MACPAC

Advising Congress on
Medicaid and CHIP Policy

April 26, 2022

The Honorable Ron Wyden
Chairman
Committee on Finance
U.S. Senate
219 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Mike Crapo
Ranking Member
Committee on Finance
U.S. Senate
219 Dirksen Senate Office Building
Washington, DC 20510

The Honorable Frank Pallone Jr.
Chairman
Committee on Energy and Commerce
U.S. House of Representatives
2125 Rayburn House Office Building
Washington, DC 20515

The Honorable Cathy McMorris Rodgers
Ranking Member
Committee on Energy and Commerce
U.S. House of Representatives
2322 Rayburn House Office Building
Washington, DC 20515

The Honorable Xavier Becerra
Secretary
U.S. Department of Health and Human Services
200 Independence Avenue SW
Washington, DC 20201

Re: Secretary's Reports to Congress: (1) Managed Care and the Institutions for Mental Diseases Exclusion; and (2) Prescription Drug Monitoring Program Best Practices

The Medicaid and CHIP Payment and Access Commission (MACPAC) is pleased to comment on two recent reports from the U.S. Department of Health and Human Services (HHS): (1) *Study and Report Related to Medicaid Managed Care Regulation,* which addresses managed care coverage for beneficiaries in institutions for mental diseases (IMDs); and (2) *State Challenges and Best Practices Implementing PDMP Requirements Under Section 5042 of the SUPPORT Act.* MACPAC is required by statute to review HHS reports to Congress and provide written comments to the Secretary and appropriate committees of Congress.

Medicaid and CHIP Payment
and Access Commission

1800 M Street NW
Suite 650 South
Washington, DC 20036

www.macpac.gov
202-350-2000
202-273-2452

Study and Report Related to Medicaid Managed Care Regulation

The 21st Century Cures Act (P.L. 114-255) directed the Secretary, acting through the Centers for Medicare & Medicaid Services (CMS), to study Medicaid coverage for beneficiaries age 21–64 in IMDs who are enrolled in a managed care organization or prepaid inpatient health plan. The law required CMS to report on:

- the extent to which states and territories are providing capