adults eligible on the basis of disability (disabled)	Adults age 65 and older (aged)		
20—Capitated HMO	Mandatory	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Optional	Mandatory
21—Capitated PHP	Mandatory	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Optional	Mandatory
22—PCCM	Mandatory	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Mandatory and optional based on FFS distribution; based on state-specific managed care and MLTSS penetration	Optional	Mandatory

Notes: MSIS is Medicaid Statistical Information System. HMO is health maintenance organization. FFS is fee for service. MLTSS is managed long-term services and supports. PHP is prepaid health plan. PCCM is primary care case management. Mandatory indicates that the services were classified as mandatory for the specified eligibility group. Optional indicates that the services were classified as optional for the specified eligibility group.

[1] Includes individuals receiving only family planning services and individuals receiving only emergency Medicaid services due to their immigration status. Although these individuals are entitled to a more limited benefit package, all services they receive are considered mandatory. We do not expect them to receive services under every type of service.

Source: MACPAC, 2017, analysis of MSIS data dictionary, the Social Security Act, and the *Code of Federal Regulations*.

Data Sources and Limitations

Spending adjustments

Form CMS-64 provides a more complete accounting of spending and is preferable to MSIS spending reports alone when examining state or federal spending totals. However, it cannot be used for analysis of benefit spending by eligibility group and other enrollee characteristics. The MSIS data allow for such comparisons, but some spending information, such as supplemental payments and drug rebates, is missing from MSIS.

Consistent with the methodology used in MACStats, and to help account for the limitations in both data sources, we used the MSIS data to provide the detailed information related to eligibility and service use and then adjusted the spending data to match total benefit spending reported by states in the CMS-64 (MACPAC 2016a). We excluded disproportionate share hospital (DSH) and certain other costs not otherwise matchable (CNOMs), including supplemental, incentive, and uncompensated care pool payments made under Section 1115 waiver authority. We excluded these supplemental payments because not all of the payments are specific to Medicaid services and enrollees, and they may be used more broadly, such as to offset the costs of uninsured individuals. We excluded $15.5 billion in DSH payments (which would be considered mandatory spending) and $10.8 billion in supplemental payments made under Section 1115 waiver authority (which would be considered optional spending).

We did not exclude waiver spending on CNOMs for eligibility expansions. We included waiver spending for several reasons, one being that many of the populations and services covered under these waivers can be covered under a state plan. These waiver costs include expansions to adults without dependent children, which required waivers in 2013 but became a state plan option in 2014. CNOMs also include family planning services and supplies to individuals not otherwise eligible for Medicaid that, until passage of the ACA, also required a waiver. They also include services similar to those provided in Section 1915(c) home- and community-based service waivers and other comparable services that can be covered without a waiver. Furthermore, all of these populations are presumed to be reported by the states in the MAS/BOE groups related to Section 1115 waiver coverage.

Limitations

In the past, MACPAC pointed out some of the limitations with administrative data, including their timeliness and accuracy (MACPAC 2013, 2011). For this study, in particular, the administrative data have the following constraints.

Level of specificity regarding enrollees' eligibility pathways. As discussed above, MACPAC classified individuals as mandatory or optional based on a combination of MAS and BOE designation. Each MAS/BOE combination contains multiple eligibility pathways, some of which are mandatory and some optional. However, there is no way to associate an individual with a specific eligibility pathway under a MAS/BOE combination in MSIS. As a result, we make a number of assumptions about the distribution of enrollees within these MAS/BOE groups.

It is important to note that using different assumptions might lead to different results. For example, for a number of MAS/BOE groups with mixed mandatory and optional eligibility pathways, we randomly assign half of the individuals mandatory status and half optional status, because approximately half of the pathways are mandatory and half are optional. However, it is not known whether enrollment through these pathways is evenly split. For example, other eligibles—adults (MAS-4, BOE-5) contains multiple mandatory pathways that likely have many people enrolled (such as parents eligible for Transitional Medical Assistance and postpartum women), and fewer optional enrollees. Because we had no data on the distribution of enrollees under each specific

eligibility pathway on which to base an alternative assumption, a conservative 50-50 split was applied.

It is also not clear whether reporting is consistent across states, as the pathways may overlap in MAS/BOE groups. For example, based on the statutory and regulatory citations, states can report certain optional enrollees age 65 and older in either MAS-1, BOE-1 or MAS-4, BOE-1. Under MACPAC's methodology for this analysis, individuals reported in the first group would be assigned mandatory status, but individuals in the second group would be randomly assigned an eligibility status.

A new version of the MSIS, referred to as the transformed MSIS (T-MSIS), will include more granular information on eligibility, including whether the eligibility pathway is mandatory or optional. At this time, however, states are still in the process of transitioning to T-MSIS reporting and such data could not be used for this analysis.

Limited spending data for managed care enrollees. For managed care, MSIS includes records of each capitated payment made on behalf of an enrollee to a managed care plan (generally referred to as capitated claims), as well as records of each service received by the enrollee from a provider under contract with a managed care plan (which generally do not include payment amounts and may be referred to as an encounter claims). All states collect encounter data from their Medicaid managed care plans, but some do not report them in MSIS.

Because the amount paid by the managed care plan for a specific service is not available from the MSIS encounter data, assumptions must be made about how much spending under managed care was for mandatory services and how much was for optional services. We assumed that the distribution of managed care spending on mandatory and optional services mirrors the distribution of spending in FFS arrangements at an eligibility group and state level. However, the differences between managed care and FFS in populations covered and services provided might mean that the FFS proportions do not provide an accurate model for the distribution of mandatory and optional spending under managed care. On the other hand, a shift in the type of service received under a managed care arrangement (for example from inpatient hospital to physician services) does not necessarily result in a shift in the share of mandatory versus optional spending, because both of these services would be considered mandatory. It was not within the scope of this project to attempt to adjust for differences in populations or services between FFS and managed care.

Additionally, states may carve out particular benefits from managed care and provide them through FFS arrangements. In these circumstances, an individual's carved out services would be classified as mandatory or optional based on the type-of-service code in the same manner as all other FFS spending. Capitation payments also include administrative costs, which account for approximately 11 percent of the payment (Palmer and Pettit 2014). As part of our CMS-64 adjustments, we also assign prescription drug rebates collected on managed care utilization to the managed care spending category. Both of these would be apportioned as mandatory or optional in the same manner as any services received under managed care.

Data cannot take into account services provided in lieu of other services. Some optional services are provided in lieu of other services. For example, many home- and community-based services would be considered optional. However, were these services not covered, some individuals would require mandatory services in an institution. This would result in an increase in the share of mandatory spending and could also increase the level of spending.

This analysis also cannot project how spending would change in response to changes in service availability. For example, if one type of optional service were to be discontinued, would that lead to an increase in the use of other available services? This type of inquiry would require an actuarial

analysis; this may be something the Commission will explore in the future.

Endnotes

[1] However, in the final rules issued after the enactment of the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) the Centers for Medicare & Medicaid Services (CMS) grouped these pathways together under one mandatory category (42 CFR 435.116).

References

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2015. *Medicaid managed care enrollment and program characteristics, 2013*. Washington, DC: CMS. https://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/medicaid-managed-care/downloads/2013-managed-care-enrollment-report.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2014. *Medicaid and CHIP Statistical Information System (MSIS) file specifications and data dictionary*. Washington, DC: CMS. https://www.medicaid.gov/medicaid-chip-program-information/by-topics/data-and-systems/downloads/collection-systems/msis-data-dictionary.pdf.

Courtot, B., E. Lawton, and S. Artiga. 2012. *Medicaid enrollment and expenditures by federal core requirements and state options.* Washington, DC: Kaiser Commission on Medicaid and the Uninsured. https://kaiserfamilyfoundation.files.wordpress.com/2013/01/8239.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016a. Technical guide to MACStats. In *MACStats: Medicaid and CHIP data book*. December 2016. Washington, DC: MACPAC. https://www.macpac.gov/publication/technical-guide-to-macstats-2.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016b. Exhibit 29: Percentage of Medicaid enrollees in managed care by state and eligibility group. In *MACStats: Medicaid and CHIP data book*. December 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/EXHIBIT-29.-Percentage-of-Medicaid-Enrollees-in-Managed-Care-by-State-and-Eligibility-Group-FY-2013.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015. Chapter 3: The intersection of Medicaid and child welfare. In *Report to Congress on Medicaid and CHIP*. June 2015. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/06/Intersection-of-Medicaid-and-Child-Welfare.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2013. Chapter 4: Update on Medicaid and CHIP data for policy analysis and program accountability. In *Report to the Congress on Medicaid and CHIP*. June 2013. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Update_on_Medicaid_and_CHIP_Data_for_Policy_Analysis_and_Program_Accountability.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2011. Chapter 6: Improving Medicaid and CHIP data for policy analysis. In *Report to the Congress on Medicaid and CHIP*. March 2011. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Improving_Medicaid_and_CHIP_Data_for_Policy_Analysis_and_Program_Accountability.pdf

Palmer, J.D., and C.T. Pettit. 2014. *Medicaid risk-based managed care: Analysis of financial results for 2013*. Indianapolis, IN: Milliman. http://www.milliman.com/uploadedFiles/insight/2014/medicaid-risk-based-managed-care.pdf.

Chapter 2:

Medicaid and the Opioid Epidemic

Medicaid and the Opioid Epidemic

Key Points

- The opioid epidemic, which has reached most communities across the U.S., disproportionately affects Medicaid beneficiaries. For example:
  - Medicaid beneficiaries age 18–64 have a higher rate of opioid use disorder than privately insured individuals, comprising about 12 percent of all civilian, non-institutionalized adults in this age group but about one-quarter of those with an opioid use disorder.
  - Medicaid beneficiaries are prescribed pain relievers at higher rates than those with other sources of insurance.
  - They also have a higher risk of overdose and other negative outcomes, from both prescription opioids and illegal opioids such as heroin and illicitly manufactured fentanyl.
  - But Medicaid beneficiaries with an opioid use disorder have higher treatment rates than privately insured adults with the same condition.
- State Medicaid programs are responding to the opioid crisis by covering treatment, innovating in the delivery of care, and working to reduce misuse of prescription opioids. Medicaid programs cover many components of medication-assisted treatment (MAT), the recommended treatment for opioid use disorders under current evidence-based guidelines. However, there is considerable variation in available services across states, since many are optional under the Medicaid statute.
- States are using a variety of legal authorities to expand both the availability of treatment and the number of individuals eligible for such care. They are also working to organize and integrate physical health and substance use disorder treatment delivery systems to provide more effective care. These mechanisms include Section 1115 waivers, the health homes option, and the rehabilitation option.
- States are also focused on identifying opioid overprescribing in order to prevent opioid use disorders from developing. These approaches include prescription drug monitoring programs, patient review and restriction programs, drug utilization reviews, utilization management techniques such as quantity limits or prior authorization requirements for prescription opioids, and the use of non-opioid pain management therapies.
- Even so, many Medicaid enrollees with an opioid use disorder are still not receiving treatment. Barriers to care include individuals not perceiving the need for treatment or fearing the stigma of having a substance use disorder, a fragmented and poorly funded delivery system, privacy regulations that limit care coordination, a shortage of Medicaid-participating providers and providers trained in MAT, and gaps in the continuum of care associated with both restrictive coverage policies and the institution for mental diseases (IMD) payment exclusion.

CHAPTER 2: Medicaid and the Opioid Epidemic

Much has been written about the opioid epidemic in America and its devastating effects on families and communities. In many ways, Medicaid is at its center. The epidemic disproportionately affects Medicaid beneficiaries, and state Medicaid programs are taking the lead in identifying and tailoring strategies to prevent and treat opioid use disorder and reduce its adverse effects. In 2015, Medicaid beneficiaries age 18–64 had a higher rate of opioid use disorder than privately insured individuals: they comprised about 12 percent of all civilian non-institutionalized adults in this age group but about one-quarter of those with an opioid use disorder (SHADAC 2017). Medicaid beneficiaries are prescribed pain relievers at higher rates than those with other sources of insurance. They also have a higher risk of overdose and other negative outcomes, from both prescription opioids and illegal opioids, such as heroin and illicitly manufactured fentanyl (McMullen 2016, Zhou et al. 2016, Sharp and Melnick 2015, Whitmire and Adams 2010, CDC 2009). In addition, Medicaid beneficiaries with an opioid use disorder have higher treatment rates than privately insured with the same condition (SHADAC 2017).

Beyond the human toll, opioid misuse and opioid use disorder have large financial effects. In 2012, 81 percent of the estimated $1.5 billion in hospital charges related to neonatal abstinence syndrome in infants born to women using opioids was billed to Medicaid (Patrick et al. 2015).[1] In 2012, inpatient hospital charges for individuals with serious infections associated with an opioid use disorder exceeded $700 million, and Medicaid enrollees accounted for 43 percent of those hospitalizations (Ronan and Herzig 2016).

Opioids are a class of drugs that include many prescription pain relievers (such as oxycodone, hydrocodone, codeine, morphine, fentanyl, and methadone) and illegal versions such as heroin and illicitly manufactured fentanyl (CDC 2016a). While historically considered a moral failing, opioid use disorder—like other substance use disorders—is a chronic brain disease. It typically develops over time with repeated misuse of opioids and involves a three-stage cycle: binge/intoxication, withdrawal/negative affect, and preoccupation/anticipation. It is further characterized by clinically significant impairments in health, social function, and control over opioid use; development of tolerance; and withdrawal symptoms. An opioid use disorder can range from mild to severe and from temporary to chronic. Continued use increases the severity of effects and changes brain function, persisting long after use has stopped. The extent to which these changes can be reversed, and how long that might take, is unknown. Even so, opioid use disorder can be effectively treated and managed; recurrence rates (also referred to as relapse rates) are no higher than those of other chronic illnesses such as type 2 diabetes, hypertension, or asthma (OSG 2016, ASAM 2014).

Medicaid is responding to the opioid crisis by covering treatment, innovating in the delivery of care, and working with other state agencies to reduce misuse of prescription opioids. However, there are gaps in the continuum of care, and states vary in the extent to which they cover needed treatment. An insufficient supply of providers also limits access to treatment in many locations. The delivery systems for physical health and behavioral health (which encompasses mental illness and substance use disorders) are traditionally separately organized and financed; the resulting fragmentation and lack of coordination can impede access to care and lead to inappropriate and insufficient use of services, poor health status, and increased costs (OSG 2016). The stigma associated with substance use disorders can also affect the willingness of individuals to seek help, providers to offer care, and policymakers to finance treatment.

Although the opioid epidemic has cut a broad swath through our society—affecting rich and poor, as well as urban, suburban, and rural communities—this chapter focuses on how it

affects Medicaid beneficiaries and state strategies to address this crisis. The chapter begins by documenting the prevalence of opioid use and opioid use disorder among different groups of beneficiaries, including children, pregnant women, working-age adults, older adults, and people with disabilities. It goes on to describe how Medicaid programs are covering screening and treatment services for opioid use disorder, highlighting the legal authorities that states are using to expand not only benefits but also the number of enrollees eligible for such care. It then details how Medicaid programs are working to reduce inappropriate opioid prescribing, and concludes by describing the challenges to further improving access to treatment for Medicaid beneficiaries with an opioid use disorder.

Opioid Use, Misuse, and Use Disorders: Prevalence, Comorbidities, and Adverse Outcomes

Prescription opioid misuse occurs when a person uses the drug without a prescription; in greater amounts, more often, or longer than prescribed; or in other ways contrary to the prescribing clinician's directions (Hughes et al. 2016). Opioid use disorder, an umbrella term for both pain reliever and heroin use disorders, is a brain disease that typically develops over time with repeated misuse of opioids. It is characterized by clinically significant impairments in health, social function, and control over opioid use; development of tolerance; and withdrawal symptoms that occur after stopping or reducing use.

Below, we describe the prevalence of and sociodemographic characteristics associated with opioid use, misuse, and opioid use disorder. We also present information on health conditions that can affect or be affected by opioid use, and rates of treatment for opioid use disorder. While not all the data in this section are specific to Medicaid, they are useful in understanding the scope and nature of the epidemic.

Prevalence of opioid use, misuse, and use disorder

In 2015, 2 million people (0.8 percent of civilian, non-institutionalized individuals age 12 and older in the U.S.) had a prescription pain reliever disorder, and some 12.5 million people (4.7 percent of individuals age 12 and older) had misused prescription pain relievers in the previous year (Bose et al. 2016, Hughes et al. 2016). Rates of prescription opioid use and misuse differed among population groups (Table 2-1).

Link between prescription opioids and heroin use

People who misuse opioids may turn from prescription drugs to illegal drugs, which may be cheaper and more potent; the share that do so is small, at less than 5 percent (Compton et al. 2016, Wu et al. 2011). Most heroin users, however, have a history of prescription opioid misuse (Jones et al. 2015a). For example, one study found that among people who used both prescription opioids for non-medical reasons and heroin during the previous year, 77.4 percent reported using prescription opioids before initiating heroin use (Jones 2013).[2] A recent study comparing data from 2001–2002 to 2012–2013 found an increase in the share of white individuals whose heroin use was preceded by non-medical use of prescription opioids. There was, however, a reduction in the percentage of non-white users who reported non-medical prescription opioid use before initiation of heroin use over the same time span (Martins et al. 2017). The increase in heroin overdose deaths rates has occurred concurrently with an increase in prescription opioid overdoses (Jones et al. 2015a).

TABLE 2-1. Share of Prescription Pain Reliever Use and Misuse in Past Year among U.S. Persons Age 12 and Older, by Demographic Characteristics, 2015

Demographic group	Prescription pain reliever use past year	Prescription pain reliever misuse past year
All individuals age 12 and older	36.4%	4.7%
Age		
12–17	22.7	3.9
18–25	34.8	8.5
26 and older	38.3	4.1
Sex		
Male	33.9	5.3
Female	38.8	4.0
Race and ethnicity		
White	38.7	4.8
Black	38.3	4.4
Hispanic	30.2	5.0
Asian	22.0	1.8
American Indian or Alaska Native	38.7	5.6
Native Hawaiian or other Pacific Islander	32.7	5.4
Two or more races	44.8	8.4
Education (among persons 18 and older)		
Less than high school	37.4	5.7
High school graduate	38.9	4.9
Some college or associate degree	42.8	5.7
College graduate	38.1	3.1
Employment status (among persons 18 and older)		
Working full time	34.9	4.8
Working part time	36.5	5.4
Unemployed	40.1	9.1
Other[1]	42.4	3.7

Notes: Prescription pain reliever use means the use of one's own prescription medication as directed by the prescribing clinician. Prescription pain reliever misuse means taking a prescription medication without a prescription; taking a prescription medication in greater amounts, more often, or longer than prescribed; or taking a prescription medication in any other way contrary to the prescribing clinician's directions. Table shows percentage of given U.S. population group with prescription pain reliever use or misuse in past year, as reported in the 2015 National Survey on Drug Use and Health (SAMHSA 2016a).

[1] Other indicates individuals not in the labor force (e.g., students, homemakers, retirees, or people not working due to disability).

Source: SHADAC 2017, Hughes et al. 2016, SAMHSA 2016a.

Prevalence of opioid disorders by insurance status

In 2015, Medicaid beneficiaries were more likely to abuse or have a dependency on an opioid in the previous year than privately insured adults age 18–64. Medicaid beneficiaries have similar rates of opioid abuse and dependence (both considered an opioid use disorder) as uninsured adults (Table 2-2). Medicaid enrollees, however, are more likely than privately insured and uninsured adults to have both used heroin in the past and had a pain reliever dependence in the previous year. They are the most likely to have ever used heroin and misused a prescription pain reliever.

Opioid use disorder occurs across all Medicaid beneficiary groups and demographics, but certain comorbid conditions, predictors of future use disorder, and outcomes differ.

Geographic differences. There has been substantial media attention on opioid misuse and opioid use disorder in rural areas (Bohner 2017, Gliha 2017, Runyon 2017, Tanner 2016). Even so, using national datasets, misuse of prescription opioids between rural and more urban areas show either similar rates of misuse or higher rates in urban and suburban areas (Lenardson et al. 2016, Rigg and Monnat 2015, SAMHSA 2013a). These statistics may mask other important differences, however. For example, studies documented a higher prevalence of prescription pain reliever misuse in certain vulnerable rural populations, such as adolescents, women who are pregnant or experiencing partner violence, and persons with co-occurring disorders. One study found higher misuse rates among specific rural subpopulations compared to their urban counterparts, including those who had less than a high school education, were uninsured, were in fair or poor health, or had low incomes (Lenardson et al. 2016, Monnat and Rigg 2015, Havens et al. 2011).

Additionally, there has been a shift in the demographics of heroin use over the past 50 years. No longer centered in inner cities and among racial minorities, heroin use is now more widespread geographically, involving primarily white men and women in their late 20s living outside of large urban areas (Cicero et al. 2014). States with the highest opioid overdose death rates also include states with large rural populations, such as Kentucky, New Hampshire, and West Virginia (Rudd et al. 2016).

Pregnant women and infants. Opioids are widely prescribed among women of childbearing age, with over one-third of Medicaid-enrolled women filling an opioid prescription annually (Ailes et al. 2015). Between 2005 and 2014, nearly 1 percent of pregnant women and 2.3 percent of non-pregnant women of reproductive age reported non-medical use of a prescription opioid in the previous 30 days. Of these women reporting non-medical use of a prescription opioid, pregnant women were more likely to receive their opioid from a doctor (46 percent) than were non-pregnant women (28 percent) (Kozhimannil et al. 2017). Infants born to women using opioids during pregnancy may experience neonatal abstinence syndrome, which manifests in the first few days of life with the following symptoms: difficulty with mobility and flexing; inability to control heart rate, temperature, and other autonomic functions; irritability; poor sucking reflex; impaired weight gain; and, in some cases, seizures (Tolia et al. 2015, Patrick et al. 2015). From 2004 to 2013, neonatal intensive care unit admissions for infants with neonatal abstinence syndrome increased from 7 cases per 1,000 admissions to 27 cases per 1,000 admissions (Tolia et al. 2015).

Adolescents. Adolescents who have an opioid prescription by 12th grade are more likely to misuse prescription opioids by the time they are 23 than those with no history of an opioid prescription (Miech et al. 2015). A history of prescription opioid misuse is also associated with initiating heroin use. Those beginning misuse of prescription opioids between the ages of 10 and 12 have the highest risk of transitioning to heroin use, and that association appears to be consistent across race, ethnicity, and income groups (Cerdá et al. 2015).

TABLE 2-2. Substance Misuse, Abuse, and Dependence in Adults Age 18–64, by Insurance Status, 2015

Type of use	Number of adults age 18–64	Percentage of all adults age 18–64	Percentage of adults age 18–64 in each coverage category		
			Medicaid	Private[1]	Uninsured
Illicit drug dependence or abuse, past year	6,674,356	3.4%	5.7%	2.4%*	5.4%
Illicit drug and alcohol abuse, past year	358,315	0.2	0.2	0.2	0.3
Illicit drug or alcohol abuse, past year	7,448,820	3.8	2.7	3.9*	4.7*
Pain reliever dependence, past year	1,430,552	0.7	1.3	0.5*	1.0
Pain reliever abuse, past year	444,013	0.2	0.5	0.1*	0.4
Misused pain reliever, past 30 days	3,309,245	1.7	2.6	1.3*	2.6
Ever misused pain reliever	24,194,171	12.4	14.0	11.7*	14.5
Misused OxyContin, past 12 months	1,581,181	0.8	1.2	0.6*	1.4
Ever used heroin	1,855,967	2.4	5.2	1.5*	3.2*
Heroin dependence, past year	555,291	0.3	0.8	0.1*	0.6
Ever used heroin and had pain reliever dependence, past year	535,853	0.3	0.8	0.2*	0.4*
Ever used heroin and ever misused pain reliever	1,123,879	1.4	3.3	0.9*	2.3*
Ever misused pain reliever and had heroin dependence, past year	164,051	0.2	0.6	0.1*	0.6

Notes: Before the 2013 release of the updated *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5), substance use disorders were split into two categories, abuse and dependence (e.g., an alcohol use disorder could be either a diagnosis of alcohol abuse or a diagnosis of alcohol dependence). The DSM-5 no longer distinguishes between abuse or dependence and uses one designation for substance use disorders and measures them on a continuum from mild to moderate to severe (e.g., a mild alcohol use disorder or a severe opioid use disorder). The 2015 National Survey on Drug Use and Health (NSDUH), however, used the older definition of abuse and dependence. In this survey, pain reliever misuse means taking a prescription medication without a prescription; taking a prescription medication in greater amounts, more often, or longer than prescribed; or taking a prescription medication in any other way contrary to the prescribing clinician's directions. We used the following hierarchy to assign individuals with multiple insurance coverage sources to a primary source: Medicare, private, Medicaid, other, or uninsured. Coverage source is defined as of the time of the most recent survey interview.

[1] Private health insurance coverage excludes plans that pay for only one type of service, such as accident coverage or dental care.

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

Source: SHADAC 2017.

Working-age adults. Factors that predict misuse by working-age adults include being male, unmarried, low income, and uninsured (Cicero et al. 2014). Available research suggests that opioid deaths and opioid-related emergency department visits rise when county-level and state-level unemployment rates increase (Hollingsworth et al. 2017). A recent study found that among adults age 26 and older, unemployed individuals were most likely to misuse prescription opioids, followed by those employed full-time. Individuals not in the labor force (e.g., students, homemakers, retirees, or persons not working due to disability) were least likely to misuse a prescription opioid (Perlmutter et al. 2017). People involved with the criminal justice system, by contrast, have higher rates of substance use disorders and heroin use in particular (Evans and Sullivan 2015, Belenko et al. 2013).

Older adults. There is relatively little high-quality research on prescription opioid misuse among older adults (Maree et al. 2016). One study found that in 2012, over one-third of Medicare enrollees with Part D prescription drug coverage filled at least one prescription for an opioid, and these individuals had more comorbidities than those without an opioid prescription. Those with particularly high use of opioids were more likely to be under age 65 and receiving a low-income subsidy (MedPAC 2015).[3] The Medicare population has one of the highest and fastest-growing rates of diagnosed opioid use disorder. Mortality rates among older adults also increased and surpassed rates for younger adults in 2012 and 2013 (Lembke and Chen 2016, West et al. 2015). Opioids and benzodiazepines (which are more likely to be prescribed to older adults to treat anxiety and sleep disorders) are also a high-risk combination, particularly in such older individuals (Nuckols et al. 2014, AOA and SAMHSA 2012).

People with disabilities. People with disabilities are more likely to be prescribed opioid pain relievers due to their higher rates of painful conditions, but there are no nationally representative data on opioid misuse in populations of people with disabilities (NCHS 2016). One systematic review and data synthesis found that rates of opioid misuse averaged between 21 percent and 29 percent among patients with chronic pain, and rates of addiction averaged between 8 percent and 12 percent (Vowles et al. 2015). Another systematic review of studies of opioid prescribing for patients with low back pain found that up to 25 percent of patients receiving these medications exhibited some signs of medication misuse (Martell et al 2007).

Utilization of treatment for opioid use disorder by insurance status

Medicaid beneficiaries with opioid use disorder are more likely to receive treatment than privately insured adults with the disorder, both inpatient and outpatient treatment. They are about three times more likely to receive drug or alcohol treatment in a hospital as an inpatient or in a residential treatment facility than privately insured adults, and they are almost twice as likely to receive care on an outpatient basis from a mental health center than privately insured adults. Treatment services, however, remain substantially underutilized; this is often referred to as the treatment gap. In 2015, only about 32 percent of Medicaid enrollees with an opioid use disorder were receiving treatment (Table 2-3).

It is unclear why Medicaid enrollees are more likely to receive treatment than privately insured individuals. Many factors influence whether an individual seeks care; for example, a belief that one does not need treatment, an unwillingness or inability to stop using drugs, concerns about the effect on one's job, inability to afford the cost of treatment, lack of information about treatment options, and lack of available treatment programs in the community (OSG 2016). Another possible explanation for the difference in rates of treatment between individuals covered by Medicaid and those with private insurance is that private plans may impose higher out-of-pocket costs or more stringent coverage limits, which discourage individuals from seeking care. Those with

employer-sponsored coverage may also worry that their employer will find out about their substance use disorder, and thus they do not get treatment (Bouchery et al. 2012). Differences in rates of treatment receipt were also observed by various demographic characteristics, such as age, race, and educational level (Bali 2013).

TABLE 2-3. Treatment for Substance Use Disorder among Adults Age 18–64 with Past Year Opioid Use Disorder, by Medicaid and Private Insurance Coverage, 2015

Treatment characteristics	Percentage of adults age 18–64 with past year opioid use disorder	Percentage in each coverage category	
		Medicaid	Private[1]
Currently receiving treatment or counseling	20.2%	32.3%	17.2%*
Ever received alcohol or drug treatment	56.0	64.3	49.9*
During previous 12 months			
Perceived the need for treatment or counseling for alcohol or drug use	11.4	16.0	6.1*
Perceived the need for treatment or counseling for pain reliever use disorder	7.1	N/A	N/A
Perceived the need for treatment or counseling for heroin use disorder	3.8	N/A	N/A
Received treatment in a hospital overnight as an inpatient	10.4	16.4	6.2*
Received treatment in a residential drug rehabilitation facility	11.7	21.8	7.1*
Received treatment in a drug rehabilitation facility as an outpatient	19.6	30.4	16.2*
Received treatment in a mental health center or facility as an outpatient	11.0	22.0	8.0*
Received treatment in an emergency room	5.8	9.6	4.0
Received treatment in a private doctor's office	12.7	15.4	15.4
Participated in a mutual aid group such as Alcoholics Anonymous or Narcotics Anonymous	20.2	26.0	19.0
Received treatment in another place	10.7	N/A	9.8

Notes: N/A indicates that the estimate is based on too small a sample or is too unstable to present. We used the following hierarchy to assign individuals with multiple coverage sources to a primary source: Medicare, private, Medicaid, other, or uninsured. Coverage source is defined as of the time of the most recent survey interview.

[1] Private health insurance coverage excludes plans that pay for only one type of service, such as accident coverage or dental care.

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

Source: SHADAC 2017.

Opioid use disorder and comorbidities

It is important to note that there are health factors that can exacerbate disorders and make effective treatment difficult. For example, comorbidities such as mental illness or misuse of other substances may interfere with a patient's ability to seek care (e.g., they are too weak to travel, or these conditions interfere with adherence). In addition, other conditions may be the main focus of a patient's treatment, with opioid use disorder being ignored or considered less critical to treat. For example:

- Heroin use, in particular, is associated with other serious health conditions. When people inject heroin with shared needles, they are at risk of serious, long-term viral infections such as HIV, hepatitis C, and hepatitis B. Intravenous drug use can also cause bacterial infections of the skin, bloodstream, and heart (CDC 2015).
- People who use other substances are more likely to misuse pain relievers (Bose et al. 2016). For example, 5.9 percent of past-year alcohol users also misused prescription pain relievers during the same time period. Among past-year heroin users age 12 and older, 72.1 percent had misused prescription pain relievers during the same time period. Of people age 12 and older who used marijuana in the past year, 16.2 percent also misused prescription pain relievers during the same time period (Bose et al. 2016). A significant percentage of heroin users meet diagnostic criteria for disorders involving other drugs (Jones et al. 2015a).
- There is a higher prevalence of opioid use disorder among individuals with anxiety or mood disorders, such as major depressive disorder or bipolar disorder, than in individuals without these conditions (NIDA 2010). Among the 19.6 million adults age 18 and older in 2015 with a past-year substance use disorder, 2.3 million (11.9 percent) also had a serious mental illness during the same period (Bose et al. 2016).

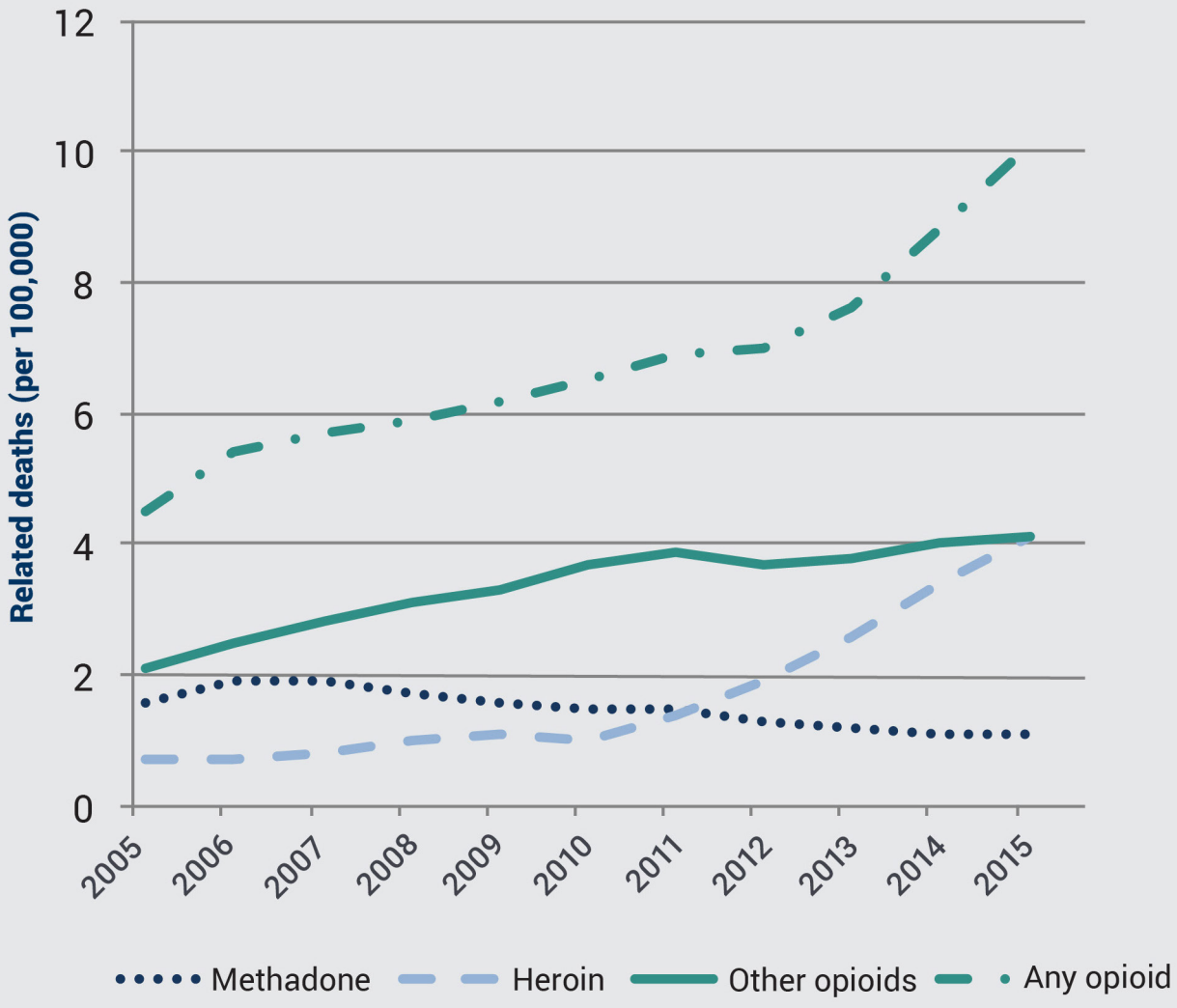
Mortality associated with opioid use

Although opioids are useful for pain control when used appropriately, their mood-enhancing effects and addictive properties can lead to misuse, opioid use disorder, and negative outcomes, such as increased risk of brain and organ damage and death. National statistics on opioid-related death rates specific to the Medicaid population are not available, but drug overdose deaths in the United States overall nearly tripled from 1999 to 2014 (Rudd et al. 2016). During this period, overdose death rates were highest among the 25 to 54 age group. Overdose death rates for non-Hispanic whites and American Indian or Alaskan Natives were higher than rates for non-Hispanic blacks and Hispanics, and men were more likely to die from an overdose than women (although the mortality gap between men and women is closing) (CDC 2016b). State-level data on opioid overdose deaths show Medicaid beneficiaries have a higher risk of overdose and adverse effects from both prescription opioids and illegal versions, including heroin and illicitly manufactured fentanyl (McMullen 2016, Zhou et al. 2016, Sharp and Melnick 2015, Whitmire and Adams 2010, CDC 2009).

Death rates vary by type of opioid. There is progress in preventing methadone deaths: death rates declined by 9.1 percent from 2014 to 2015 (Figure 2-1). During the same time period, however, overdose deaths associated with other synthetic opioids increased by 72.2 percent (most likely due to greater availability of illicitly manufactured fentanyl), while natural or semisynthetic opioid death rates increased by 2.6 percent (Rudd et al. 2016, Gladden et al. 2016).[4] Heroin death rates increased by 20.6 percent overall and across all demographic groups and regions. Of the 28 states with high-quality data permitting state-level analysis, 16 experienced increases in death rates involving synthetic opioids other than methadone,

and 11 saw increases in heroin death rates. West Virginia had the highest death rate associated with opioid use, followed in descending order by New Hampshire, Kentucky, Ohio, and Rhode Island. The largest overall changes in rates of death from synthetic opioids other than methadone occurred in Massachusetts, New Hampshire, Ohio, Rhode Island, and West Virginia; the largest overall changes in rates of heroin deaths were in Connecticut, Massachusetts, Ohio, and West Virginia. New Mexico, Oklahoma, and Virginia saw decreases in rates of deaths due to natural or semisynthetic opioids, while increases occurred in Massachusetts, New York, North Carolina, Ohio, and Tennessee (Rudd et al. 2016).

FIGURE 2-1. Opioid Overdose Death Rates by Opioid Type, 2005–2015



Notes: Other opioids in this figure include natural opioids (e.g., morphine and codeine), semisynthetic opioids (e.g., oxycodone, hydrocodone, hydromorphone, and oxymorphone), and synthetic opioids other than methadone (e.g., tramadol and fentanyl).

Source: MACPAC, 2017, analysis of Centers for Disease Control and Prevention 1999–2015 multiple cause of death data.

Medicaid's Response to the Opioid Epidemic

Medicaid is fighting the opioid epidemic on a variety of fronts. State Medicaid programs cover substance use disorder treatment and supportive services to varying degrees. They are working to integrate care for physical health and treatment for substance use disorders across providers and with other social programs. They also are implementing programs to reduce opioid overprescribing in order to prevent opioid use disorder from developing in the first place. Many of these efforts are being undertaken in conjunction with other state and federal initiatives, such as the National Governors Association's Compact to Fight Opioid Addiction and the Centers for Medicare & Medicaid Services (CMS) Opioid Misuse Strategy (CMS 2017a, NGA 2016).

Medicaid coverage of diagnosis and treatment for opioid use disorder

State Medicaid programs cover many services that are considered effective in identifying and intervening in misuse, responding to overdoses, and diagnosing and treating opioid use disorder. Below, we describe three components that contribute to this success: screening and early intervention, naloxone use, and medication-assisted treatment.

Coverage varies considerably across states, in part because many of these services are optional under the Medicaid statute. Such services include counseling, services provided by licensed clinical social workers, targeted case management, medication management, clinic services, prescription drugs, and peer and recovery supports.[5] States that expanded Medicaid to the new adult group have different obligations to these beneficiaries: alternative benefit plans offered to the new adult group must cover 10 essential health benefits, including mental health and substance use disorder services (CMS 2017b).

Although mental health parity requirements prohibit Medicaid managed care organizations and alternative benefit plans from imposing financial and treatment limitations to mental health and substance use disorder benefits that are more stringent than those imposed on medical and surgical benefits, parity requirements apply only to covered benefits and do not create an obligation to provide them (CMS 2013).

Screening and early intervention. Because of the prevalence of substance use disorders and the fact that most individuals with such a disorder are not aware of the need for treatment, it is important for clinicians, including primary care providers, to screen for misuse and disorders, engage patients, and provide interventions and referrals for additional care as needed. Thirty-four states and the District of Columbia covered some component of screening, intervention, and referral under Medicaid in 2012 (Townley and Dorr 2017, Shapiro et al. 2013). Current guidelines of the American Academy of Family Physicians, the American Academy of Pediatrics, and the American College of Obstetricians and Gynecologists call for universal and ongoing screening for substance use and mental health issues in both adults and adolescents (OSG 2016).[6] The United States Preventive Services Task Force (USPSTF) recommends that primary care providers screen adults for alcohol misuse and provide brief behavioral counseling interventions as an evidence-based practice (USPSTF 2013). The USPSTF is currently reviewing new evidence and is potentially updating its recommendation regarding screening and intervention for illicit drug use in adults, including pregnant women, and adolescents. The USPSTF had previously found insufficient evidence regarding the utility of screening and intervention in the general population (USPSTF 2016).

Overdose prevention. Naloxone reverses or blocks the effects of opioids, reducing the likelihood of overdose death or injury, such as brain and other organ damage. All states cover naloxone (MACPAC 2016a). In addition, 26 state Medicaid programs listed naloxone on their preferred drug lists or

made at least one formulation available without prior authorization in 2016 (KFF and NAMD 2016). This coverage, however, may be limited to use in traditional medical settings, despite the medication being most effective when used quickly after an overdose occurs. States are expanding use in other settings, for example, by covering take-home naloxone; distributing naloxone to first responders, such as emergency medical technicians and police officers; and allowing pharmacists to write and dispense prescriptions to either individuals at risk of overdose or their family or peers (Corso and Townley 2016, CMS 2016a).

Medication-assisted treatment. For individuals who already have an opioid use disorder, current evidence-based guidelines recommend the use of medication-assisted treatment (MAT), which combines medication with counseling, behavioral therapies, and recovery support services (VA/DoD 2015, ASAM 2015). When used correctly, MAT is cost-effective and can reduce or eliminate illicit opioid use, restore healthy functioning, lessen criminal activity, reduce infectious disease transmission, and lead to significant reductions in inpatient and detoxification use (OSG 2016, Baser et al. 2011). Medicaid coverage of MAT components, as described below, varies considerably.

Medications. Three medications are currently approved by the U.S. Food and Drug Administration (FDA) for use in MAT of opioid use disorder: methadone, buprenorphine, and naltrexone. While all states now cover at least one of these three, many do not cover all. State Medicaid policies on these drugs as of 2015 were as follows:

- methadone—30 states and the District of Columbia covered methadone (MACPAC 2016a);
- buprenorphine—all 50 states and the District of Columbia covered at least one formulation of buprenorphine (Grogan et al. 2016); and
- naltrexone—49 states and the District of Columbia covered at least one formulation of naltrexone under Medicaid state plan authority (MACPAC 2016a).

Each medication has its own known risks and benefits, and, depending on an individual's treatment plan, they may not be interchangeable (VA/DoD 2015).[7] Clinical guidelines note that the clinician and patient should share the decision in selecting a treatment, basing it on patient preferences, resources, past treatment history, and treatment setting (ASAM 2015). There is not yet sufficient research to recommend a specific length of time for MAT, but arbitrary maintenance periods (e.g., 90 or 180 days), followed by detoxification from methadone or buprenorphine, are rarely effective and may lead to relapse and overdose (OSG 2016). Studies show that methadone and buprenorphine can be successfully used for years at a time and other studies also indicate that long-term treatment is more effective than quick tapering with buprenorphine (VA/DoD 2015).

Behavioral therapies. The second component of MAT is the use of behavioral therapies to help patients develop healthier and more productive coping mechanisms and recognize how their behaviors affect their ability to support long-term recovery. In 2015, 24 states covered some type of psychotherapy, and 39 states and the District of Columbia covered some other type of therapy under their state plan (MACPAC 2016b).

Several types of therapy are effective in treating substance use disorders across different genders, ages, and racial and ethnic groups. Generally, these therapies can be delivered in any treatment setting and include the following:

- cognitive-behavioral therapy (CBT)—teaches coping skills and techniques to identify and modify dysfunctional thinking, usually involves 12–24 weekly individual sessions;
- contingency management—gives material rewards to individuals who are demonstrating

positive behavior changes (e.g., participating in treatment activities or testing drug-free in urine screens);

- motivational enhancement therapy—uses motivational interviewing techniques to help individuals resolve any ambivalence about stopping substance use;
- the Matrix model—a 16-week structured program that includes relapse prevention, family therapy, group therapy, drug education, and self-help;
- family therapy—conducted with partners, children, and others to support an individual's behavior change; and
- 12-step facilitation—therapy designed to prepare individuals to engage in programs such as Alcoholics Anonymous or Narcotics Anonymous (OSG 2016).

Treatment settings. Opioid use disorder treatment can occur in a variety of settings depending on the severity of an individual's disorder and treatment goals (Table 2-4). Many states use the criteria developed by the American Society of Addiction Medicine (ASAM), called the ASAM Criteria, which uses a multidimensional assessment to create a comprehensive and individualized treatment plan, including a determination of the most appropriate setting for care (ASAM 2017).

Recovery support services. Due to the chronic nature of substance use disorders, individuals often require ongoing management and monitoring to support long-term recovery, especially after treatment has ended. Recovery support services can provide emotional and practical support to maintain remission. Individuals who participate in treatment and utilize support services typically have better long-term outcomes than individuals receiving either alone. These services are offered through both treatment programs and community organizations and are conducted by trained case managers, recovery coaches, and peers. Supports include peer support, supported employment, mutual aid groups such as 12-step groups, recovery housing, recovery checkups, telephonic case monitoring, and recovery community centers (OSG 2016). In 2015, 14 states covered some form of peer support for substance use disorders and 9 states and the District of Columbia covered some version of supported employment under state plan authority (MACPAC 2016b).

Medicaid innovations in delivery of care for opioid use disorder

State Medicaid programs are using a variety of legal authorities to organize delivery systems to combat the opioid epidemic. These include:

- Section 1115 waivers;
- Section 2703 health homes option;
- the state plan rehabilitation option; and
- Section 1915(i) state plan option for home- and community-based services.

Below, we describe four state initiatives that are using different authorities to improve access to treatment and improve outcomes.

Vermont: Care Alliance for Opioid Addiction. In Vermont, the Care Alliance for Opioid Addiction, also known as the Hub and Spoke Initiative, is expanding MAT access statewide to Medicaid enrollees with opioid use disorder. The initiative builds on the existing substance use disorder infrastructure and seeks to increase treatment capacity and integration with other types of medical care to provide comprehensive, coordinated, high-quality services. Operating under the Section 2703 health homes option, Vermont receives a temporary enhanced federal match for the services to coordinate care across the continuum of care.

The hubs in the Vermont model are seven (as of January 2017) regional opioid treatment program (OTP) facilities, which coordinate care and support services for clinically complex patients with opioid

use disorder and co-occurring substance use disorders or mental health conditions. Depending on the patient's needs, support services can include mental health treatment, pain management, family supports, life skills, job development, and recovery supports. Methadone dispensing is restricted by federal law to these specially licensed OTP facilities, but buprenorphine may also be available in an OTP. The hubs receive a monthly bundled payment for Medicaid health home enrollees' care (Cimaglio 2017, VTDH 2017, Moses and Klebonis 2015).

The spokes in the Vermont model are patient-centered medical homes; for instance, a primary care practice or a federally qualified health

TABLE 2-4. Medicaid Covered Benefits in Substance Use Disorder Care Settings, 2015

Setting	Medicaid covered benefits
Medically monitored or managed inpatient hospital care	
For individuals who require withdrawal management, primary medical and nursing care, or both.	Thirty-one states and the District of Columbia covered some form of inpatient detoxification.
Residential services in 24-hour non-hospital setting	
Provide intensive support, structure, and evidence-based clinical services for individuals who are not stabilized enough to receive care on an outpatient basis.	Twenty-six states and the District of Columbia covered some type of non-detoxification related inpatient care, which may include treatment in residential facilities.
Partial hospitalization or intensive outpatient services	
Provide a range of services such as counseling, education, and clinically intensive programming. This care is appropriate for individuals who live in a stable environment conducive to recovery but nevertheless require rigorous structure to avoid relapse.	Seventeen states covered some form of partial hospitalization and 21 states and the District of Columbia covered some type of intensive outpatient services.
Outpatient settings	
Outpatient treatment includes treatment provided in primary and specialty physician practices, community mental health centers, and specialized substance use disorder treatment programs that provide individual and group behavioral interventions or medications. Care in this setting is appropriate for individuals with mild to moderate substance use disorders or as step-down from more intensive treatment.	State coverage of services delivered in these settings varies according to the type of service.

Note: Estimates of the number of states covering services in these settings is based on an analysis of coverage under 2015 Medicaid state plan authorities.

Sources: MACPAC 2016b, OSG 2016, ASAM 2015.

center (FQHC), that provide opioid use disorder treatment to patients with less complex needs. Patients being treated with buprenorphine can receive treatment in a spoke. The hubs and spokes have reciprocal clinical relationships, and addiction nurses and licensed addiction and mental health counselors are embedded in the spokes to support the buprenorphine-prescribing providers and deliver the continuum of MAT care. In addition to payment for MAT services, spokes also receive a monthly capacity payment for spoke nurses and clinician case managers (VTBH 2017, Moses and Klebonis 2015).

Previously, the state's treatment network had limited capacity for Medicaid beneficiaries, with some areas having long wait lists for OTPs or no access at all. There were also not enough physicians authorized to prescribe buprenorphine. The siloed nature of the delivery system made management of comorbidities difficult. Enrollees with an opioid use disorder were at risk of overdose and their incurred costs were on average three times higher than other beneficiaries (Cimaglio 2015).

Since implementation in July 2013, the number of enrollees receiving MAT has almost tripled to over 6,000 beneficiaries, and the number of physicians in non-specialty settings offering MAT has also increased significantly. Those receiving MAT have lower inpatient, emergency department, and general pharmacy expenditures than other beneficiaries with opioid use disorder who are receiving treatment without use of methadone and buprenorphine (Mohlman et al. 2016).

Virginia: Medicaid Addiction and Recovery Treatment Services. The opioid epidemic in Virginia has been costly in both human and financial terms. In 2013, prescription opioids and heroin were implicated in 80 percent of drug overdose deaths in Virginia. In 2014, Virginia spent $44 million on Medicaid beneficiaries with a primary or secondary diagnosis of substance use disorder and who were admitted to hospitals or emergency departments. In 2015, there were 216,555 Medicaid enrollees who had at least one claim that included a substance use disorder diagnosis (VDMAS 2016a).

In response, a bipartisan task force formed by the governor recommended that Virginia expand the scope of MAT benefits in Medicaid and expand coverage to all its Medicaid enrollees. With subsequent approval from the legislature and the governor, the state Medicaid agency worked with the Virginia Department of Behavioral Health and Developmental Services to design the Medicaid Addiction and Recovery Treatment Services (ARTS) benefit. This comprehensive set of covered services, modeled after the ASAM criteria, went into effect on April 1, 2017 (Neuhausen 2017).

Through an amendment to an existing Section 1115 demonstration waiver, Virginia expanded benefits to all Medicaid enrollees to include the following:

- inpatient detoxification and inpatient substance use disorder treatment for up to 15 days (previously only available to children);
- residential detoxification and residential substance use disorder treatment (previously delivered using outdated, state-defined program rules); and
- peer supports for individuals with substance use disorders or mental health conditions to provide intensive short-term and long-term recovery coaching.

In addition, to improve provider participation and access to treatment, the agency increased payment for substance use disorder case management by 50 percent and quadrupled payment for substance use disorder partial hospitalization, intensive outpatient services, and the counseling component of MAT. Rates are now on par with, and exceed in some cases, those of commercial insurers. To promote integration with medical and mental health care, the benefit was carved in to standard

managed care contracts. To reduce clinician burden, the state mandated that managed care plans adopt a uniform preauthorization protocol for medication. Using separately appropriated non-Medicaid state funds, Virginia is also conducting a series of provider education and training sessions (Neuhausen 2017, VDMAS 2016b).

Ohio: Maternal Opiate Medical Support (MOMS) project. In 2013, Ohio Medicaid, in conjunction with the Office of Health Transformation and the Ohio Department of Mental Health and Addiction Services, initiated a two-year pilot project to improve maternal and fetal health outcomes, improve family stability, and reduce the costs associated with neonatal abstinence syndrome. Although pregnant women with opioid use disorder had been receiving treatment as a priority population, they were still at significant risk for overdoses and other related adverse effects. Infants born to these mothers also faced poor health outcomes soon after delivery—19.6 percent were low birth weight compared to 10.0 percent of all Ohio infants; 21.0 percent had respiratory problems compared to 9.5 percent of all Ohio infants; 16.6 percent had feeding difficulties compared to 5.4 percent of all Ohio infants; and 0.8 percent suffered seizures and convulsions compared to 0.2 percent of all Ohio infants (ODH 2017). In 2014, Medicaid paid for nearly 91 percent of hospitalizations for neonatal abstinence syndrome. Treatment costs for these infants came to $105 million and accounted for nearly 26,000 hospital days (Applegate and Hurst 2016).

The MOMS project piloted a maternal care home model across four sites. This team-based delivery model emphasized care coordination and wrap-around services, engaging pregnant women in a combination of MAT and case management. In addition to clinical services, the project's $4.2 million budget also covered recovery support and non-clinical services such as housing vouchers, transportation, and child care. The care team was led by care coordinators who ensured communication between the client and all program partners and among the program partners themselves—obstetrician-gynecologists, behavioral health providers, MAT providers, social service workers, insurer case managers, and other service providers involved in supporting client recovery (Massatti et al. 2016, ODM and OhioMHAS 2016). This also included collaboration with Medicaid managed care plans. Four out of the five plans covering women enrolled in MOMS integrated their own staff into the MOMS care team meetings. All plans eliminated prior authorization requirements for prescribing of MAT medications and three out of five plans provided transportation to 12-step meetings. Some plans also provided transportation for other purposes, including transportation to court for custody hearings or other type of court proceedings, or to probation appointments (Massatti 2017).

The state is now in the process of evaluating the findings of this study. Preliminary results indicate women enrolled in the project had better treatment retention rates before and after delivery, and infants experienced shorter stays in the neonatal intensive care unit than the matched Medicaid cohort (Massatti 2017). The state also recently received federal funding through the 21st Century Cures Act of 2016 (P.L. 114-255) and is planning to contract with six OTPs per year for two years to develop maternal care homes to integrate obstetric care and MAT. Covered start-up costs may include hiring of clinical care coordinators and business contracting with obstetrician-gynecologist practices. All funded sites will be expected to collaborate with Medicaid managed care plans, comprehensive primary care centers, and accountable care organizations for care collaboration and to sustain system changes (OhioMHAS 2017).

Texas: Rehabilitation option. In response to the prevalence of substance use disorders in the Medicaid population and the potential for cost savings, the Texas legislature in 2009 passed legislation enabling Medicaid to offer a comprehensive substance use disorder treatment benefit to all enrollees. Previously, comprehensive treatment had only been available to enrollees

under 21; adults were limited to prescription drugs and in-patient hospital detoxification. Utilizing the state plan rehabilitation option, Texas Medicaid implemented a comprehensive benefits package for substance use disorder treatment, including for opioid use disorder. By January 2011, all Medicaid enrollees in both fee for service and managed care were able to access services such as clinical assessment to evaluate severity of the disorder and identify treatment options, outpatient detoxification, individual and group counseling, MAT, and residential detoxification and treatment (THHS 2017, 2015; TLBB 2015, 2009).

Initial uptake of the treatment benefit was low, however. In fiscal years 2011 and 2012, only 2.2 percent of adult enrollees with a substance use disorder diagnosis on a claim or encounter received substance use disorder treatment through Medicaid. Over time, uptake increased and the total number of unique beneficiaries receiving services grew by 53.6 percent from 2011 to 2014 and use of MAT doubled; this is in contrast to an increase of only 5.7 percent in total Medicaid enrollment in the state (THHS 2015, TLBB 2015).

To help identify and address possible reasons for the disconnect between treatment need and receipt of care, the state is participating in a high-intensity learning collaborative under the auspices of the CMS Medicaid Innovation Accelerator Program (CMS 2016b). As a result, Texas Medicaid is engaging with plans, providers, consumers, and other stakeholders to overcome identified barriers such as:

- variations in plan prior authorization processes, creating confusion and burden for providers;
- lack of coordination in the effort to identify enrollees with treatment needs between plans providing acute care and those that only provide behavioral health services;
- low payment rates; and
- lack of familiarity among providers with substance use disorders and treatment modalities (THHS 2015).

In 2016, the state also added a screening, brief intervention, and referral to treatment (SBIRT) benefit for all adults, and in community-based settings, which can assist in identifying individuals in need of care. Previously, only adolescents presenting in emergency departments for reasons related to substance use could receive an SBIRT intervention (THHS 2016).

Programs to reduce use of prescription opioids

State Medicaid programs are also responding to the rise in opioid misuse and opioid use disorder with policies to regulate and reduce prescription opioid use and misuse, while still allowing their appropriate use for pain management. These policies focus on identifying high-volume users, prescribers, and dispensers; using clinical protocols and guidelines to limit both the duration and dosage of prescriptions; and restricting the types of opioids available. Some states are also promoting use of non-opioid and non-pharmacologic options for management of chronic pain. Some of these efforts are specific to Medicaid; others are broader.

Many states and their Medicaid programs have implemented programs to reduce opioid prescribing, as described below. It is important to note, however, that high opioid prescribing rates are not necessarily correlated with high overdose death rates. In 2012, Alabama, Kentucky, Oklahoma, Tennessee, and West Virginia had the highest opioid prescribing rates (128 to 148 prescriptions per 100 residents). Other states with rates above the national average include Mississippi, Louisiana, Arkansas, Indiana, and Michigan, but not all of these states are in the top tier of opioid death rates (Rudd et al. 2016, CDC 2014).

Prescription drug monitoring programs. All states but Missouri now have prescription drug monitoring programs (PDMPs) to track dispensing of controlled substances, including opioids. Such programs are most commonly operated by state boards of pharmacy, not Medicaid. In fact, as of December 2014, only 31 state Medicaid programs had access to their state's PDMP (MACPAC 2016c). PDMPs collect data from pharmacies and other dispensers to help physicians and pharmacists avoid potentially fatal drug interactions, to identify providers with inappropriate prescribing patterns, and to help clinicians identify patients who may be at risk for opioid misuse. Possible indicators of misuse include patients receiving overlapping prescriptions from multiple providers (doctor shopping) or filling prescriptions at multiple pharmacies. Individuals found to be at risk may be enrolled in patient review and restriction programs (see below), or referred for substance use disorder treatment (Alexander et al. 2015). A recent study found that between 2011 and 2014, the introduction of state mandates for prescribers to register with or use their state's PDMP was associated with a 9–10 percent reduction in the number of Schedule II opioid prescriptions Medicaid enrollees received as well as Medicaid spending on these prescriptions (Wen et al. 2017a).[8]

Patient review and restriction programs. Many Medicaid programs use patient review and restriction (PRR) programs, also referred to as lock-in programs, to prevent so-called pharmacy and doctor shopping. These programs assign patients considered at risk for misuse and substance use disorders to predesignated pharmacies and prescribers to obtain and fill prescriptions. At-risk patients are identified based on a combination of criteria, unique to each Medicaid PRR, which often include the number of prescriptions and pharmacies a patient has visited to obtain controlled substance prescriptions (Pew 2016).

As of November 2015, Medicaid programs in 48 states and the District of Columbia utilized PRR: 27 states and the District of Columbia in both fee for service and managed care, 18 states in fee for service only, and 3 states in managed care only. Two states did not operate a PRR program. Most states review patient enrollment in the PRR quarterly, annually, or within a certain number of months before a patient is scheduled to be released from the PRR (Pew 2016).

Drug utilization review. State Medicaid agencies use drug utilization review (DUR) to identify prescribing practices that may contribute to opioid misuse (CMS 2016a). When inappropriate practices are identified, pharmacists, prescribers, and other members of the health team modify and improve drug therapy practices (AMCP 2009). DUR can be conducted prospectively, concurrently, or retrospectively. In the case of prospective review, the Medicaid program would screen prescription drug claims to help pharmacists identify potential problems ahead of dispensing—such as therapeutic duplication, contraindications, incorrect dosage or duration, drug allergies, or clinical misuse. Forty-five states contract with an outside vendor to run the prospective DUR. Federal law also requires pharmacists to offer patient counseling on proper use of medications and determine if there are specific needs. In 43 states, the board of pharmacy monitors compliance with this requirement (CMS 2016c).

Under concurrent review, prescription drug use is evaluated while the patient is undergoing therapy to identify any potential risk factors that could lead to adverse outcomes. If any concerns are found, they are communicated to the prescribing physicians and dispensing pharmacists. Similarly, in a retrospective review, claims data are reviewed at least quarterly to identify possible patterns of drug misuse; if problems are found, the prescribing clinicians are contacted. Primary responsibility for conducting the review is held by a contractor in 37 states and by an academic organization in 11 states (CMS 2016c).

Utilization management. State Medicaid agencies and managed care plans utilize preferred drug lists (PDLs) to incentivize the prescribing and use of

certain medications over others. All state Medicaid programs operate a PDL; many plans operate their own PDL within the parameters defined by the state. Drugs that are on the PDL often do not require the prescriber or dispenser to receive a prior authorization from the state Medicaid agency or plan. Recently, states began removing methadone for purposes of pain management from PDLs because a large proportion of prescription opioid-related overdose deaths were associated with methadone when prescribed as a pain reliever (Jones et al. 2016, Reilly 2015). A recent study of three states found an association between Medicaid PDLs requiring prior authorization for methadone and lower rates of methadone overdose among Medicaid enrollees (Faul et al. 2017).

For certain drugs such as opioids where overutilization is a concern, states use clinical protocols to regulate their use, even if the drug is on the state's PDL. A state may impose quantity limits, step therapy controls, or prior authorization on certain drugs. As of June 2016, all but five Medicaid programs had some type of quantity limit on opioids in their PDL (MACPAC 2016c). Step therapies, also known as fail-first policies, require a beneficiary to try one preferred drug and to document side effects, treatment failure, and other criteria before receiving a specific opioid; these are commonly used before prescribing opioids that could be misused. Prior authorization requirements can also be used to identify and address opioid overprescribing by requiring prescribers to seek pre-approval before prescribing a particular drug. Based on a set of clinical criteria, prescribers must demonstrate the clinical need and therapeutic rationale for the selected medication. The goal is to ensure that the drug is a safe and effective choice in treating the patient's condition (CMS 2016a).

Alternatives to opioid treatment. A 2016 survey of Medicaid programs found that 12 states had implemented specific programs and policies to encourage or require the use of non-opioid pain management therapies, including other medications (e.g., non-steroidal anti-inflammatories, corticosteroids, anticonvulsants, and antidepressants), cognitive-behavioral therapy, and exercise therapy (Dorr and Townley 2016, Dowell et al. 2016).

Challenges for Medicaid in Addressing the Opioid Epidemic

Many Medicaid enrollees with an opioid use disorder are not receiving treatment, some due to barriers to care common in Medicaid and others due to circumstances unique to substance use disorders. Barriers common in Medicaid include lack of providers, difficulty securing timely appointments, and lack of enabling services such as transportation and translation or interpretation services. As noted above, many states do not cover needed services. Barriers specific to substance use disorders include the stigma of having a substance use disorder (particularly if the substance is illicit or illegal), difficulty understanding why treatment is needed, and physical and mental side effects of treatment that affect adherence and outcomes (Livingston et al. 2012, Mittal et al. 2012). Systems of care for substance use disorder treatment are frequently fragmented and poorly funded, which can create poor coordination among providers and gaps in the continuum of care. These are briefly discussed below.

A fragmented delivery system

As MACPAC noted in its prior work on behavioral health, mental health conditions and substance use disorders have long been considered different from other health needs, with care for these conditions traditionally financed and delivered separately from other medical care. As a result, specialty substance use disorder treatment providers and programs often interact on a limited basis with other parts of the health care system, including Medicaid. Additionally, when states cover few optional services, beneficiaries may need to rely on these non-Medicaid providers and funding

sources, which results in beneficiaries experiencing greater fragmentation in their care or not getting services at all (MACPAC 2016d).

Historically, addiction has been seen as a moral failing, and treatment, if available, was delivered in asylums and so-called narcotic farms run by prisons (OSG 2016). It was not until the 1960s that government and medical authorities began to recognize alcoholism, and later other addictions, as potentially treatable illnesses (Mignon 2015, OSG 2016). Then, despite growing recognition of substance use disorder as a chronic disease, the health care system's lack of experience in caring for individuals with substance use disorders and the continued stigma resulted in treatment programs being run and financed separately from other medical care for many years (OSG 2016). Currently, there are about 14,000 specialized treatment facilities delivering the bulk of care, 62 percent of which reported accepting Medicaid (SAMHSA 2017a).

The origins of widespread prescriptions opioid use can be traced back to the 1990s with the medical profession's introduction of pain as the so-called fifth vital sign (Kolodny et al. 2015). The concept was widely adopted by both health care providers and accrediting bodies such as The Joint Commission. But it also coincided with substantial marketing efforts to prescribers by pharmaceutical manufacturers of opioids. Over time, overzealous prescription of pain relievers was linked to a significant increase in opioid-related morbidity and mortality, including opioid use disorder (Baker 2017, Alexander et al. 2015, Kolodny et al. 2015).

Among insurers, Medicaid is the largest payer of substance use disorder treatment, financing 21 percent of all treatment in 2014. But 41 percent of funding comes from a mix of other non-Medicare and non-Medicaid federal, state, and local government funds (Mark et al. 2016). The Substance Abuse and Mental Health Services Administration (SAMHSA) Substance Abuse Prevention and Treatment (SAPT) block grant to states makes up nearly half of all federal non-Medicaid and non-Medicare spending on substance use disorder treatment.[9] Other federal sources include the Veterans Administration, the Department of Defense, the Indian Health Service, the Health Resources and Services Administration, and the Department of Justice (HRSA 2017, OJP 2016, SAMHSA 2013b). Single state agencies for substance abuse, which receive the SAPT block grant funds, and other agencies related to child protective services, corrections, and the courts manage state and local treatment funds (Pew and MacArthur 2015). To expand state ability to address the opioid epidemic, the 21st Century Cures Act of 2016 provided an additional $1 billion over two years for grants to single state agencies to establish new prevention and treatment programs related to opioids and to expand existing programs.

State substance abuse agency dollars typically fund care for uninsured and underinsured individuals, as well as those who may be Medicaid-eligible but not enrolled (e.g., the homeless). Because of the variability in Medicaid benefits, state substance abuse agencies may fund treatment services for Medicaid beneficiaries, such as case management and peer support, other recovery support services such as vocational counseling, parenting support and education, and services such as residential treatment and certain housing supports that Medicaid is prohibited from financing. In some states, single state agencies administer the funds allocated by a Medicaid agency's substance use disorder treatment benefit (Pew and MacArthur 2015, Woodward 2015, NASADAD 2010).

Substance use disorder treatment often is not well coordinated or integrated with other mental health or physical treatment. Linkages between addiction and primary care and specialty providers are often suboptimal, affecting diagnosis and treatment of addiction and related comorbidities (Saitz et al. 2008). Despite the prevalence of dual diagnoses, in 2015, only about half of specialty substance use disorder treatment facilities offered comprehensive mental health assessments or diagnoses; fewer

provided testing for common comorbid conditions such as tuberculosis, HIV, hepatitis B and C, and sexually transmitted diseases (SAMHSA 2017a). Specialty substance use disorder treatment providers also are subject to strict confidentiality requirements related to patient medical records, which may hinder their ability to consult with outside treatment providers. A 2012 study also found that 63 percent of specialty addiction treatment providers did not have a fully functioning electronic health record, impeding care coordination (Andrews et al. 2015).

Given the complexity of the substance use disorder delivery system, there are some efforts to align eligibility, financing, services, and oversight across agencies. These efforts include co-locating physical and behavioral health providers, sharing data and information, blending funding streams, and consolidating Medicaid and state behavioral health and substance abuse agencies. Some states are also developing stronger or more formalized relationships between Medicaid and other agencies. For example, Medicaid agencies may work with criminal justice agencies to help transition individuals with an opioid use disorder in and out of prison or jail, as a way to help them continue treatment. To do so, Medicaid programs may decide to suspend rather than terminate Medicaid benefits while these individuals are incarcerated (MACPAC 2016d, Cuellar and Cheema 2012).

The previously mentioned initiatives in Vermont and Virginia are two examples of how states are seeking to mitigate the fragmentation in care. CMS is also working to streamline the substance use disorder treatment system and has promoted a Section 1115 waiver opportunity that would allow some inpatient treatment in a substance use disorder facility to be covered that otherwise would be subject to the institution for mental diseases (IMD) exclusion (described in greater detail below). The waiver opportunity also calls for use of ASAM criteria to ensure a comprehensive continuum of care, including withdrawal management, short-term residential treatment, intensive outpatient treatment, medication assisted treatment, and aftercare supports for long-term recovery such as transportation, employment, housing, and community and peer support services (CMS 2015a). Through the Medicaid Innovation Accelerator Program and its High Intensity Learning Collaborative and other targeted learning opportunities, CMS is also providing technical assistance and education to states to support adoption and evaluation of payment methodologies, care delivery models, and benefit strategies that better identify individuals in need of treatment, expand coverage and access to treatment, and promote improved care and better coordination between addiction and other health care providers (CMS 2016b, CMS 2015c).

Adequate supply of providers

The supply of substance use disorder treatment services available to Medicaid enrollees is affected by several factors including their geographic location; state scope of practice laws, such as ones permitting certain clinicians who are not physicians to prescribe medications; willingness of providers to serve Medicaid beneficiaries; and the number of providers with special federal approval to prescribe and dispense methadone and buprenorphine.

Federal regulations govern the provision of methadone and buprenorphine as part of MAT.[10] Methadone use for treatment of opioid use disorder can be provided only in specially designated OTPs certified and regulated by SAMHSA's Center for Substance Abuse Treatment. Buprenorphine can be prescribed in a general medical office, but physicians must undergo a special eight-hour training and receive a DATA-2000 waiver from SAMHSA and the Drug Enforcement Administration, as mandated by the Drug Addiction Treatment Act of 2000 (DATA-2000, P.L.106-310). Depending on the waiver, a physician is limited to prescribing to up to 30, 100, or 275 patients (SAMHSA 2017b).

As of March 2017, 37,526 physicians had obtained a DATA-2000 waiver to prescribe buprenorphine

(SAMHSA 2017c). Even so, most U.S. counties had no physicians with such waivers, meaning that more than 30 million people were living in counties without access to office-based treatment. Additionally, only 3 percent of primary care physicians had received waivers as of July 2012 (Rosenblatt et al. 2015). Another recent study showed nearly all states had opioid use disorder rates higher than their buprenorphine treatment capacity rates; 19 states had a gap of at least 5 per 1,000 people (Jones et al. 2015b).

Trends in the provision of MAT by specialty substance use disorder treatment facilities provide a mixed picture. There has been an increase in the number of facilities providing buprenorphine, but in 2015, they still represented only one-quarter of all facilities. Only about 17 percent offer injectable naltrexone. The number of OTPs providing buprenorphine in addition to methadone, as a percentage of all OTPs, increased from 26 percent to 45 percent between 2005 and 2009 but fell to 35 percent in 2015 (SAMHSA 2017a). Moreover, 38 states also reported at least 75 percent of methadone-dispensing OTPs were operating at 80 percent capacity or more (Jones et al. 2015b).

In addition, OTPs are mostly located in urban areas and often require patients to visit daily for on-site administration of methadone. This limits the ability of rural patients to access such treatment (Dick et al. 2015). One study of specialty treatment provider distribution in 2009 found that counties with a higher percentage of black, rural, and/or uninsured residents were less likely to have at least one outpatient facility that accepted Medicaid (Cummings et al. 2014).

Because of concerns about access to treatment, the Comprehensive Addiction and Recovery Act of 2016 (CARA, P.L. 114-198) included a provision to allow advanced practice nurses and physician assistants to qualify for a waiver for up to 30 patients from 2016 through 2021, so long as their state license includes prescribing authority for Schedule III, IV, or V medications for the treatment of pain. In 2016, SAMHSA also increased the total number of patients a certified physician can request to treat to 275 patients (HHS 2016).

Several states with rural and other underserved areas are also exploring how telemedicine can be used to increase access to care. This may involve utilizing the ECHO model, in which specialist physicians in academic hubs provide case consultations and reviews to primary care physicians in the community to inform and support them in delivering evidence-based substance use disorder care. States are using a variety of sources to fund this model, including Medicaid medical assistance and administrative funds, general state funds, federal grant dollars, and funding from insurance companies (Project ECHO 2017, Tewarson 2016). As of September 2015, Medicaid in 30 states and the District of Columbia covered some type of telehealth services relevant to substance use disorder treatment, such as individual psychotherapy (MACPAC 2016a).

Although there is no comprehensive source of data on the supply of professionals available to treat individuals with substance use disorders, multiple sources suggest there is a shortage of trained providers overall at least in some areas (OSG 2016). A variety of professionals provide substance use disorder treatment services, including addiction and mental health counselors, psychiatrists, addiction medicine physicians, other physicians, psychologists, social workers, advanced practice nurses, case managers, peer support specialists, and recovery coaches (SAMHSA 2015). In surveys conducted by various regional Addiction Technology Transfer Centers, program directors indicated problems recruiting adequately prepared staff, often citing at least one or more unfilled full-time equivalent positions. Recruiting difficulties include insufficient numbers of applicants who meet minimum qualifications, a small applicant pool in specific geographic areas, and a lack of interest due to salary and limited funding (SAMHSA 2013c).

Research on acceptance of Medicaid by physicians has identified several reasons physicians do not

accept Medicaid. Low payment rates relative to those offered by private insurance and Medicare are frequently cited, although the relationship between payment rates and provider participation is not straightforward (MACPAC 2015). Finally, providers note that patients covered by Medicaid tend to require more time and attention than the average patient (ASPE 2015).

Several studies found that a lack of support for existing and potential prescribers of medications for use in MAT can deter physician participation. Physicians may be reluctant to provide MAT if there are not sufficient mental health and substance use disorder treatment services and supportive services to which patients can be referred. There are also concerns about insufficient access to expert consultation (Quest et al. 2012, Netherland et al. 2009). Physicians also identified preauthorization and documentation requirements to secure payment as a barrier to participation, because these requirements are viewed as cumbersome and confusing (SAMHSA-HRSA 2014, Netherland et al. 2009).

Specialty addiction providers may have additional barriers, such as inconsistent credentialing or licensure requirements across payers and state agencies in order for facilities and counseling staff to be paid (ASPE 2015, Ryan et al. 2012). A 2012 survey also found that many specialty addiction treatment providers did not have sufficient information technology systems needed to bill insurers, posing a challenge to providing care to individuals newly covered by health insurance under the Patient Protection and Affordable Care Act (ACA, P.L. 111-148, as amended) (Andrews et al. 2015).

Privacy regulations

In designing effective treatment models, Medicaid officials and clinicians frequently raise concerns about federal regulations at 42 CFR Part 2, often referred to simply as Part 2, which are designed to protect patient privacy but may make it difficult to share information among providers. These regulations govern the confidentiality of substance use disorder records and originate in legislation from the 1970s that sought to address the stigma of substance use disorders and concerns that the people seeking treatment could be subject to criminal prosecution and other serious consequences such as loss of employment, housing, or child custody. The restrictions upon the disclosure and use of substance use disorder patient records currently apply to any federally funded individual or entity, other than a general medical facility, that, "holds itself out as providing, and provides, substance use disorder diagnosis, treatment, or referral for treatment." It also applies to any identified unit within a general medical facility that holds itself out in the same way, as well as, "[m]edical personnel or other staff in a general medical facility whose primary function is the provision of substance use disorder diagnosis, treatment, or referral for treatment and who are identified as such providers" (42 CFR 2.11).

Until recently, Part 2 required written consent to include the name or title of every individual or the name of every organization to which the substance use disorder treatment record is provided. Some stakeholders reported that this requirement makes it difficult for treatment providers subject to Part 2 restrictions to be included in health information exchanges, medical homes, accountable care organizations, and coordinated care organizations. Generally, these latter entities only need to follow the Health Insurance Portability and Accountability Act of 1996 (HIPAA, P.L. 104-191) privacy rules and thus do not have the needed additional consent management capabilities to be compliant with Part 2 requirements. Many entities as a result simply do not include substance use disorder treatment information in their systems. OTPs and most DATA-2000 waivered providers are also prohibited from reporting methadone and buprenorphine prescribing to a state's prescription drug monitoring program (SAMHSA 2016b, 2011).

To assist in sharing data in integrated data systems, SAMHSA updated Part 2 regulations in January 2017 to allow, under certain conditions,

a substance use disorder patient to consent to disclosing their patient identifying information using a general designation to one or more individuals or entities (e.g., "my treating providers"). The revised regulations also make research using patient data easier (HHS 2017).[11] But for the most part, the rule covers the same providers and patient consent for all providers accessing their data still apply. It is unclear how providers will respond or if they will be more willing to share data on patients receiving substance use disorder treatment. Numerous stakeholders, including health care providers, health plans, and some patient advocacy groups, called for further harmonization with HIPAA rules, to allow for additional data sharing for purposes of treatment and care coordination and integration. These groups believe that such a move would not sacrifice patient confidentiality, but others—in particular, other patient advocates—believe that such changes would undermine Part 2's protections (HHS 2017).

Institution for mental diseases exclusion

The Medicaid IMD exclusion acts a barrier for individuals with an opioid use disorder to receive residential treatment, which, depending on an individual's treatment plan, may be the most appropriate setting for care. The IMD exclusion prohibits states from receiving federal payment for inpatient care provided to individuals over the age of 21 and under the age of 65 who are patients in an IMD. This includes patients in residential substance use disorder treatment facilities, and therefore the exclusion has been cited as a barrier to treatment for beneficiaries with an opioid use disorder (CMS 2015a). The Medicaid IMD exclusion is one of the few instances in the Medicaid program where federal financial participation cannot be used for medically necessary and otherwise covered services for a specific Medicaid enrollee population receiving treatment in a specific setting.

Recognizing the barriers to treatment imposed by the IMD exclusion, CMS, in July 2015, issued guidance to states noting that the agency is willing to grant Section 1115 demonstration waivers that include the ability to receive federal financial participation for substance use disorder treatment services administered at IMDs under certain circumstances (CMS 2015a). California and Virginia both received an 1115 waiver allowing federal matching payments for treatment in substance use disorder residential care facilities (CMS 2016d, 2015b).

Medicaid managed care regulations finalized in 2016 may also affect access to IMD services by clarifying that plans contracting with state Medicaid agencies may provide care in an IMD to beneficiaries in lieu of services or settings covered under the state plan. States can receive the federal match and make a capitation payment on behalf of an enrollee that spends part of the month as a patient in an IMD if a number of conditions are met, including that the length of stay cannot exceed 15 days during a given month. Services for opioid and other substance use disorder treatment provided in IMDs may therefore be covered under these conditions (CMS 2016e). There are no national data on how Medicaid managed care plans use IMDs as in lieu of services, although CMS estimates that in 2010, 17 states used this provision to cover some IMD care (CMS 2016e). It is also possible that the newly enumerated 15-day limit may be more restrictive than what some managed care plans may have provided previously as an in lieu service (AHCCCS 2017).

Restrictive coverage policies

State Medicaid programs, like other payers, use various tools to design their Medicaid benefit packages and control utilization to promote clinically and cost-effective care. As discussed above, state Medicaid programs vary considerably in the specific services that they cover (MACPAC 2016b). Certain policies may be inhibiting access to MAT. For example, all Medicaid programs do

not cover all three medications approved for use in MAT. In addition, Medicaid policies that are identified as potential barriers to timely treatment access include the following:

- limits on prescription dosages (such as annual or lifetime medication limits);
- prior authorization and reauthorization requirements;
- fail-first criteria, also known as step therapy, requiring that other therapies be tried first; and
- insufficient coverage of related counseling or behavioral therapy (OSG 2016, SAMHSA-HRSA 2014, Netherland et al. 2009, Rinaldo and Rinaldo 2013, Quest et al. 2012).

Stigma

Opioid use disorder, although increasingly recognized as a medical illness, has historically been seen as a moral weakness or willful choice (Olsen and Sharfstein 2014, White 2009). Within the substance use disorder treatment community, many still believe that recovery should not involve the use of medications such as methadone or buprenorphine, and that treatment with these medications is simply substituting one addiction for another. As a result, providers of residential treatment may force patients receiving methadone or buprenorphine to taper off the medication as a condition of treatment. Even the language associated with drug treatment ("clean" or "dirty" urine samples, "clean" status associated with lack of using drugs) perpetuates the stigma associated with substance use disorder (Olsen and Sharfstein 2014). Heroin use disorder, because of its illegality, has particularly high stigma attached to it.

This stigma, including that associated with legally obtained prescription opioids, may cause those with the condition to internalize negative stereotypes. High levels of internalized stigma are associated with social isolation, and low levels of self-esteem, self-efficacy, and quality of life. Internalized stigma may undermine adherence to treatment, decrease help-seeking behaviors, and interfere with recovery goals, such as pursuing employment and independent living (Mittal et al. 2012). High levels of stigma and discrimination may also discourage people from self-identifying and dampen advocacy efforts. The opioid epidemic has now become so prevalent that recognition that addiction is a medical illness is increasing, but more education of both providers and the public is needed to encourage people to seek treatment.

Opioid use disorder treatment and Medicaid expansion

In states that opted to expand eligibility to the new adult group, these new enrollees now have coverage for opioid use disorder treatment services. As noted above, states are required to provide Medicaid expansion enrollees with alternative benefit plans that cover 10 essential health benefits, including mental health and substance use disorder treatment services. Legislation passed by the U.S. House of Representatives in May 2017 would change the ACA's Medicaid expansion and sunset Medicaid's obligation to cover the 10 essential health benefits at the end of 2019 (AHCA 2017). Beneficiary advocates, providers, and some governors raised concerns about the potential impact on the availability of opioid use disorder treatment for these individuals (AP 2017, Jacobs 2017, O'Donnell and DeMio 2017).

National estimates of how many individuals covered under the Medicaid expansion are able to receive opioid use disorder treatment are not yet available, but there is evidence from several expansion states that an increasing number of individuals are receiving care (Vestal 2017). One recently published study found that expansion states in 2014 experienced a 70 percent increase in Medicaid-covered buprenorphine prescriptions and a 50 percent increase in buprenorphine spending over non-expansion states, indicating improved access to treatment (Wen et al. 2017b). Another study found that in 2014, Medicaid payments for

medications used to treat alcohol and opioid use disorder (excluding methadone) in outpatient settings increased by 33 percent in expansion states relative to non-expansion states. The same study, however, found no evidence that admissions to specialty treatment facilities differed between expansion and non-expansion states, although it did not account for individuals receiving treatment from primary care or other physicians in private practice or other general medical settings (Maclean and Saloner 2017). In Kentucky, an expansion state, Medicaid payment for substance use disorder treatment services for expansion enrollees increased by 700 percent between the first quarter in 2014 and the second quarter of 2016. Earlier research suggests that many of these enrollees were previously uninsured and had limited access to care before 2014 (FHK 2016).

Endnotes

[1] In 2010, Medicaid covered about half of all births (MACPAC 2014).

[2] Prior to 2015, the source of this data—the National Survey on Drug Use and Health (NSDUH)—used the term non-medical use of prescription drugs to identify individuals who used a drug that was not prescribed to them or used a drug solely for the experience of feeling high. The definition, however, did not specifically include the criterion of overuse of a prescription medication, which is especially important for assessing prescription pain reliever misuse. Therefore, beginning with the 2015 NSDUH, the survey replaced questions used to identify non-medical use of prescription drugs with questions to identify misuse of prescription drugs (Hughes et al. 2016).

[3] This may include individuals dually eligible for Medicare and Medicaid; in these cases, the enrollee receives prescription drug coverage through Medicare Part D, rather than Medicaid.

[4] Natural opioids include morphine and codeine, which come largely from plants. Semisynthetic opioids include drugs that are derived from naturally occurring opiates and opium alkaloids and include oxycodone, hydrocodone, hydromorphone, and oxymorphone. Synthetic opioid drugs include methadone, tramadol, and fentanyl.

[5] Prescription drug coverage is also an optional benefit, but all states currently offer it.

[6] There are several validated screening tools for use by providers who are not addiction specialists to help identify individuals who have a substance use disorder or may be at risk of developing one. In cases where misuse is identified, brief interventions can address substance misuse; these can range from informal counseling to more structured methods (e.g., cognitive-behavioral therapy or motivational interviewing) and can be conducted over the course of several sessions lasting anywhere from 5 to 60 minutes (Townley and Dorr 2017, OSG 2016, Adkins et al. 2014). When conducting the intervention, the clinician informs the patient about safe consumption limits, offers advice about change, assesses the patient's readiness, and tries to resolve any ambivalence the patient may have about modifying his or her problematic use. The intervention can also be used to encourage follow-through on a referral to specialty treatment in cases where the provider makes a substance use disorder diagnosis.

[7] Methadone is an opioid agonist that binds to and activates the brain's opioid receptors. It is used in detoxification therapy to suppress withdrawal symptoms and in maintenance therapy to control opioid cravings. Research shows that long-term methadone maintenance treatment is more effective than short-term withdrawal management. There is a risk for misuse and it is provided only in SAMHSA-certified and U.S. Drug Enforcement Administration (DEA)-registered programs, called opioid treatment programs (OTPs).

Buprenorphine is a partial opioid agonist that binds to the brain's opioid receptors and activates them, but not as much as methadone. When used with naloxone, there is less risk for misuse. Buprenorphine comes in a sublingual tablet and a sublingual or buccal film and can be used for both detoxification and maintenance therapy. In 2016, the FDA approved an implantable version of buprenorphine, which releases a continuous low dose of the medication

into the bloodstream for six months and is geared toward individuals who are already stable on a moderate to low dose of buprenorphine. OTPs can dispense buprenorphine, and physicians can prescribe it in an office-based practice if they hold a DATA-2000 waiver, which is granted by SAMHSA and the DEA after prescribers meet certain conditions and clinical training.

Naltrexone is an opioid antagonist that binds to opioid receptors but does not activate them. Instead, it prevents opioid agonists from binding to and activating opioid receptors. Naltrexone is used for relapse prevention, because an individual on naltrexone who uses opioids will not experience their effects. The oral formulation is recommended for highly motivated individuals in whom adherence can be monitored and enforced, whereas the extended-release injectable formulation may be more suitable for patients who had trouble adhering to their treatment plan. Because naltrexone carries no known risk for misuse, prescribers do not need a special license (OSG 2016, ASAM 2015, Bagalman 2015, VA/DoD 2015).

[8] Schedule II controlled opioids have a high potential for misuse and development of a substance use disorder. They include hydromorphone, oxycodone, morphine, and fentanyl (DEA 2017).

[9] A minimum of 20 percent of the block grant is set aside for prevention activities.

[10] Naltrexone, the third medication that can be used as part of MAT, is not a controlled substance, and any provider with prescribing authority can prescribe it.

[11] SAMHSA allows any lawful holder of patient identifying information to disclose Part 2 patient identifying information to qualified personnel for purposes of conducting scientific research, if the researcher meets certain regulatory requirements. SAMHSA also permits data linkages to enable researchers to link to data sets from data repositories holding Part 2 data if certain regulatory requirements are met.

References

Academy of Managed Care Pharmacy (AMCP). 2009. *Drug Utilization Review*. Alexandria, VA: AMCP. http://www.amcp.org/WorkArea/DownloadAsset.aspx?id=9296.

Adkins, R.E., J.G. Grailer, M.R. Lay, and B.E. Keehn. 2014. *An analysis of national funding trends for SBI services*. St. Louis, MO: Missouri Institute of Mental Health, University of Missouri-St. Louis. https://www.mosbirt.org/Portals/0/Docs/FundingSBIRTCodes_2014_0318%20_FINAL.pdf.

Administration on Aging and Substance Abuse and Mental Health Services Administration (AOA and SAMHSA). 2012. *Prescription medication misuse and abuse among older adults*. Older Americans behavioral health series, Issue brief 5. City, ST: AOA and SAMHSA. https://www.ncoa.org/wp-content/uploads/Issue-Brief_5_Pres-Med-Misuse-Abuse_Color-Version.pdf.

Ailes, E.C., A.L. Dawson, J.N. Lind, et al. 2015. Opioid prescription claims among women of reproductive age—United States, 2008–2012. *Mortality and Morbidity Weekly Report* 64, no. 2: 37–41. https://www.cdc.gov/mmwr/pdf/wk/mm6402.pdf.

Alexander, G.C., S. Frattaroli, and A.C. Gielen. 2015. *The prescription opioid epidemic: An evidence-based approach*. Baltimore, MD: Johns Hopkins Bloomberg School of Public Health. http://www.jhsph.edu/research/centers-and-institutes/center-for-drug-safety-and-effectiveness/opioid-epidemic-town-hall-2015/2015-prescription-opioid-epidemic-report.pdf.

American Health Care Act of 2017 (AHCA). 2017. H.R. 1628. Washington, DC: United States House of Representatives. https://www.congress.gov/bill/115th-congress/house-bill/1628/text.

Andrews, C., A. Abraham, C. Grogan, et al. 2015. Despite resources from the ACA, most states do little to help addiction treatment programs implement health care reform. *Health Affairs* 34, no. 5: 828–835. http://content.healthaffairs.org/content/34/5/828.abstract.

American Society of Addiction Medicine (ASAM). 2017. What is the ASAM criteria? Chevy Chase, MD: ASAM. http://www.asam.org/quality-practice/guidelines-and-consensus-documents/the-asam-criteria/about.

American Society of Addiction Medicine (ASAM). 2015. *The ASAM national practice guideline for the use of medications in the treatment of addiction involving opioid use*. Chevy Chase, MD: ASAM. http://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-supplement.pdf.

American Society of Addiction Medicine (ASAM). 2014. *Treating opioid addiction as a chronic disease*. Chevy Chase, MD: ASAM. http://www.asam.org/docs/default-source/advocacy/cmm-fact-sheet---11-07-14.pdf.

Applegate, M., and M. Hurst. 2016. Maternal Opiate Medical Support (MOMS). Presentation before the 2016 Ohio Infant Mortality Summit, December 5–6, 2016, Cleveland, OH. http://www.odh.ohio.gov/~/media/ODH/ASSETS/Files/cfhs/octpim/imsummit2016/MOMS---Maternal-Opiate-Medical-Support.pdf.

Arizona Health Care Cost Containment System (AHCCCS). 2017. Arizona Section 1115 Waiver Amendment request: Institution for mental diseases (IMD). April 12, 1017. Phoenix, AZ. https://www.azahcccs.gov/Resources/Downloads/1115Waiver/IMDWaiver_04_12_2017Final.pdf.

Assistant Secretary for Planning and Evaluation (ASPE), U.S. Department of Health and Human Services. 2015. *Examining substance use disorder treatment demand and provider capacity in a changing health care system: Initial findings report*. Washington DC: ASPE. https://aspe.hhs.gov/system/files/pdf/203761/ExamSUD.pdf.

Associated Press (AP). 2017. Opioid addicts worry about losing Obamacare. *AP*, February 22. http://www.nbcnews.com/health/health-news/opioid-addicts-worry-about-losing-obamacare-n724101.

Bagalman, E. 2015. *Opioid treatment programs and related federal regulations.* Washington, DC: Congressional Research Service. https://digital.library.unt.edu/ark:/67531/metadc810363/m2/1/high_res_d/IF10219_2015May04.pdf.

Baker, D.W. 2017. History of The Joint Commission's pain standards: Lessons for today's prescription opioid epidemic. *Journal of the American Medical Association* 317, no. 11: 1117–1118. http://jamanetwork.com/journals/jama/article-abstract/2606790.

Bali, V., D.W. Raisch, M.L. Moffett, and N. Khan. 2013. Determinants of nonmedical use, abuse or dependence on prescription drugs, and use of substance abuse treatment. *Research in Social and Administrative Pharmacy* 9, no. 3: 276–287.

Baser, O., M. Chalk, D.A. Fiellin, and D.R. Gastfriend. 2011. Cost and utilization outcomes of opioid dependence treatments. *American Journal of Managed Care* 17, no. 8: 235–248.

Belenko, S. M. Hiller, and L. Hamilton. 2013. Treating substance use disorders in the criminal justice system. *Current Psychiatry Reports* 15, no. 11. https://link.springer.com/article/10.1007%2Fs11920-013-0414-z.

Bohner, T. 2017. Former FDA commissioner discusses health crisis in rural southeast regions, Appalachia. WCYB/WEMT, April 6. http://www.wcyb.com/news/fmr-fda-commissioner-discusses-health-crisis-in-rural-southeast-regions-appalachia/438741698.

Bose, J., S.L. Hedden, R.N. Lipari, et al. 2016. *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR1-2015/NSDUH-FFR1-2015/NSDUH-FFR1-2015.pdf.

Bouchery, E.E., H.J. Harwood, J. Dilonardo, and R. Vandivort-Warren. 2012. Type of health insurance and the substance abuse treatment gap. *Journal of Substance Abuse Treatment* 42, no. 3, 289–300.

Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. 2016a. Opioid basics. Atlanta, GA: CDC. https://www.cdc.gov/drugoverdose/opioids/index.html.

Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. 2016b. Prescription opioid overdose data. Atlanta, GA: CDC. https://www.cdc.gov/drugoverdose/data/overdose.html.

Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. 2015. *Today's heroin epidemic: More people at risk, multiple drugs abused*. Atlanta, GA: CDC. https://www.cdc.gov/vitalsigns/pdf/2015-07-vitalsigns.pdf.

Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. 2014. Opioid painkiller prescribing infographic. Atlanta, GA: CDC. https://www.cdc.gov/vitalsigns/opioid-prescribing/infographic.html.

Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. 2009. Overdose deaths involving prescription opioids among Medicaid enrollees—Washington, 2004–2007. *Morbidity and Mortality Weekly Report* 58, no. 42: 1171–1175. http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5842a1.htm.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2017a. *Opioid misuse strategy 2016*. Baltimore, MD: CMS. https://www.cms.gov/Outreach-and-Education/Outreach/Partnerships/Downloads/CMS-Opioid-Misuse-Strategy-2016.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2017b. Alternative benefit plan coverage. Baltimore, MD: CMS. https://www.medicaid.gov/medicaid/benefits/abp/index.html.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2016a. Center for Medicaid and CHIP Services (CMCS) informational bulletin from Vicky Wachino regarding "Best practices for addressing prescription opioid overdoses, misuse and addiction." January 28, 2016. Baltimore, MD: CMS. https://www.medicaid.gov/federal-policy-guidance/downloads/cib-02-02-16.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2016b. *Medicaid Innovation Accelerator Program (IAP): Reducing substance use disorders: SUD program area high intensity learning collaborative*. Baltimore, MD: CMS. https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/iap-downloads/learn-hilc-iap.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2016c. Medicaid drug utilization review: *State comparison/summary report FFY 2015, Annual report: Prescription drug fee-for-service programs*. Baltimore, MD: CMS. https://www.medicaid.gov/medicaid-chip-program-information/by-topics/prescription-drugs/downloads/2015-dur-summary-report.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2016d. Letter to Cynthia B. Jones, Virginia Medicaid Director from Vikki Wachino regarding "the Virginia Governor's Access Plan (GAP) and Addiction and Recovery Treatment Services (ARTS) delivery system transformation." December 15, 2016. Baltimore, MD: CMS. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/va/va-gov-access-plan-gap-ca.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2016e. Medicaid and Children's Health Insurance Program (CHIP) programs: Medicaid managed care, CHIP delivered in managed care, and revisions related to third party liability. Final rule. *Federal Register* 81, no. 88 (May 6): 27498–27901. https://www.gpo.gov/fdsys/pkg/FR-2016-05-06/pdf/2016-09581.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2015a. Letter to state Medicaid directors from Vikki Wachino regarding "New service delivery opportunities for individuals with a substance use disorder." July 27, 2015. https://www.medicaid.gov/federal-policy-guidance/downloads/SMD15003.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2015b. Section 1115 of the Social Security Act Medicaid demonstration: Extension and amendment to California Medi-Cal 2020 demonstration. December 30, 2015. Baltimore, MD: CMS. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/ca/medi-cal-2020/ca-medi-cal-2020-ca.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2015c. Medicaid Innovation Accelerator Program (IAP): *Reducing substance use disorders fact sheet*. Baltimore, MD: CMS. https://www.medicaid.gov/state-resource-center/innovation-accelerator-program/iap-downloads/sud-factsheet.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2013. Letter to state health officials and state Medicaid directors from Cindy Mann regarding: "Application of the mental health parity and addiction equity act to Medicaid MCOs, CHIP, and alternative benefit (benchmark) plans." January 16, 2013. Baltimore, MD: CMS. https://www.medicaid.gov/federal-policy-guidance/downloads/sho-13-001.pdf.

Cerdá, M., J. Santaella, B.D.L. Marshall, et al. 2015. Nonmedical prescription opioid use in childhood and early adolescence predicts transitions to heroin use in young adulthood: A national study. *Pediatrics* 167, no. 3: 605–612. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4714948/.

Cicero, T.J., M.S. Ellis, H.L. Surratt, and S.P. Kurtz. 2014. The changing face of heroin use in the United States: A retrospective analysis of the past 50 years. *Journal of the American Medical Association, Psychiatry* 71, no. 7: 821–826. http://jamanetwork.com/journals/jamapsychiatry/fullarticle/1874575.

Cimaglio, B. 2017. Testimony before the U.S. House Appropriations Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, April 5, 2017, Washington, DC. http://docs.house.gov/meetings/AP/AP07/20170405/105823/HHRG-115-AP07-Wstate-CimaglioB-20170405.pdf.

Cimaglio, B. 2015. Vermont's approach–treating the opiate epidemic. Presentation at the National Governors Association Convening on State Experiences with Health Care Reform, October 2, 2015, Salt Lake City, UT. https://www.nga.org/files/live/sites/NGA/files/pdf/2015/1510StateExpHealthCimaglio.pdf.

Compton, W.M., C.M. Jones, and G.T. Baldwin. 2016. Relationship between nonmedical prescription-opioid use and heroin use. *The New England Journal of Medicine* 374, no. 2: 154–163. http://www.nejm.org/doi/pdf/10.1056/NEJMra1508490.

Corso, C., and C. Townley. 2016. *Intervention, treatment, and prevention strategies to address opioid use disorders in rural areas: A primer on opportunities for Medicaid-safety net collaboration*. Washington, DC: National Academy for State Health Policy. http://nashp.org/wp-content/uploads/2016/09/Rural-Opioid-Primer.pdf.

Cuellar, A.E., and J. Cheema. 2012. As roughly 700,000 prisoners are released annually, about half will gain health coverage and care under federal laws. *Health Affairs* 31, no. 5: 931–938. http://content.healthaffairs.org/content/31/5/931.full.html.

Cummings, J.R., H. Wen, M. Ko, and B.G. Druss. 2014. Race/ethnicity and geographic access to Medicaid substance use disorder treatment facilities in the United States. *Journal of the American Medical Association, Psychiatry* 71, no. 2: 190–196. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4039494/.

Department of Veterans Affairs and Department of Defense (VA/DoD). 2015. *VA/DoD clinical practice guideline for the management of substance use disorders*. Washington, DC: VA/DoD. http://www.healthquality.va.gov/guidelines/MH/sud/.

Dick, A.W., R.L. Pacula, A.J. Gordon, et al. 2015. Growth in buprenorphine waivers for physicians increased potential access to opioid agonist treatment, 2002–2011. *Health Affairs* 34, no. 6: 1028–1034. http://content.healthaffairs.org/content/34/6/1028.

Dorr, H., and C. Townley. 2016. *Chronic pain management therapies in Medicaid: Policy considerations for non-pharmacological alternatives to opioids*. Washington, DC: National Academy for State Health Policy. http://www.nashp.org/wp-content/uploads/2016/09/Pain-Brief.pdf.

Dowell, D., T.M. Haegerich, and R. Chou. 2016. CDC guideline for prescribing opioids for chronic pain—United States, 2016. *MMWR Recommendations and Reports* 65, no. 1: 1–49.

Drug Enforcement Administration (DEA), U.S. Department of Justice. 2017. Controlled substance schedules. https://www.deadiversion.usdoj.gov/schedules/.

Evans E.A., and M.A. Sullivan. 2015. Women with opioid use disorders in the criminal justice system: A brief report. *Journal of Addiction Medicine and Therapy* 3, no.1: 1011. https://www.jscimedcentral.com/Addiction/addiction-3-1011.pdf.

Faul, M., M. Bohm, and C. Alexander. 2017. Methadone prescribing and overdose and the association with Medicaid preferred drug list policies—United States, 2007–2014. *Morbidity and Mortality Weekly Report* 66, no. 12: 320–323. http://dx.doi.org/10.15585/mmwr.mm6612a2.

Foundation for a Healthy Kentucky (FHK). 2016. *Substance use and the ACA in Kentucky*. Louisville, KY: FHK. https://www.healthy-ky.org/res/images/resources/Full-Substance-Use-Brief-Final_12_16-002-.pdf.

Gladden, R.M., P. Martinez, and P. Seth. 2016. Fentanyl law enforcement submissions and increases in synthetic opioid-involved overdose deaths—27 states, 2013–2014. *Morbidity and Mortality Weekly Report* 65, no. 33: 837–843.

Gliha, L.J. 2017. Rural Colorado hard hit by opioid addiction crisis. *Rocky Mountain PBS News*, February 21. https://durangoherald.com/articles/137606.

Grogan, C.M., C. Andrews, A. Abraham, et al. 2016. Survey highlights differences in Medicaid coverage for substance use treatment and opioid use disorder medications. *Health Affairs* 35, no.12: 2289–2296. http://content.healthaffairs.org/content/35/12/2289.abstract.

Havens, J.R., A.M. Young, and C.E. Havens. 2011. Nonmedical prescription drug use in a nationally representative sample of adolescents: Evidence of greater use among rural adolescents. *Archives of Pediatric and Adolescent Medicine* 165, no. 3: 250–255. http://jamanetwork.com/journals/jamapediatrics/fullarticle/384378.

Health Resources & Services Administration (HRSA), U.S. Department of Health and Human Services. 2017. FY 2016 substance abuse service expansion technical assistance. https://bphc.hrsa.gov/programopportunities/fundingopportunities/substanceabuse/.

Hollingsworth, A., C.J. Ruhm, and K. Simon. 2017. *Macroeconomic conditions and opioid abuse*. NBER Working Paper No. 23192. Cambridge, MA: National Bureau of Economic Research. http://www.nber.org/papers/w23192.

Hughes, A., M.R. Williams, R.N. Lipari, et al. 2016. *Prescription drug use and misuse in the United States: Results from the 2015 National Survey on Drug Use and Health*. Rockville, MD: Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/sites/default/files/NSDUH-FFR2-2015/NSDUH-FFR2-2015.htm.

Jacobs, H. 2017. The Obamacare repeal 'could be a disaster' for states fighting the opioid epidemic. *Business Insider*, February 13. http://www.businessinsider.com/obamacare-medicaid-expansion-states-in-danger-opioid-epidemic-2017-2.

Jones, C.M., G.T. Baldwin, T. Manocchio, et al. 2016. Trends in methadone distribution for pain treatment, methadone diversion, and overdose deaths—United States, 2002–2014. *Morbidity and Mortality Weekly Report* 65, no. 26: 667–671. https://www.cdc.gov/mmwr/volumes/65/wr/mm6526a2.htm.

Jones, C.M., J. Logan, R.M. Gladden, and M.K. Bohm. 2015a. Vital signs: Demographic and substance use trends among heroin users—United States, 2002–2013. *Morbidity and Mortality Weekly Report* 64, no. 26: 719–725. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6426a3.htm.

Jones, C.M., M. Campopiano, G. Baldwin, and E. McCance-Katz. 2015b. National and state treatment need and capacity for opioid agonist medication-assisted treatment. *American Journal of Public Health* 105, no. 8: 55–63. https://www.ncbi.nlm.nih.gov/pubmed/26066931.

Jones, C.M. 2013. Heroin use and heroin use risk behaviors among nonmedical users of prescription opioid pain relievers— United States, 2002–2004 and 2008–2010. *Drug and Alcohol Dependence* 132, nos. 1-2: 95–100. http://www.sciencedirect.com/science/article/pii/S0376871613000197.

Kaiser Family Foundation (KFF). 2017. *Summary of the American Health Care Act*. Washington, DC: KFF. http://files.kff.org/attachment/Proposals-to-Replace-the-Affordable-Care-Act-Summary-of-the-American-Health-Care-Act.

Kaiser Family Foundation and National Association of Medicaid Directors (KFF and NAMD). 2016. Implementing coverage and payment initiatives: Results from a 50-state Medicaid budget survey for state fiscal years 2016 and 2017. Washington, DC: KFF and NAMD. http://files.kff.org/attachment/Report-Implementing-Coverage-and-Payment-Initiatives.

Kolodny, A., D.T. Courtwright, C.S. Hwang, et al. 2015. The prescription opioid and heroin crisis: A public health approach to an epidemic of addiction. *Annual Review of Public Health* 2015, no. 36: 559–574. http://www.annualreviews.org/doi/pdf/10.1146/annurev-publhealth-031914-122957.

Kozhimannil, K.B., A.J. Graves, M. Jarlenski, et al. 2017. Non-medical opioid use and sources of opioids among pregnant and non-pregnant reproductive-aged women. *Drug and Alcohol Dependence* 174: 201–208. http://www.drugandalcoholdependence.com/article/S0376-8716(17)30072-8/abstract.

Lembke A., and J. Chen. 2016. Use of opioid agonist therapy for Medicare patients in 2013. *Journal of the American Medical Association, Psychiatry* 73, no. 9: 990–992.

Lenardson, J.D., J.A. Gale, and E.C. Ziller. 2016. *Research & policy brief—Rural opioid abuse: Prevalence and user characteristics*. Portland, ME: Maine Rural Health Research Center. https://muskie.usm.maine.edu/Publications/rural/Rural-Opioid-Abuse.pdf.

Livingston, J.D., T. Milne, M.L. Fang, and E. Amarai. 2012. The effectiveness of interventions for reducing stigma related to substance use disorders: A systematic review. *Addiction* 107, no. 1: 39–50. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3272222/pdf/add0107-0039.pdf.

Maclean, J.C., and B. Saloner. 2017.*The effect of public insurance expansions on substance use disorder treatment: Evidence from the Affordable Care Act*. NBER working paper 23342. Cambridge, MA: National Bureau of Economic Research. http://www.nber.org/papers/w23342.

Maree R.D., A. Marcum, E. Saghafi, et al. 2016. A systematic review of opioid and benzodiazepine misuse in older adults. *American Journal of Geriatric Psychiatry* 24, no. 11: 949–963. http://www.ajgponline.org/article/S1064-7481(16)30143-9/.

Mark, T.L., T. Yee, K.R. Levit, et al. 2016. Insurance financing increased for mental health conditions but not for substance use disorders, 1986–2014. *Health Affairs* 35, no. 6: 958–965. http://content.healthaffairs.org/content/35/6/958.

Martell, B.A., P.G. O'Connor, R.D. Kerns, et al. 2007. Systematic review: Opioid treatment for chronic back pain: Prevalence, efficacy, and association with addiction. *Annals of Internal Medicine* 146, no. 2: 116–127. https://www.ncbi.nlm.nih.gov/pubmed/17227935.

Martins, S.S., A. Sarvet, J. Santaella-Tenorio, et al. 2017. Changes in U.S. lifetime heroin use and heroin use disorder prevalence from the 2001–2002 to 2012–2013 National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of the American Medical Association, Psychiatry*. http://jamanetwork.com/journals/jamapsychiatry/article-abstract/2612444.

Massatti, R. 2017. Maternal opiate medical support (MOMS): Building partnerships to improve care. Presentation at the 13th All Ohio Institute on Community Psychiatry conference. March 25, 2017. Columbus, OH.

Massatti, R., J. Bailit, M. Marcotte, and M. Prasad. 2016. MOMS project panel overview. Presentation to Ohio Perinatal Quality Collaborative learning session, September 19, 2016. https://opqc.net/sites/bmidrupalpopqc.chmcres.cchmc.org/files/Learning%20Sessions/Sept%2019,%202016%20LS/1000-1045%20-%20MOMS%20Project%20Overview_Wallick&Deshler.pdf.

McMullen, E. 2016. Maryland Medicaid and opioid epidemic. Presentation before the Maryland Medicaid Advisory Committee, June 23, 2016, Baltimore, MD. https://mmcp.dhmh.maryland.gov/Documents/MMAC%20presentation%20DUR%20and%20Overdose%20Jun%2016.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016a. State coverage of FDA-approved drugs to treat addiction, 2015. https://www.macpac.gov/state-coverage-of-fda-approved-drugs-to-treat-addiction-2015/.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016b. State policies for behavioral health services covered under the state plan. https://www.macpac.gov/wp-content/uploads/2016/06/BH-State-Plan-Services-Policy-Compendium-Cmsn-review.xlsx.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016c. *Prescription opioid use in the Medicaid population*. https://www.macpac.gov/publication/prescription-opioid-use-in-the-medicaid-population/.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016d. Chapter 4: Integration of behavioral and physical health services in Medicaid. In *Report to Congress on Medicaid and CHIP*. March 2016. Washington DC: MACPAC. https://www.macpac.gov/publication/integration-of-behavioral-and-physical-health-services-in-medicaid/.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2015. Chapter 8: An update on the Medicaid primary care payment increase. In *Report to Congress on Medicaid and CHIP*. March 2015. Washington DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/03/An-Update-on-the-Medicaid-Primary-Care-Payment-Increase.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2014. Chapter 3: Issues in pregnancy coverage under Medicaid and exchange plans. In *Report to the Congress on Medicaid and CHIP*. March 2014. Washington DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Issues_in_pregnancy_Coverage_under_Medicaid_and_Exchange_Plans.pdf.

Medicare Payment Advisory Commission (MedPAC). 2015. Chapter 5: Polypharmacy and opioid use among Medicare Part D enrollees. In *Report to the Congress: Medicare and the health care delivery system*. June 2015. Washington, DC: MedPAC. http://www.medpac.gov/docs/default-source/reports/june-2015-report-to-the-congress-medicare-and-the-health-care-delivery-system.pdf?sfvrsn=0.

Miech, R., L. Johnston, P.M. O'Malley, et al. 2015. Prescription opioids in adolescence and future opioid misuse. *Pediatrics* 136, no. 5: e1169–e1177. http://pediatrics.aappublications.org/content/pediatrics/136/5/e1169.full.pdf.

Mignon, S.I. 2015. Substance abuse treatment: Options, challenges, and effectiveness. New York, NY: Springer Publishing Company.

Mittal, D., G. Sullivan, L. Chekuri, et al. 2012. Empirical studies of self-stigma reduction strategies: A critical review of the literature. *Psychiatric Services* 63, no. 10: 974–981. http://psychiatryonline.org/doi/abs/10.1176/appi.ps.201100459.

Mohlman, M.K., B. Tanzman, K. Finison, et al. 2016. Impact of medication-assisted treatment for opioid addiction on Medicaid expenditures and health services utilization rates in Vermont. *Journal of Substance Abuse Treatment* 67: 9–14. http://www.journalofsubstanceabusetreatment.com/article/S0740-5472(15)30065-9/fulltext.

Monnat, S.M., and K.K. Rigg. 2015. *Rural adolescents are more likely than their urban peers to abuse prescription painkillers*. Carsey Research National Fact Sheet no. 32. Durham, NH: University of New Hampshire. http://scholars.unh.edu/cgi/viewcontent.cgi?article=1255&context=carsey.

Moses, K., and J. Klebonis. 2015. *Designing Medicaid health homes for individuals with opioid dependency: Considerations for states.* Baltimore, MD: Centers for Medicare & Medicaid Services. http://www.chcs.org/media/HH-IRC-Health-Homes-for-Opioid-Dependency.pdf.

The National Association of State Alcohol and Drug Abuse Directors (NASADAD). 2010. *The effects of health care reform on access to, and funding of substance abuse services in Maine, Massachusetts, and Vermont*. Washington, DC: NASADAD. http://nasadad.org/wp-content/uploads/2015/03/The-Effects-of-Health-Care-Reform-on-Access-to-and-Funding-of-Substance-Abuse-Services-in-Maine-Massachusetts-and-Vermont-2010.pdf.

National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC), U.S. Department of Health and Human Services. 2016. *Health, United States, 2015: With special feature on racial and ethnic health disparities*. Hyattsville, MD: NCHS. http://www.cdc.gov/nchs/data/hus/hus15.pdf.

National Governors Association. 2016. A compact to fight opioid addiction. Washington, DC: NGA. https://www.nga.org/cms/Compact-to-Fight-Opioid-Addiction.

National Institute on Drug Abuse (NIDA), National Institutes of Health, U.S. Department of Health and Human Services. 2010. *Comorbidity: Addiction and other mental illnesses*. Research report series, NIH publication no. 10-5771. Bethesda, MD: NIDA. https://d14rmgtrwzf5a.cloudfront.net/sites/default/files/rrcomorbidity.pdf.

Netherland, J., M. Botsko, J.E. Egan, et al. 2009. Factors affecting willingness to provide buprenorphine treatment. *Journal of Substance Abuse Treatment* 36, no. 3: 244–251. http://www.journalofsubstanceabusetreatment.com/article/S0740-5472(08)00100-1/.

Neuhausen, K. 2017. Presentation before the Medicaid and CHIP Payment and Access Commission, March 2, 2017, Washington, DC. https://www.macpac.gov/wp-content/uploads/2016/10/March-2017-MACPAC-meeting-transcript.pdf.

Nuckols, T.K., L. Anderson, I. Popescu, et al. 2014. Opioid prescribing: A systematic review and critical appraisal of guidelines for chronic pain. *Annals of Internal Medicine* 160, no. 1: 38–47. http://annals.org/aim/article/1767856/opioid-prescribing-systematic-review-critical-appraisal-guidelines-chronic-pain.

O'Donnell, J., and T. DeMio. 2017. Obamacare repeal jeopardizes mental health, addiction coverage. *USA Today*, January 8. https://www.usatoday.com/story/news/politics/2017/01/08/obamacare-repeal-jeopardizes-mental-health-addiction-coverage/96199628/.

Office of Justice Programs (OJP). 2016. *FY 2017 budget request at a glance*. https://www.justice.gov/jmd/file/822111/download.

Office of the Surgeon General (OSG), U.S. Department of Health and Human Services (HHS). 2016. *Facing addiction in America: The Surgeon General's report on alcohol, drugs, and health*. Washington, DC: HHS. https://addiction.surgeongeneral.gov/surgeon-generals-report.pdf.

Ohio Department of Health (ODH). 2017. *Neonatal abstinence syndrome (NAS) in Ohio: 2006–2015 report*. Columbus, OH: ODH. https://www.odh.ohio.gov/-/media/ODH/ASSETS/Files/health/injury-prevention/NAS-Summary-Report.pdf.

Ohio Department of Medicaid and Ohio Department of Mental Health & Addiction Services (ODM and OhioMHAS). 2016. Child welfare and MOMS: Building partnerships to improve care. Training presentation. Columbus, OH: ODM and OhioMHAS. http://momsohio.org/healthcare-providers/providers-attributes/MOMS%20Child%20Welfare%20Training_Final_3-21-16.pdf.

Ohio Department of Mental Health & Addiction Services (OhioMHAS). 2017. *Cures project narrative/Ohio opioid STR project*. Columbus, OH: OhioMHAS. http://mha.ohio.gov/Portals/0/assets/Funding/CURES/CURES-project-narrative.pdf.

Olsen, Y., and J.M. Sharfstein. 2014. Confronting the stigma of opioid use disorder—and its treatment. *Journal of the American Medical Association* 311, no. 14: 1393–1394.

Patrick, S.W., M.M. Davis, C.U. Lehmann, and W.O. Cooper. 2015. Increasing incidence and geographic distribution of neonatal abstinence syndrome: United States 2009 to 2012. *Journal of Perinatology* 35, no. 8: 650–655. https://www.ncbi.nlm.nih.gov/pubmed/25927272.

Perlmutter, A.S., S.C. Conner, M. Savone, et al. 2017. Is employment status in adults over 25 years old associated with nonmedical prescription opioid and stimulant use? *Social Psychiatry and Psychiatric Epidemiology* 52, no. 3: 291–298. http://link.springer.com/article/10.1007%2Fs00127-016-1312-6.

Pew Charitable Trusts (Pew). 2016. *Curbing prescription drug abuse with patient review and restriction programs: Learning from Medicaid agencies*. Washington, DC: Pew Charitable Trusts. http://www.pewtrusts.org/~/media/assets/2016/03/curbing_prescription_drug_abuse_with_patient_review_and_restriction_programs.pdf.

Pew Charitable Trusts and MacArthur Foundation (Pew and MacArthur). 2015. *Substance use disorders and the role of the states*. Washington, DC: Pew. http://www.pewtrusts.org/~/media/assets/2015/03/substanceusedisordersandtheroleofthestates.pdf.

Project ECHO, The University of New Mexico. 2017. About the ECHO model. http://echo.unm.edu/about-echo/model/.

Quest, T.L., J.O. Merrill, J. Roll, et al. 2012. Buprenorphine therapy for opioid addiction in rural Washington: The experience of the early adopters. *Journal of Opioid Management* 8, no. 1: 29–38.

Reilly, C. 2015. Policy options to decrease risks from the use of methadone as a pain reliever. Presentation for a National Conference of State Legislatures webinar on state-based strategies to address prescription drug abuse, November 17, 2015, http://www.pewtrusts.org/~/media/assets/2015/11/wv-methadone-webinar-final-slides.pdf.

Rigg, K.K., and S.M. Monnat. 2015. Urban vs. rural differences in prescription opioid misuse among adults in the United States: Informing region specific drug policies and interventions. *International Journal of Drug Policy* 26, no. 5: 484–491. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4397122/.

Rinaldo, S., and D. Rinaldo. 2013. *Availability without accessibility? State Medicaid coverage and authorization requirements for opioid dependence medications.* Report to the American Society of Addiction Medicine. Berkeley, CA: The Avisa Group. http://www.asam.org/docs/default-source/advocacy/aaam_implications-for-opioid-addiction-treatment_final.

Ronan, M.V., and S.J. Herzig. 2016. Hospitalizations related to opioid abuse/dependence and associated serious infections increased sharply. *Health Affairs* 35, no.5: 832–837. http://content.healthaffairs.org/content/35/5/832.

Rosenblatt, R.A., C.H.A. Andrilla, M. Catlin, and E.H. Larson. 2015. Geographic and specialty distribution of U.S. physicians trained to treat opioid use disorder. *Annals of Family Medicine* 13, no. 1: 23–26. http://www.annfammed.org/content/13/1/23.

Rudd, R.A, P. Seth, F. David, and L. Scholl. 2016. Increases in drug and opioid-involved overdose deaths—United States, 2010–2015. *Morbidity and Mortality Weekly Report* 65, no. 51: 1445–1452. https://www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm655051e1.pdf.

Runyon, L. 2017. Why the opioid epidemic hits rural America hard. *KBIA*, January 18. http://kbia.org/post/why-opioid-epidemic-hits-rural-america-hard#stream/0.

Ryan, O., D. Murphy, and L. Krom. 2012. *Vital signs: Taking the pulse of the addiction treatment workforce, a national report. Version 1*. Kansas City, MO: Addiction Technology Transfer Center. http://www.attcnetwork.org/files/VitalSignsReport.pdf.

Saitz, R., M.J. Larson, C. LaBelle, et al. 2008. The case for chronic disease management for addiction. *Journal of Addiction Medicine* 2, no. 2: 55–65. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756688/.

Shapiro, B., D. Coffa, and E.F. McCance-Katz. 2013. A primary care approach to substance misuse. *American Family Physician* 88, no. 2: 113–121. http://www.aafp.org/afp/2013/0715/p113.pdf.

Sharp, M.J., and T.A. Melnik. 2015. Poisoning deaths involving opioid analgesics—New York State, 2003–2012. *Morbidity and Mortality Weekly Report* 64, no. 14: 377–380. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6414a2.htm.

State Health Access Data Assistance Center (SHADAC), University of Minnesota. 2017. Analysis for MACPAC of 2015 National Survey on Drug Use and Health (NSDUH). Minneapolis, MN: SHADAC.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2017a. *National survey of substance abuse treatment services (N-SSATS): 2015*. Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/2015_National_Survey_of_Substance_Abuse_Treatment_Services.pdf.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2017b. Physician and program data. Rockville, MD: SAMHSA. https://www.samhsa.gov/programs-campaigns/medication-assisted-treatment/physician-program-data.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. Buprenorphine waiver management. 2017c. https://www.samhsa.gov/medication-assisted-treatment/buprenorphine-waiver-management.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2016a. Results from the 2015 National Survey on Drug Use and Health: Detailed tables. Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015/NSDUH-DetTabs-2015.htm#intro.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2016b. Applying the substance abuse confidentiality regulations: Frequently asked questions. Rockville, MD: SAMHSA. https://www.samhsa.gov/about-us/who-we-are/laws/confidentiality-regulations-faqs.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2015. Workforce. https://www.samhsa.gov/workforce.

Substance Abuse and Mental Health Services Administration (SAMHSA)-Health Resources and Services Administration (HRSA) Center for Integrated Health Solutions, U.S. Department of Health and Human Services. 2014. *Expanding the use of medications to treat individuals with substance use disorders in safety-net settings. Creating change on the ground: Opportunities and lessons learned from the field*. Washington, DC: SAMHSA-HRSA. http://www.integration.samhsa.gov/clinical-practice/mat/FINAL_MAT_white_paper.pdf.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2013a. *The NSDUH report: Nonmedical use of prescription-type drugs, by county type*. Rockville, MD: SAMHSA. https://www.samhsa.gov/data/sites/default/files/NSDUH098/NSDUH098/sr098-UrbanRuralRxMisuse.htm.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2013b. *National expenditures for mental health services and substance abuse treatment, 1986–2009*. Rockville, MD: SAMHSA. https://store.samhsa.gov/shin/content/SMA13-4740/SMA13-4740.pdf.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2013c. *Report to Congress on the nation's substance abuse and mental health workforce issues*. Rockville, MD: SAMHSA. http://store.samhsa.gov/shin/content/PEP13-RTC-BHWORK/PEP13-RTC-BHWORK.pdf.

Substance Abuse and Mental Health Services Administration (SAMHSA), U.S. Department of Health and Human Services. 2011. Letter from H. Westley Clark to staff in opioid treatment programs (OTPs) regarding "Encouragement to utilize state prescription drug monitoring programs (PDMPs) as an additional resource to maximize safety of patient care pursuant to applicable state guidelines.". September 27, 2011. https://www.samhsa.gov/sites/default/files/programs_campaigns/medication_assisted/dear_colleague_letters/2011-colleague-letter-state-prescription-drug-monitoring-programs.pdf.

Tanner, L. 2016. The number of drug-affected newborns is going up because of rural opioid use. *Associated Press*, December 16. https://www.statnews.com/2016/12/12/newborns-rural-opioid/.

Tewarson, H. 2016. Presentation before the National Governors Association Learning Lab on telehealth strategies for expanding access to opioid addiction treatment, November 17, 2017, Albuquerque, NM. https://www.nga.org/files/live/sites/NGA/files/pdf/2016/1611TelehealthStrategiesTewarson.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2010. Amendment to Texas State Plan to implement coverage and reimbursement for substance abuse and dependency treatment. July 26, 2010. Baltimore, MD: CMS. https://downloads.cms.gov/cmsgov/archived-downloads/MedicaidGenInfo/downloads/TX-10-17-179.pdf.

Texas Health and Human Services (THHS). 2016. Benefits to change for screening brief intervention and referral to treatment (SBIRT) effective July 1, 2016. https://hhs.texas.gov/about-hhs/communications-events/news/2016/06/benefits-change-screening-brief-intervention-referral-treatment-effective-july-1-2016.

Texas Health and Human Services (THHS). 2015. MCO webinar update: Medicaid substance disorder (SUD) treatment benefit. https://hhs.texas.gov/sites/hhs/files/documents/about-hhs/process-improvement/medicaid-chip-qei/MCO-WEBINAR-052115.pdf.

Texas Legislative Budget Board (TLBB). 2015. *Texas state government effectiveness and efficiency report: Selected issues and recommendations.* Austin, TX: TLBB. http://www.lbb.state.tx.us/Documents/Publications/GEER/Government_Effectiveness_and_Efficiency_Report_2015.pdf.

Texas Legislative Budget Board (TLBB). 2009. *Texas state government effectiveness and efficiency: Selected issues and recommendations.* Austin, TX: TLBB. http://www.lbb.state.tx.us/Documents/Publications/GEER/Government%20Effectiveness%20and%20Efficiency%20Report%202009.pdf.

Tolia, V.N., S.W. Patrick, M.M. Bennett, et al. 2015. Increasing incidence of the neonatal abstinence syndrome in U.S. neonatal ICUs. *The New England Journal of Medicine* 372, no. 22: 2118–2126. http://www.nejm.org/doi/full/10.1056/NEJMsa1500439#t=article.

Townley, C., and H. Dorr. 2017. *Integrating substance use disorder treatment and primary care*. Washington, DC: National Academy for State Health Policy. http://www.nashp.org/wp-content/uploads/2017/02/Primary-Care-Integration-Brief.pdf.

U.S. Department of Health and Human Services (HHS). 2017. Confidentiality of substance use disorder patient records. Final Rule. *Federal Register* 82, no. 11 (January 18): 6052–6127. https://www.gpo.gov/fdsys/pkg/FR-2017-01-18/pdf/2017-00719.pdf.

U.S. Department of Health and Human Services (HHS). 2016. Medication assisted treatment for opioid use disorders. Final Rule. *Federal Register* 81, no. 131 (July 8): 44712–44739. https://www.gpo.gov/fdsys/pkg/FR-2016-07-08/pdf/2016-16120.pdf.

U.S. Preventive Services Task Force (USPSTF). 2015. *Topic update in progress—Drug use in adolescents and adults, including pregnant women: Screening*. Rockville, MD: USPSTF. https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryDraft/drug-use-in-adolescents-and-adults-including-pregnant-women-screening.

U.S. Preventive Services Task Force (USPSTF). 2013. *Final update summary: Alcohol misuse: Screening and behavioral counseling interventions in primary care*. Rockville, MD: USPSTF. https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care.

Vermont Blueprint for Health (VTBH), Department of Vermont Health Access. 2017. *Opioid addiction treatment health home– hub & spoke*. March 2017 handout. Waterbury, VT: VTBH.

Vermont Department of Health (VTDH). 2017. The care alliance for opioid addiction. http://www.healthvermont.gov/response/alcohol-drugs/treating-opioid-use-disorder.

Vestal, K. 2017. ACA repeal seen thwarting state addiction efforts. *Stateline, an initiative of The Pew Charitable Trusts*. Washington DC: Pew Charitable Trusts. http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2017/02/06/aca-repeal-seen-thwarting-state-addiction-efforts.

Virginia Department of Medical Assistance Services (VDMAS). 2016a. Application for amendment to the Virginia GAP Program for the Seriously Mentally Ill 1115 Demonstration: Virginia's addiction and recovery treatment services delivery system transformation. Letter and report. Richmond, VA: VDMAS. https://www.medicaid.gov/Medicaid-CHIP-Program-Information/By-Topics/Waivers/1115/downloads/va/va-gov-access-plan-gap-pa.pdf.

Virginia Department of Medical Assistance Services (VDMAS). 2016b. Transforming Medicaid's addiction and recovery treatment services benefit: What providers need to know before implementation April 1, 2017. Presentation for medical providers. http://www.dmas.virginia.gov/Content_atchs/bh/ARTS%20Benefit%20Final%20Presentation_09.12.16%20Final%20v9.pdf.

Vowles, K.E., M.L. McEntee, P.S. Julnes, et al. 2015. Rates of opioid misuse, abuse, and addiction in chronic pain: A systematic review and data synthesis. *PAIN* 156, no. 4: 569–576. http://insights.ovid.com/pubmed?pmid=25785523.

Wen, H., B.R. Schackman, B. Aden, and Y. Bao. 2017a. States with prescription drug monitoring mandates saw a reduction in opioids prescribed to Medicaid enrollees. *Health Affairs* 36, no. 4: 733–774. http://content.healthaffairs.org/content/36/4/733.

Wen, H., J.M. Hockenberry, T.F. Borders, and B.G. Druss. 2017b. Impact of Medicaid expansion on Medicaid-covered utilization of buprenorphine for opioid use disorder treatment. *Medical Care* 55, no. 4: 336–341. http://journals.lww.com/lww-medicalcare/Citation/2017/04000/Impact_of_Medicaid_Expansion_on_Medicaid_covered.5.aspx.

West, N.A., S.G. Severtson, J.L. Green, and R.C. Dart. 2015. Trends in abuse and misuse of prescription opioids among older adults. *Drug and Alcohol Dependence* 149: 117–121. http://www.drugandalcoholdependence.com/article/S0376-8716(15)00047-2/fulltext.

White, W. 2009. *Long-term strategies to reduce the stigma attached to addiction, treatment, and recovery within the city of Philadelphia (with particular reference to medication assisted treatment/recovery)*. Philadelphia, PA: Department of Behavioral Health and Intellectual Disability Services. http://www.williamwhitepapers.com/pr/2009Stigma%26methadone.pdf.

Whitmire, J.T., and G.W. Adams. 2010. Unintentional overdose deaths in the North Carolina Medicaid population: *Prevalence, prescription drug use, and medical care services. SCHS Study No. 162*. Raleigh, NC: State Center for Health Statistics, North Carolina Department of Health and Human Services. http://schs.state.nc.us/schs/pdf/schs_162_WEB_081310.pdf.

Woodward, A. 2015. The substance abuse prevention and treatment block grant is still important even with the expansion of Medicaid. *The CBHSQ Report*. Rockville, MD: Substance Abuse and Mental Health Services Administration (SAMHSA). https://www.samhsa.gov/data/sites/default/files/report_2080/ShortReport-2080.html.

Wu, L., G.E. Woody, C. Yang, and D.G. Blazer. 2011. How do prescription opioid users differ from users of heroin or other drugs in psychopathology: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Addiction Medicine* 5, no. 1: 28–35. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3082206/pdf/nihms-213427.pdf.

Zhou, C., C.S. Florence, and D. Dowell. 2016. Payments for opioids shifted substantially to public and private insurers while consumer spending declined, 1999–2012. *Health Affairs* 35, no.5: 824–831. http://content.healthaffairs.org/content/35/5/824.abstract.

Chapter 3:

Program Integrity in Medicaid Managed Care

Program Integrity in Medicaid Managed Care

Key Points

- Program integrity consists of initiatives to detect and deter fraud, waste, and abuse as well as routine oversight to ensure compliance with state and federal law. These activities are meant to ensure that taxpayer dollars are spent appropriately on delivering accessible, high-quality, and necessary care.
- Comprehensive managed care is now the primary Medicaid delivery system, accounting for nearly half of federal and state spending on Medicaid and about 60 percent of beneficiaries in 2015. However, managed care program integrity issues have not traditionally received the same focus as those in fee for service.
- States require that Medicaid managed care organizations (MCOs) proactively minimize fraud, waste, and abuse. Risk-based payments also create financial incentives for MCOs to minimize improper payments.
- There is considerable variation among states in program integrity requirements for Medicaid MCOs, state oversight of MCO program integrity activities, and the extent to which states and MCOs work together to reduce fraud, waste, and abuse.
- While many program integrity practices are perceived to be effective, there are few mechanisms for measuring return on investment or for sharing best practices. In addition, there is a need for greater coordination among state staff assigned to managed care and program integrity functions as well as better data on managed care encounters.
- Federal regulations for Medicaid managed care were updated in 2016, including more detailed provisions relating to program oversight and program integrity. Many stakeholders believe the changes will strengthen managed care program integrity and lead to greater consistency across states. However, the Centers for Medicare & Medicaid Services is still in the process of developing guidance and implementing major portions of the rule, so it is too early to assess the complete effects of the new rule.
- Looking ahead, the Commission may examine other areas of program integrity in managed care, such as:
  - how states validate their encounter data for future rate setting;
  - incentives for MCOs to make investments in prepayment auditing;
  - mechanisms for sharing provider screening data among states and programs; and
  - how to measure the effectiveness and impact of program-related activities and best practices.
- The Commission may also consider how well current program integrity rules apply to new value-based purchasing models, particularly the use of accountable care organizations and managed long-term services and supports plans.

CHAPTER 3: Program Integrity in Medicaid Managed Care

From its earliest reports, MACPAC has focused repeatedly on program integrity in Medicaid and the State Children's Health Insurance Program (CHIP).[1] As described in previous Commission reports, program integrity activities are meant to ensure that taxpayer dollars are spent appropriately on delivering accessible, high-quality, and necessary care and preventing fraud, waste, and abuse (Box 3-1). The Commission also previously identified challenges associated with the implementation of an effective and efficient Medicaid program integrity strategy (MACPAC 2013, 2012). These challenges include insufficient collaboration and information sharing among various oversight entities and few federal program integrity resources for delivery models other than fee for service (FFS).

BOX 3-1. Fraud, Waste, Abuse, and Managed Care Oversight

Program integrity consists of initiatives to detect and deter fraud, waste, and abuse as well as routine program oversight to ensure compliance with state and federal regulations. These activities are meant to ensure that taxpayer dollars are spent appropriately on delivering accessible, high-quality, and necessary care.

Medicaid regulations define fraud and abuse in the same way for fee for service and managed care (42 CFR 455.2).

Fraud is an intentional act of deception or misrepresentation made with the knowledge that the deception could result in some unauthorized benefit to the person committing the act or some other person. It includes any act that constitutes fraud under applicable federal or state law.

Abuse comprises provider practices that are inconsistent with sound fiscal, business, or medical practices and result in an unnecessary cost to the Medicaid program or in payment for services that are not medically necessary or that fail to meet professionally recognized standards for health care. For example, a dentist might recommend a root canal and crown when standards of dental practice would indicate that a filling is appropriate. It also includes beneficiary practices that result in unnecessary cost to the Medicaid program.

Medicaid regulations do not define **waste**, but it is generally understood to include the misuse of resources (not caused by criminally negligent actions) that directly or indirectly results in unnecessary costs to the Medicaid program, such as requesting duplicate laboratory tests or imaging.

Managed care oversight consists of minimum contracting standards and oversight responsibilities placed on states that contract with managed care plans to provide Medicaid services on a per member per month basis (42 CFR 438). States are responsible for exercising general oversight over their plans' compliance with their contracts and adherence to federal and state laws, regulations, and policies, including when fraud or abuse is suspected. States establish additional oversight and monitoring of quality, access, and timeliness of care for managed care enrollees. Managed care oversight also focuses on administration and management, appeal and grievance systems, claims management, customer service, finance, information systems, marketing, medical management, provider networks, and quality improvement.

Traditionally, Medicaid program integrity activities were designed with the assumption that states would enroll and pay providers directly for individual services—for example, that states would check national databases to ensure that a provider excluded from participation in Medicare was also excluded from Medicaid—and that they would implement prepayment edits and audits in the claims adjudication process to help identify and suspend potentially improper payments. But over time the program's structure has changed dramatically, and now managed care is the primary Medicaid delivery system in 29 states. Nearly half of federal and state spending on Medicaid in 2015—over $230 billion—was on managed care, and the proportion continues to grow each year (MACPAC 2016a).[2] This shift has important consequences for strategies to ensure program integrity.

While both the federal and state agencies that oversee Medicaid remain statutorily responsible for ensuring program integrity, the nature of their efforts change when Medicaid services are provided through a managed care delivery system instead of FFS. In FFS, the state is responsible for contracting with providers, processing claims, managing utilization, and paying providers and is therefore best positioned to monitor for provider fraud, waste, and abuse. In managed care, these responsibilities are contracted to a managed care organization (MCO), which assumes responsibility for monitoring for false or improper claims submission by providers and other types of fraud and abuse.

It is important to note, however, that although MCOs are given primary responsibility for oversight of their providers and claim payments, states cannot delegate their federally mandated responsibility to ensure appropriate payment, access, and quality. Thus, states must assume broader program oversight responsibility—ensuring that capitation payments are appropriate, validating that MCOs have adequate provider networks, and providing oversight of MCO administrative requirements. Correspondingly, the Centers for Medicare & Medicaid Services (CMS), the federal agency that administers the Medicaid program, must ensure that states provide appropriate oversight of contracted managed care plans and comply with federal requirements.

Earlier MACPAC reports on program integrity focused on state and federal initiatives to detect provider fraud and eligibility errors, the two areas of concern that have been most frequently addressed in legislation and rulemaking (MACPAC 2013, 2012). In those early reports, noting that states were increasingly enrolling beneficiaries into MCOs, MACPAC highlighted the importance of identifying the program integrity challenges and opportunities relating to managed care. In May 2016, CMS published updated federal regulations for Medicaid managed care, which included more detailed provisions relating to program oversight and program integrity.[3] This update provided the impetus for the Commission to move ahead with an examination of managed care program integrity, focusing on initiatives to detect and deter fraud, waste, and abuse. The broader program oversight aspects of managed care program integrity activities may be the subject of future Commission work.

Over the past year, the Commission undertook an in-depth examination of state, federal, and MCO program integrity activities to assess the scope of current activities, their perceived effectiveness, and the anticipated effects of regulatory changes, including the degree to which the new rule addresses the Commission's earlier concerns. This examination included an environmental scan of managed care program integrity policies and interviews between July and October 2016 with 10 states, 3 MCOs, and several federal agencies, including the Center for Medicaid and CHIP Services (CMCS), the Center for Program Integrity (CPI), and the Center for Medicare (all within CMS) as well as the Office of the Inspector General (OIG) of the U.S. Department of Health and Human Services (HHS). The Commission also heard from a panel of federal and state experts at its December 2016 public meeting.

This study found the following:

- While the prevalence of managed care has grown over the last 15 years, making it a major Medicaid delivery system today, only recently have managed care program integrity issues received the same amount of focus at the state and federal level as program integrity in FFS.
- There is considerable variation among states in program integrity requirements for Medicaid MCOs, state oversight of MCO program integrity activities, and the extent to which states and MCOs work together to reduce fraud, waste, and abuse.
- Many program integrity practices are perceived by states and MCOs to be effective, but states have few mechanisms for measuring the return on investment of program integrity activities or for sharing best practices.
- Most states and plans interviewed for this study commented that the updated regulations, which incorporate many prior recommendations made by federal oversight agencies and adapt practices from leading states, are likely to strengthen managed care program integrity (Appendix 3A).
- States indicated they are already operating largely in compliance with some provisions in the new rule, while other provisions will require them to make substantial operational changes.
- CMS is still in the process of developing subregulatory guidance to assist states and MCOs in complying with the updated program integrity provisions, and states are still in the process of assessing the new rule, implementing changes where necessary while awaiting additional guidance from CMS. It is too early to assess the complete effect of the new rule.

We begin this chapter with a description of the program integrity issues in managed care and how these are similar to or different from those in FFS Medicaid, which we follow with summaries of the program integrity responsibilities of CMS, states, and MCOs. We then report the findings of our research, particularly regarding the strengths and weaknesses associated with existing program integrity measures, whether there are additional or alternative steps the federal government could take to ensure program integrity in Medicaid managed care, and the degree to which the new managed care rule is likely to strengthen state and federal oversight. We conclude the chapter with a brief discussion of issues that the Commission may examine in the future.

Program Integrity in Managed Care

Comprehensive managed care is now the primary Medicaid delivery system in 29 states, accounting for nearly half of federal and state spending on Medicaid and about 60 percent of beneficiaries in 2015 (MACPAC 2016a, 2016b). States vary in how they have designed and implemented Medicaid managed care programs, including the populations enrolled, the roles and responsibilities assigned to MCOs, the level of oversight and management retained at the state level, and the maturity of their programs. In a comprehensive managed care program, states contract with MCOs to deliver all or most Medicaid-covered services for plan enrollees. MCOs are paid a capitation rate—a fixed dollar amount per member per month—to cover a defined set of services for each enrolled member, and they must contract with a network of providers to deliver these services. The capitation rates must be developed in accordance with generally accepted actuarial principles and practices, they must be appropriate for the enrolled population and the services covered in the contract between the state and MCO, and they must be certified by qualified actuaries. MCOs are at financial risk if spending

on benefits and administration exceeds payments; conversely, they are permitted to retain any portion of payments not expended for covered services and other contractually required activities.

The primary differences between FFS and managed care delivery systems—in particular the payment and contracting arrangements—create new or different kinds of program integrity risks that require program-specific safeguards (Table 3-1). For example, under a managed care contract, the state delegates provider contracting, utilization management, and claims processing to an MCO. This means that the MCO, not the state, is primarily responsible for making sure that payments are accurate and that sufficient data are collected for oversight. State responsibilities must adapt to include oversight of and payment to plans; for example, to make sure capitation payments are appropriate and that encounter and enrollment data are accurate and valid.

TABLE 3-1. Characteristics of Fee-for-Service and Managed Care Delivery Systems and Program Integrity Risks Specific to Managed Care

Fee-for-service characteristics	Managed care characteristics	Program integrity risks specific to managed care delivery systems
State pays providers for services	State pays MCO a capitated payment	• Incorrect or inappropriate capitation rate setting for MCO payments • Underutilization of services by MCO enrollees
State processes claims	MCO processes claims	• Inaccurate encounter (claims) data submitted by MCO • Failure of MCO staff to cooperate with state investigations and prosecutions of fraudulent claims • Focus on cost avoidance, not recoupment of state dollars
State oversees individual providers and contracts	State oversees MCO contract; MCO can subcontract	• MCO submits incomplete or inaccurate information on contract performance • Lack of access to subcontractor information on contract performance or falsification of information
State pays providers on a fee-for-service basis	MCO can subcapitate providers or use other incentives	• Underutilization by MCO enrollees • Inappropriate physician incentive plans
State covers all Medicaid beneficiaries	MCO covers only assigned or enrolled beneficiaries	• Payment to MCOs for non-enrolled individuals • Marketing or enrollment fraud by MCO
State contracts with all qualified providers	MCO contracts with a select provider network	• Lack of adequate MCO provider network • MCO must choose between removing risky providers and maintaining network adequacy • Lack of communication results in a disqualified provider terminated from one MCO being hired by another MCO

Note: MCO is managed care organization.

Source: MACPAC, 2017, review of Title XIX of the Social Security Act and 42 CFR 435–460.

MCOs carry the financial risk associated with capitated payment arrangements, meaning that they are at risk for any losses if the costs associated with covering Medicaid enrollees exceed the capitation payments received from the state. Therefore, the traditional assumption has been that MCOs have an incentive to proactively reduce fraud, waste, and abuse to minimize avoidable losses. But the various approaches MCOs use to avoid or recover improper claim payments (e.g., purchasing claims-editing software and hiring investigators) have costs, and there is little information on which program integrity efforts consistently generate positive returns.

Moreover, other financial considerations can influence MCO decisions about the amount and type of investments they make in ensuring program integrity. For example, although recoveries of fraudulent payments can be easily quantified, the amounts potentially saved through cost avoidance activities are harder to estimate. If a state's contract with a Medicaid MCO links incentives or penalties to recoveries but not to cost avoidance, then the MCO might invest more resources in postpayment fraud detection activities and less in upfront fraud prevention. Medicaid MCOs are also required to report annually their medical loss ratio (the proportion of the Medicaid capitation spent on claims and activities that improve health care quality) and are expected to achieve a medical loss ratio of at least 85 percent.[4] Expenses for fraud reduction activities are not counted toward the medical loss and are considered administrative costs, along with other MCO administrative expenses and financial margins, which might cause MCOs to limit the amounts they spend on program integrity activities.

Although states may not delegate their federally mandated responsibilities to MCOs, they may delegate day-to-day responsibility for oversight of network providers. Prior to 2016, there were few federal rules that specifically addressed managed care program integrity and there was substantial variation among states in their requirements for MCOs and their oversight activities. For example, before 2016, federal regulations on program integrity for Medicaid managed care required MCOs to certify the accuracy of data submitted to the state, including encounter data submitted by network providers, and prohibited health plans from contracting with providers who had been debarred by federal agencies, including the Medicare program. Federal rules also required Medicaid health plans to have a written fraud and abuse plan that included, at minimum, a description of compliance oversight, training, and education for MCO staff as well as communication standards, disciplinary guidelines, internal monitoring, and corrective action plans.

As the proportion of Medicaid spending that flows through managed care contracts has increased, states and the federal government have sought to strengthen the oversight of managed care plans and to ensure that MCOs are conducting a full range of program integrity activities. In 2016, CMS updated the federal rule, thereby expanding the federal oversight role, standardizing the expectations for states across all managed care authorities, and updating program standards to reflect the current scope of Medicaid managed care programs (42 CFR 438). Subpart H of the new rule focuses specifically on program integrity: it adapts provisions from FFS, addresses vulnerabilities identified by oversight agencies including the U.S. Government Accountability Office (GAO) and the OIG, and implements best practices used by leading managed care states. Other subparts of the rule support program integrity through stronger program oversight, such as requirements to improve the reporting and quality of encounter data (Subparts D and E) and by requiring MCO contract provisions to flow down to subcontractors (Subpart D). States and MCOs may conduct additional program integrity activities beyond those required. Below we summarize Medicaid managed care program activities conducted by federal agencies, states, and MCOs.

Federal program integrity activities

The CMS CPI is responsible for the Medicaid Integrity Program, a comprehensive federal strategy to reduce Medicaid provider fraud, waste, and abuse. Managed care is a component of many of its initiatives, including periodic reviews of state program integrity operations, training, and technical assistance for states (CMS 2015). CPI publishes information on noteworthy state practices to address fraud and abuse in Medicaid managed care and provides training for state staff on managed care program integrity. CPI has also developed a managed care plan compliance toolkit with guidance to assist Medicaid managed care plans in preventing, detecting, and reporting Medicaid fraud, waste, and abuse (CMS 2015).

As noted earlier, managed care program integrity also involves broader program oversight, which, at the federal level, is the responsibility of various entities within CMS. CMCS reviews state documents (e.g., waivers and MCO contracts) to ensure that managed care programs comply with federal statutes and regulations. For example, CMCS annually reviews and approves each MCO contract and any contract amendments to ensure they include all required provisions, including those relating to program integrity.

Many federal efforts have focused on oversight and accountability for the accuracy of the payments made by states to MCOs. For managed care payments, the fundamental payment principle is that capitation rates be actuarially sound (42 CFR 438.4). States are required to submit for federal review the capitation rates that correspond to the populations and services covered in the managed care program, actuarial certifications for those rates, and data and documentation to support these certifications. CMCS reviews the capitation rates for each Medicaid managed care program to determine whether the payments are actuarially sound and support the necessary contract terms to deliver high-value, high-quality services to enrollees.

CMCS also collects managed care encounter data (information relating to the receipt of any items or services by an enrollee under an MCO contract) from the states, which are required to collect these data from the MCOs. CMCS uses these data to measure state and plan performance, monitor compliance with federal rules, and support program integrity efforts. The federal government has statutory authority to disallow Medicaid matching payments if states fail to submit complete and accurate data, although to date it has not exercised this authority (§§ 1903(i)(25) and 1903(m)(2)(A)(xi) of the Social Security Act).

Other offices within CMS also have responsibilities relating to Medicaid managed care program integrity. For example, as required by federal law, the Office of Financial Management measures the rate of improper payments for all CMS programs. This includes a review of a random sample of capitation payments made by state Medicaid programs to MCOs to determine whether they were made in accordance with the relevant contracts and capitation rate schedules (CMS 2017). The improper payment rate does not include an estimate of erroneous payments made by Medicaid MCOs to their plan providers.

Lastly, while not within CMS, the OIG is responsible for overseeing the integrity of all HHS programs, including Medicaid. The OIG conducts audits and investigations of both state Medicaid programs and CMS, and evaluates aspects of the Medicaid program to make recommendations focused on improving efficiency and reducing fraud, waste, and abuse. The OIG also oversees the state-based Medicaid Fraud Control Units (MFCUs).

State program integrity activities

All state Medicaid programs, regardless of delivery system design, must comply with federal Medicaid program integrity requirements. For example, states must have mechanisms to identify, investigate, and refer suspected fraud and

abuse cases to appropriate state and federal law enforcement agencies and cooperate with federal program integrity initiatives including the Medicaid Integrity Program and the Payment Error Rate Measurement (PERM) program (42 CFR 455).[5] In addition, all states have an MFCU, which operates independently from the Medicaid program, to investigate and prosecute Medicaid provider fraud, including fraud committed by providers under contract to Medicaid managed care plans.[6]

States with managed care programs have two additional program integrity responsibilities: conducting program integrity activities for the managed care program and making sure MCOs maintain effective program integrity programs of their own. For example, states must:

- periodically, but no less than every three years, conduct or contract for an independent audit of the accuracy, truthfulness, and completeness of the encounter and financial data submitted by or on behalf of each MCO;
- directly enroll and conduct all applicable screening and disclosure reviews and database checks for all MCO network providers (beginning in January 2018);
- investigate information received from whistleblowers relating to the integrity of the MCO, subcontractors, or network providers; and
- ensure that MCOs disclose certain information, such as personal and financial conflicts of interest, for each person with at least a 5 percent ownership or controlling interest in the entity and ensure that MCOs agree to provide information related to business transactions upon request.

States are required by federal rules to put specific program integrity requirements in their contracts with Medicaid health plans. For example, each contract must require MCOs to:

- implement and maintain arrangements or procedures that are designed to detect and prevent fraud, waste, and abuse;
- ensure that all network providers are enrolled with the state as Medicaid providers consistent with the provider disclosure, screening, and enrollment requirements; and
- provide written disclosure of any prohibited affiliation and information on ownership and control.

The contract also must specify the retention policies for the treatment of recoveries of all overpayments from the MCO to a provider, including, specifically, retention policies for treatment of overpayment recoveries due to fraud, waste, or abuse.

State Medicaid managed care programs are also required to comply with a number of other federal requirements relating to transparency and accountability; these program oversight activities strengthen program integrity (Table 3-2). For example, the state must validate that MCOs have adequate provider networks and review encounter data to guard against underutilization. States must provide oversight of MCO administrative requirements, such as marketing and enrollment rules. States also must develop mechanisms for appropriate payments, for example, mechanisms for ensuring that capitation rates are correct and actuarially sound, that MCOs are not paid for non-enrolled individuals, and that the FFS program does not pay claims for services that are the responsibility of the MCOs.

States also may choose to conduct additional program integrity activities beyond those required by federal law, including encounter data analyses and joint program integrity investigations with MCOs. Many states periodically convene staff from the state managed care unit, program integrity unit, MCO program integrity department, and MFCU to discuss information about potential fraud, waste, and abuse. These opportunities for staff

of different state entities to share information on program integrity practices can also help strengthen state knowledge and oversight of MCO operations.

MCO program integrity activities

Medicaid MCOs conduct a variety of program integrity activities, including those required by federal rule, those required as a condition of contracting with a state, and those initiated by the health plan itself to minimize improper provider payments.

As noted above, federal rules require Medicaid managed care plans to comply with many specific requirements relating to program integrity, which are enforced through contracts with the states. For example, as part of its contractually required policies and procedures to detect and prevent fraud, waste, and abuse, each Medicaid MCO must have the following:

- a formal compliance program with written policies, procedures, and standards of conduct;

TABLE 3-2. State Requirements for Addressing Medicaid Managed Care Program Integrity Risks

Managed care program integrity risk	Regulatory requirements for states
• Incorrect or inappropriate rate setting	• Use detailed data for capitation rate development, certification, and federal review • Report medical loss ratio (MLR) and use MLR in capitation rate development • Conduct an independent audit of the encounter and financial data submitted by managed care plans
• Inaccurate encounter or claims data • Incomplete or inaccurate information on contract performance • Lack of access to subcontractor information or falsification of information	• Establish clear contractual language regarding required MCO reporting • Monitor MCO compliance with program integrity provisions • Post MCO data on state website • Require that all subcontractors be held to same provisions as MCO
• Underutilization in subcontracted or capitated providers • Inappropriate physician incentive plans	• Screen and enroll managed care plan network providers • Review ownership, control, and exclusion status for MCOs and subcontractors
• Payment to MCOs for non-enrolled individuals • Marketing or enrollment fraud	• Establish clear contractual language regarding acceptable marketing • Monitor MCO marketing activities

Note: MCO is managed care organization.

Source: MACPAC analysis of 42 CFR 438.

- a designated compliance officer and regulatory compliance committee;
- a program integrity training program to educate MCO staff;
- disciplinary guidelines that enforce compliance program policies;
- a system for routine internal monitoring and auditing of compliance risks and for responding to compliance issues as they are raised or for investigating and correcting potential compliance problems when identified in the course of self-evaluation and audits; and
- a method to periodically verify whether billed services were received by enrollees.

MCOs must cooperate with state and law enforcement agencies on program integrity activities. For example, MCOs must promptly report all overpayments identified or recovered to the state, specifying the overpayments due to potential fraud, and they must promptly refer any potential fraud, waste, or abuse to the state Medicaid program integrity unit or directly to the state MFCU, as applicable. MCOs must notify the Medicaid agency if they receive information regarding changes to enrollee or provider eligibility. They must also suspend payments to a network provider if the state has determined that there is a credible allegation of fraud against that provider.

Medicaid MCOs must comply with other state and federal requirements that support program integrity and ensure that taxpayer dollars are spent appropriately (Table 3-3). For example, MCOs must provide audited financial reports, complete and accurate encounter data for all services provided to enrolled members, and documentation demonstrating compliance with network adequacy requirements.

Medicaid MCOs may also engage in a variety of program integrity activities beyond those required by federal rule or specified in contracts with the state. For example, MCOs may implement additional prepayment and postpayment reviews of provider claims to detect patterns of fraud or conduct data matching with other insurers to identify unreported third-party liability.

Assessment of Managed Care Program Integrity Activities

Over the past year, the Commission conducted a comprehensive assessment of the scope of current Medicaid managed care program integrity activities, the perceived effectiveness of these activities, and the anticipated effects of regulatory changes. This examination included an environmental scan of managed care program integrity policies and interviews between July and October 2016 with 10 states, 3 MCOs, and several federal agencies, including the Center for Medicaid and CHIP Services (CMCS), the Center for Program Integrity (CPI), and the Center for Medicare (all within CMS) as well as the Office of the Inspector General (OIG) of the U.S. Department of Health and Human Services (HHS). The Commission also heard from a panel of federal and state experts at its December 2016 public meeting. Through this review, MACPAC identified several key findings:

- State managed care oversight and traditional FFS program integrity activities, which have largely operated in separate spheres, are increasingly coordinated by rule and by practice as state managed care staff take more oversight responsibility for MCO program integrity activities and as state program integrity staff expand fraud detection activities to encompass managed care providers. However, initiatives to ensure program integrity in managed care still lack the sophistication of those for FFS, and in many states program integrity in managed care is not a primary area of focus.
- State Medicaid personnel we interviewed indicated that additional guidance, training, and tools to support information sharing

would further strengthen managed care program integrity efforts. Interviewees identified many practices perceived to be effective but noted that there are few mechanisms for measuring the return on investment of program integrity activities or for sharing best practices. In the absence of clear guidance, states have developed their own policies and procedures, resulting in variation among states in what they require of Medicaid MCOs, state oversight of MCO program integrity activities, and how states and MCOs work together to reduce fraud, waste, and abuse.

- Personnel from state Medicaid programs, MCOs, and federal agencies also assert that the updated federal regulations, which incorporate many prior recommendations made by federal oversight agencies and adapt practices from leading states, are likely to strengthen managed care program integrity. However, most states are still in the process of assessing the new rule and implementing changes where necessary, and some provisions in the final rule have not yet gone into effect. The full effect of the new rule will not be known for several years.

TABLE 3-3. MCO Requirements for Ensuring Medicaid Managed Care Program Integrity

Managed care program integrity risk	Regulatory requirements for MCOs
• Incorrect or inappropriate rate setting	• Report medical loss ratio • Submit annual report on overpayment recoveries • Submit audited financial reports
• Inaccurate encounter or claims data (from providers and subcontractors) • Failure to coordinate with investigations and prosecutions of fraudulent claims • Incomplete or inaccurate information on contract requirements • Lack of access to subcontractor information or falsification of information • Inappropriate physician incentive plans	• Submit encounter data per specific requirements • Comply with contractual reporting and recovery requirements • Validate that billed services were received by enrollees • Promptly refer potential waste, fraud, and abuse to appropriate entity • Suspend payments to network providers if there is a credible allegation of fraud
• Payment to MCOs for non-enrolled individuals • Marketing or enrollment fraud	• Notify state about changes in enrollee eligibility status
• Lack of adequate provider network or underutilization	• Credential and recredential all network providers • Provide data demonstrating compliance with provider network requirements

Note: MCO is managed care organization.

Source: MACPAC analysis of 42 CFR 438.

In the Commission's view, these findings indicate that recent changes in federal guidance have the potential to help strengthen Medicaid managed care program integrity. However, the federal government has not issued complete guidance on all aspects of the new rule and states and MCOs have not yet developed all of the necessary infrastructure to support the additional requirements. While the Commission has not identified the need for specific statutory or regulatory changes at this time, based on our findings, the program integrity recommendations MACPAC made in March 2012 remain relevant for managed care and FFS delivery models. That is, CMS should enhance states' abilities to detect and deter fraud and abuse by developing methods for better quantifying the effectiveness of program integrity activities, by improving dissemination of best practices in program integrity, and by enhancing program integrity training programs (MACPAC 2012).

MACPAC findings

We discuss our specific findings below.

State emphasis on managed care program integrity varies widely. States use a variety of approaches to develop program integrity contract and reporting requirements, with some using only the federally required contractual provisions and others creating additional requirements. Many states have included provisions allowing penalties or liquidated damages for failure to comply with contractual requirements (e.g., not conducting required fraud and abuse oversight activities); however, only a few states actively levy fines or liquidated damages against MCOs. The number and type of state staff focused on managed care program integrity also varies considerably, with some states hiring no dedicated managed care program integrity staff and others hiring large teams focused solely on reviewing health plan reports and conducting on-site health plan audits. Finally, the level of review and validation of MCO reporting, particularly on the medical loss ratio (MLR) and performance reports, also varies widely.

This variation stems in part from a lack of consistent federal guidance as well as limited opportunities for states to share best practices. Other researchers have reached the same conclusion: a recent GAO review of CMS oversight and support of state Medicaid program integrity efforts found that CMS lacked a systematic approach to collecting and sharing state best practices for program integrity activities across states (GAO 2017). MCOs operating in multiple states are frustrated by the requirement to comply with multiple sets of rules and reporting formats relating to similar program expectations. States that have more recently implemented Medicaid managed care programs have been able to adapt policies and procedures from states with more mature programs that have identified which practices are likely to work. New and more explicit federal rules may lead to greater consistency in the future, but the full effects are unknown at this time.

State managed care oversight and program integrity initiatives have traditionally operated separately, but may work together more closely in the future. Traditionally, many states have separate departments for managed care program staff, who oversee not only program integrity but all aspects of MCO contracts, and program integrity staff, who generally focus on oversight of individual providers as opposed to MCO contracts. (MFCUs, by law, are organizationally separate from the Medicaid agency.) These operational separations mirror those at the federal level: managed care oversight is the responsibility of CMCS, responsibility for program integrity is at CPI, and MFCUs are overseen by the OIG.

However, as managed care delivery systems take on increasing importance within Medicaid, it is clear that there is overlap between managed care oversight and program integrity that requires coordination among the staff assigned to these separate functions. Similarly, the growing volume of Medicaid services provided through managed

care increases the need for Medicaid program integrity staff to be able to examine services and providers across delivery systems to identify potential problems.

At the federal level, CPI and CMCS staff worked together on the development of the new rule to ensure that program integrity requirements for managed care were appropriate. At the time of our interviews, most states had not yet developed new contract provisions in response to the new rule but several interviewees indicated that they would be interested in bringing program integrity and managed care oversight staff together to respond to new program integrity requirements. Some parts of the rule will also require greater integration between managed care and FFS staff. For example, the CMS final rule and the 21st Century Cures Act (P.L. 114-255) establish a new requirement for states to screen and enroll all new managed care providers (that is, those who are not already enrolled) in their FFS program (CMS 2016).[7]

States identified the need for greater collaboration among the state program integrity unit and managed care program unit, MFCU, and MCOs. Program integrity experts reported that the most common sources of fraud, waste, and abuse were the same in managed care and FFS: providers found to have engaged in suspect practices in one MCO were likely also doing so in other MCOs, other states, and in other federal programs such as Medicare. However, MFCUs and state program integrity staff interviewed noted that managed care plans typically refer fewer cases of potential fraud than the FFS program. Therefore, efforts to promote information sharing about fraud, waste, and abuse cases, suspect providers, or emerging fraudulent schemes could help prevent additional improper payments, reduce duplication of efforts, and support the development of stronger investigative cases when complex fraudulent activities occur.

Some states have attempted to increase coordination by implementing regular meetings across program integrity, managed care, and MFCU staff and, less frequently, by co-locating program integrity and managed care program management staff. Some states cited challenges in improving collaboration, including state administrative capacity limitations and MCO hesitation to share information with other plans due to proprietary concerns. As noted before, there are multiple offices at the federal level working with states on these issues (e.g., CPI organizes the state Fraud and Abuse Technical Advisory Group for state program integrity staff and CMCS runs the state Managed Care Technical Advisory Group for managed care staff) and these siloed approaches may also hamper efforts to improve collaboration at all levels.

Differences between the approaches taken by MCOs and states to ensure program integrity create challenges for oversight agencies. State Medicaid agencies and managed care plans both use similar claims-editing processes to screen for potentially improper claims and conduct retrospective reviews to examine claims for patterns of fraud, which can be investigated and recovered as appropriate. However, MCOs generally have greater flexibility than states to implement provider oversight and utilization management tools to reduce the risk of fraud, waste, and abuse by providers with unusual service delivery patterns. This flexibility helps MCOs maintain access and compliance with network adequacy rules while potential program integrity issues are investigated and resolved.

The differences between the approaches available to states and MCOs create two challenges for oversight agencies. First, recoveries are a significant focus of program integrity activities: by law, state and federal overpayments must be identified and returned to the government, and, for managed care, factored into the rate-setting process. While MCOs report on overpayment recoveries made during the year, typical reporting requirements do not capture the dollars saved through activities focused on avoiding overpayment, potentially undervaluing successful program integrity efforts conducted by MCOs in

comparison to traditional pay-and-chase efforts performed under FFS.

Second, while MCOs are concerned primarily with the integrity of their own providers, state and federal officials are concerned with providers that participate in any Medicaid MCO or FFS program. Without clear guidance regarding required referrals to state investigators, MCOs may terminate providers without notifying the state about suspected fraud, waste, or abuse. Moreover, when MCOs do notify the state, they may not need to provide a reason, given that "without cause" termination clauses are typically included in provider contracts. State personnel, particularly staff of MFCUs, expressed concern that limiting the cases sent for investigation affects their ability to exclude fraudulent providers from the system, thereby posing a risk to Medicaid beneficiaries enrolled in other MCOs or receiving services through FFS.

Data quality is important for program integrity but continues to be a concern. State and federal entities reported continuing challenges to obtaining accurate, complete, and timely encounter data from MCOs. Such data are needed for predictive modeling, data analytic strategies, and investigation of potential fraud, waste, and abuse across MCOs and between managed care and FFS. Most states have processes for verifying the accuracy of encounter data submitted by MCOs, such as system edits and staff reviews. Most states also contract with an external quality review organization (EQRO) or other vendor to validate additional data. The new rule requires all states to have mechanisms to review encounter data and to develop quality assurance protocols to ensure that encounter data are complete and accurate. States are now also required to conduct an external audit of encounter data at least every three years.

Knowledgeable staff from some states noted that guidance on technical matters like data quality benchmarks and encounter data validation protocols could help them develop their capacity to oversee MCO compliance with stricter encounter data submission requirements. These benchmarks and protocols could be obtained from other states or from other programs, such as Medicare. Personnel from other states requested that CMS provide states with specific examples of enforceable contract language (e.g., liquidated damages if encounter data are not received).

States use different incentives to encourage MCOs to rigorously pursue program integrity, but there is no clear information favoring one approach over others. As noted earlier, MCOs are at risk for any losses if the costs associated with covering Medicaid enrollees exceed the capitation payments received from the state, including any costs resulting from fraud, waste, or abuse. Thus, in addition to their contractual responsibilities to prevent improper payments, MCOs have a financial incentive to monitor for fraudulent provider activity. However, there are financial and non-financial costs associated with program integrity activities. Financial costs include staffing expenses for claims examiners and case investigators as well as other supports, such as staff training, sophisticated fraud detection software, and third-party liability matching services. Non-financial costs include provider frustration with delayed payments and the challenge of maintaining adequate provider networks while proactively addressing provider fraud by suspending or removing providers as appropriate. States want to ensure that MCOs make sufficient investments in program integrity and do not waste taxpayer money. MCOs must also manage program integrity expenses within the overall administrative allocation they are expected to maintain under Medicaid MLR rules.

Procedures for accounting for program integrity expenses and recoveries in the rate-setting process vary from state to state. States may make different assumptions about the underlying level of improper payments in the base data and corresponding adjustments to the baseline. Some states require MCOs to return any overpayments recovered through MCO audits and investigations to the state and others allow MCOs to keep recovered overpayments but require that they

report the amounts to the state periodically. These approaches reflect state preferences regarding MCO contracting and risk sharing and affect subsequent rate setting. However, it is not clear whether certain rate-setting approaches are more effective than others in providing incentives for MCOs to invest in program integrity and to pursue recoveries when improper payments are discovered.

It is still too early to gauge the full impact of the Medicaid managed care final rule. The 2016 rule incorporates many provisions that directly and indirectly support program integrity, but because few provisions have gone into effect at this time, it is difficult to know what the ultimate impact of the rule will be. As well, the current administration is contemplating changes that will likely delay implementation of the final rule, and it is not known to what extent these changes and the possible delay will directly or indirectly affect program integrity provisions. Some states are already in compliance with some requirements, and those we spoke with are preparing to respond to remaining provisions. Most of those we interviewed agreed that the new rule will likely strengthen program integrity, but also will require staff and information technology resources to implement (e.g., provider screening capabilities). We anticipate that the added requirements will present challenges given administrative capacity constraints in many states and the diffusion of operational responsibilities among different agencies and departments. Knowledgeable state and MCO staff said they would like implementation support, additional guidance, and greater clarity around federal policy in the following areas:

- **Encounter data:** Accurate, complete, and timely encounter data from MCOs are needed to allow all partners in program integrity identify fraud, waste, and abuse. Additional guidance, tools, and best practice guidelines that states can use (e.g., specific and enforceable MCO contract language) that result in the MCO submitting complete, accurate, and timely data would help states improve encounter data collection.
- **Cross-agency collaboration:** State, federal, and MCO officials face challenges in coordinating their managed care program integrity activities, but they agree that collaboration is important. Additional guidance from CMS on ways in which collaboration has worked across MFCUs, state and federal entities, and MCOs could prove valuable.
- **Oversight tools:** Because states have different levels of experience with managed care and take different approaches toward managed care program integrity, many would like more and better opportunities to learn from each other and to share documents, information, and tools, including but not limited to specific MCO contract language, MCO reporting layouts, and encounter data validation methods. Many states agree that the Medicaid Integrity Institute, which is operated in coordination with the U.S. Department of Justice, is an effective mechanism for training state Medicaid staff and that it also facilitates the sharing of best practices and ideas across states.
- **Payment and recoveries:** Federal rules on how states pay MCOs on a capitated basis can create conflicting financial incentives for MCOs when deciding how to invest in program integrity. States also seek best practices on how other states have handled recoveries. States cited a need for additional guidance from CMS in the areas of implementation and enforcement of MCO contracts to best align payments with program integrity incentives.

Issues for the Future

Looking ahead, the Commission's review suggests that the discussion of program integrity would benefit from additional research into the impact of specific provisions of the new federal managed

care rule. Issues of interest include how states validate their encounter data for future rate setting; best practices across states that provide incentives for MCOs to make investments in prepayment auditing as well as postpayment reviews; how to improve mechanisms for sharing provider screening data among states and programs; and how to measure the effectiveness and impact of program-related activities and best practices.

The adoption of value-based purchasing models in states, particularly the use of accountable care organizations (ACOs), may affect how states and MCOs approach program integrity. ACOs rely in part on the reporting of quality measures to improve outcomes that have the potential to save costs. However, it is unclear how provider-led organizations such as ACOs would approach program integrity in cases of potential fraud. In addition, many states are turning to MCOs to coordinate the delivery of long-term services and supports (LTSS), an area that has been identified by the OIG as being vulnerable to fraud and abuse in FFS (OIG 2017). It will be important to determine whether current rules, as implemented by managed LTSS plans, can effectively protect enrollees and state Medicaid programs against fraud and abuse or if additional standards are needed.

Only after the final rule is fully implemented and enforced will we know what works best for all players in managed care program integrity. States, MCOs, and federal entities that oversee program integrity will play key roles in demonstrating how effectively the provisions of the rule may be applied. The new administration will determine how (or whether) to implement and enforce the various provisions of the final rule and we look forward to additional guidance being issued on provisions scheduled to take effect in 2017 and 2018. MACPAC is prepared to assess the specific requirements as they are carried out.

Endnotes

[1] CHIP-funded expansions of Medicaid are subject to the same administrative requirements as Medicaid, including program integrity requirements. Many states operate CHIP programs as stand-alone programs, but in practice use the same staff and systems that support Medicaid such that the two programs are administratively integrated (e.g., they process claims on the same system, use the same providers, and have the same program integrity processes). Some states operate CHIP as a fully separate program that is typically smaller in size and subject to different federal administrative requirements. For these reasons, the administrative capacity issues unique to separate CHIP programs are generally excluded from this chapter.

[2] Total Medicaid benefit spending across all states and territories in 2015 was $526.1 billion. Spending on all forms of managed care in 2015, including comprehensive managed care and premium assistance, was $230.2 billion (MACPAC 2016a).

[3] The rule was finalized in May 2016 and constituted the first update of the federal regulations on Medicaid managed care since the initial rulemaking in 2002 (CMS 2016).

[4] This requirement applies no later than the rating period for MCO contracts starting on or after July 1, 2019. Fraud reduction activities are also included in the numerator if they are included in the numerator of the MLR calculation for the commercial market, as defined in 42 CFR Part 158. As of May 2017, CMS has not changed its definition of fraud reduction activities in the numerator of the MLR calculation for the commercial market.

[5] For a detailed description, see MACPAC's June 2013 report to Congress (MACPAC 2013).

[6] MFCUs, for which the OIG has oversight responsibility, investigate and prosecute Medicaid provider fraud as well as patient abuse and neglect in health care facilities and board and care facilities in 49 states and the District of Columbia (only North Dakota does not have an MFCU).

[7] Databases specified in the final rule include the Social Security Administration's Death Master File, the National Plan and Provider Enumeration System (NPPES), the List of Excluded Individuals/Entities (LEIE), the System for

Award Management (SAM), and any other databases the state or the Secretary of the U.S. Department of Health and Human Services may prescribe. There is some overlap between the screening and credentialing processes. The screening process involves verifying a provider's licensure for enrollment in the Medicaid program, while credentialing involves the state or the MCO verifying a provider's education, training, liability record, and practice history prior to execution of a network agreement (CMS 2016).

References

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2017. *Payment error rate measurement manual*. Baltimore, MD: CMS. https://www.cms.gov/Research-Statistics-Data-and-Systems/Monitoring-Programs/Medicaid-and-CHIP-Compliance/PERM/Downloads/FY2016PERMManual2017.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2016. Medicaid and Children's Health Insurance Program (CHIP) Programs: Medicaid managed care, CHIP delivered in managed care, Medicaid and CHIP comprehensive quality strategies, and revisions related to third party liability. Final rule. *Federal Register* 81, no. 88 (May 6): 27497–27901, https://www.federalregister.gov/documents/2016/05/06/2016-09581/medicaid-and-childrens-health-insurance-program-chip-programs-medicaid-managed-care-chip-delivered.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2015. *Annual report to Congress on the Medicaid Integrity Program for fiscal years 2013 and 2014*. Baltimore, MD: CMS. https://www.cms.gov/About-CMS/Components/CPI/Downloads/2016-07-15-FY-2013-2014-MandM-PI-RTC-FINAL.PDF.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016a. Exhibit 17: Total Medicaid Benefit Spending by State and Category, FY 2015 (millions). In *MACStats: Medicaid and CHIP data book*. December 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/EXHIBIT-17.-Total-Medicaid-Benefit-Spending-by-State-and-Category-FY-2015-millions.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2016b. Exhibit 28: Percentage of Medicaid Enrollees in Managed Care by State, July 1, 2014. In *MACStats: Medicaid and CHIP data book*. December 2016. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/11/EXHIBIT-28.-Percentage-of-Medicaid-Enrollees-in-Managed-Care-by-State-July-1-2014.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2013. Chapter 5: Update on program integrity in Medicaid. In *Report to the Congress on Medicaid and CHIP*. June 2013. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Update_on_Program_Integrity_in_Medicaid.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2012. Chapter 4: Program integrity in Medicaid. In *Report to the Congress on Medicaid and CHIP*. March 2012. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2015/01/Program_Integrity_in_Medicaid.pdf.

U.S. Department of Health and Human Services Inspector General (OIG). 2017. *OIG Work Plan: fiscal year 2017*. Washington, DC: OIG. https://oig.hhs.gov/reports-and-publications/archives/workplan/2017/HHS%20OIG%20Work%20Plan%202017.pdf.

U.S. Government Accountability Office (GAO). 2017. *CMS should build on current oversight efforts by further enhancing collaboration with states*. Washington, DC: GAO. https://www.gao.gov/products/GAO-17-277.

APPENDIX 3A: Summary of Medicaid Managed Care Program Integrity Regulatory Requirements

TABLE 3A-1. Regulatory Requirements for Oversight and Integrity of Medicaid Managed Care Programs

Section of CFR, Title 42	Requirement
State managed care program integrity requirements	
438.66(a)–(c)	Have a monitoring system for all managed care programs that addresses all aspects of the program
438.602(a)	Monitor managed care plan compliance with program integrity provisions
438.602(b)	Screen and enroll managed care plan network providers
438.602(c), (d)	Review ownership, control, and exclusion status for managed care plans and subcontractors
438.602(e)	Conduct an independent audit of the encounter and financial data submitted by managed care plans
438.602(f)	Receive and investigate information from whistleblowers about the integrity of managed care plans, subcontractors, and network providers
438.602(g); 438.604	Collect data and publish information from managed care plans on the state's managed care website, including managed care contracts, compliance with access and availability of services requirements, results of audits of encounter and financial data submissions
438.608(d)	Contractually specify overpayment recovery procedures, including retention policies, reporting procedures, and procedures for repayment to the state
State general managed care requirements and statutory definitions	
438.66(e)	Implement an annual managed care program report
438.68	Develop and enforce network adequacy standards
438.104	Monitor managed care organization marketing activities
438.332	Require and monitor accreditation status of managed care plans
438.334	Establish a Medicaid managed care quality rating system
438.340	Establish quality measures and performance outcomes in the state quality strategy, review and evaluate the effectiveness of the state quality strategy
438.364	Develop an annual external quality review technical report
438.2	Definitions: "rating period," "overpayment," "network provider," among others
438.3(c), (e)	Describes the services for inclusion in rate development
438.4	Actuarial soundness definitions and requirements
438.5	Establish rate development standards

TABLE 3A-1. (continued)

Section of CFR, Title 42	Requirement
438.6	Special contract provisions related to payment
438.7	Rate certification submission
438.8; 438.74	Medical loss ratio (MLR) and state oversight of MLR requirements
438.60	Prohibition of additional payments for services covered under managed care contracts
Managed care organization (MCO) program integrity requirements	
438.3(m)	Submit audited financial reports specific to the Medicaid contract
438.242; 438.604(a)(1)	Maintain a health information system; submit encounter data
438.604(a)(2)	Submit data for capitation rate development and certification
438.8(k); 438.604(a)(3)	Submit data used to calculate and monitor compliance with the MLR
438.604(a)(4)	Submit data to determine compliance with solvency requirements
438.207(a), (b); 438.604(a)(5)	Submit documentation demonstrating compliance with the availability, accessibility, and timeliness of services and network adequacy
438.604(a)(6); 438.608(c)	Submit information on ownership, control, and disclosure of any prohibited affiliation of managed care plans and subcontractors
438.604(a)(7); 438.608(d)	Submit annual report of overpayment recoveries
438.608(a)(1)	Maintain written program integrity policies and procedures; designate a compliance officer; establish a regulatory compliance committee; provide employee training and education; establish disciplinary guidelines; and designate staff to audit and respond to compliance issues
438.608(a)(2)	Promptly report overpayments, specifying overpayments due to potential fraud
438.608(a)(3)	Promptly notify the state about changes in an enrollee's circumstances that may affect an enrollee's eligibility
438.608(a)(4)	Notify the state about a change in a network provider's circumstances that affects the provider's eligibility to participate in the program
438.608(a)(5)	Establish a method to verify that services represented as delivered by network providers were received by enrollees
438.608(a)(6)	Provide written policies to all employees, contractors, and agents that provide detailed information about the false claims act
438.608(a)(7)	Promptly refer any potential fraud, waste, or abuse identified to the state Medicaid program integrity unit or to the state Medicaid Fraud Control Unit
438.608(a)(8)	Suspend payments to a network provider when the state determines a credible allegation of fraud

Notes: CFR is *Code of Federal Regulations*. All citations are included in Title 42 of the CFR.

Source: MACPAC, 2017, analysis of 42 CFR.

Appendix

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

Medicaid and CHIP Payment and Access Commission

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

(b) DUTIES.—

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

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

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

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

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

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

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

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

(ii) payment methodologies; and

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(6) AGENDA AND ADDITIONAL REVIEWS.—

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

(B) REVIEW AND REPORTS REGARDING MEDICAID DSH.—

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

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

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

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

(III) Data identifying hospitals with high levels of uncompensated care that also provide access to essential community services for low-income, uninsured, and vulnerable populations, such as graduate medical education, and the continuum of primary through quarternary care, including the provision of trauma care and public health services.

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

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

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

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

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

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

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

(11) CONSULTATION AND COORDINATION WITH MEDPAC.—

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

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

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

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

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

(c) MEMBERSHIP.—

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

(2) QUALIFICATIONS.—

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

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

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

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

(3) TERMS.—

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

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

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

(5) CHAIRMAN; VICE CHAIRMAN.—The Comptroller General of the United States shall designate a member of MACPAC, at the time of appointment of the member as Chairman and a member as Vice Chairman for that term of appointment, except that in the case of vacancy of the Chairmanship or Vice Chairmanship, the Comptroller General of the United States may designate another member for the remainder of that member's term.

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

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

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

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

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

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

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

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

(e) POWERS.—

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

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

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

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

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

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

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

(f) FUNDING.—

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

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

(3) FUNDING FOR FISCAL YEAR 2010.—

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

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

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

Biographies of Commissioners

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

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

Brian Burwell is vice president, community living systems at Truven Health Analytics in Cambridge, Massachusetts. Mr. Burwell conducts research and provides consulting services, policy analysis, technical assistance in financing and delivery of long-term services and supports, and data analysis related to integrated care models for dually eligible beneficiaries and managed long-term services and supports. He has been with Truven Health Analytics and its predecessor companies for 30 years. Mr. Burwell received his bachelor of arts degree from Dartmouth College.

Martha Carter, DHSc, MBA, APRN, CNM, is CEO of FamilyCare Health Centers in Scott Depot, West Virginia, where she provides the organization with leadership and strategic vision, manages its programs and operations, and represents the organization in the community. Previously, she provided clinical care for two decades as a certified nurse-midwife at practices in Kentucky, Ohio, and West Virginia. Dr. Carter received her doctor of health sciences degree from A.T. Still University in Mesa, Arizona, and her master of business administration from West Virginia University in Morgantown, West Virginia.

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

Gustavo Cruz, DMD, MPH, is an oral health policy consultant and senior advisor to Health Equity Initiative, a professional membership organization in New York City that brings together community leaders and professionals in diverse fields to promote innovations in health equity. He also serves as resident advisor to the dental public health residency at Lutheran Medical Center and as adjunct associate professor in the Department of

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

Kisha Davis, MD, MPH, is a family physician at the Casey Health Institute in Gaithersburg, Maryland, and is also program manager at the Center for Applied Research in Philadelphia, Pennsylvania, where she supports projects for family physicians focused on payment reform and practice transformation to promote health system change. Previously, Dr. Davis was medical director and director of community health at the Casey Health Institute and was also a family physician at a federally qualified health center in Maryland. As a White House fellow at the U.S. Department of Agriculture, she established relationships among leaders of federally qualified health centers and the Women, Infants, and Children nutrition program. Dr. Davis received her degree in medicine from the University of Connecticut and her master of public health from Johns Hopkins University.

Toby Douglas, MPP, MPH, is senior vice president for Medicaid solutions at Centene Corporation. Before joining Centene, he was an independent consultant and senior advisor for Sellers Dorsey, assisting organizations involved with Medicaid, health insurance exchanges, and Medicare. Previously, Mr. Douglas was a long-standing state Medicaid official, serving for 10 years as an executive in California Medicaid. He served as director of the California Department of Health Care Services and was director of California Medicaid for six years, during which time he also served as a board member of the National Association of Medicaid Directors and as a State Children's Health Insurance Program (CHIP) director. Earlier in his career, Mr. Douglas worked for the San Mateo County Health Department in California, as a research associate at the Urban Institute, as a consultant on pharmacy utilization with Kaiser Permanente Consulting, and as a VISTA volunteer. He received his master of public policy and master of public health from the University of California, Berkeley.

Leanna George is the parent of a teenager with a disability who is covered under Medicaid and a child covered under CHIP. A resident of Benson, North Carolina, Ms. George serves on the Johnston County Consumer and Family Advisory Committee, which advises the Board of the County Mental Health Center. She also serves on the Alliance Innovations Stakeholders Group, which advises a Medicaid managed care organization and the state of North Carolina about services and coverage for developmentally disabled enrollees, and on the Client Rights Committee of the Autism Society of North Carolina, a Medicaid provider agency.

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

director of managed care programs for Tennessee's Medicaid program. Mr. Gordon received his bachelor of science degree from Middle Tennessee State University.

Christopher Gorton, MD, MHSA, is the president of public plans at Tufts Health Plan, a non-profit health plan in Massachusetts, Rhode Island, and New Hampshire. Previously, Dr. Gorton was CEO of a regional health plan that was acquired by the Inova Health System of Falls Church, Virginia. Other positions include vice president for medical management and worldwide health care strategy for Hewlett Packard Enterprise Services and president and chief medical officer for APS Healthcare, a behavioral health plan and care management organization based in Silver Spring, Maryland. After beginning his career as a practicing pediatrician in federally qualified health centers in Pennsylvania and Missouri, Dr. Gorton served as chief medical officer in the Pennsylvania Department of Public Welfare. Dr. Gorton received his degree in medicine from Columbia University's College of Physicians and Surgeons and his master of health systems administration from the College of Saint Francis in Joliet, Illinois.

Stacey Lampkin, FSA, MAAA, MPA, is an actuary and principal with Mercer Government Human Services Consulting where she leads actuarial work for several state Medicaid programs. She previously served as 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 also served as a member of the Federal Health Committee of the American Academy of Actuaries (AAA), as vice chairperson of AAA's Uninsured Work Group, and as a member of the Society of Actuaries project oversight group for research on evaluating medical management interventions. Ms. Lampkin is a fellow in the Society of Actuaries and a member of the AAA. She received her master of public administration from Florida State University.

Charles Milligan, JD, MPH, is CEO of UnitedHealthcare Community Plan of New Mexico, a Medicaid managed care organization with enrolled members in all Medicaid eligibility categories (including dually eligible beneficiaries and adults in Medicaid expansion programs) that provides somatic, behavioral, and managed long-term services and supports. Mr. Milligan is a former state Medicaid and CHIP director in New Mexico and Maryland. He also served as executive director of the Hilltop Institute, a health services research center at the University of Maryland at Baltimore County, and as vice president at The Lewin Group. Mr. Milligan directed the 2005–2006 Commission on Medicaid and conducted Medicaid-related research projects in numerous states. He received his master of public health from the University of California, Berkeley, and his law degree from Harvard Law School.

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

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

Dr. Scanlon received his doctorate in economics from the University of Wisconsin, Madison.

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

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

Biographies of Staff

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Kirstin Blom, MIPA, is a principal analyst. Before joining MACPAC, Ms. Blom was an analyst in health care financing at the Congressional Research Service (CRS). 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 was also 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.

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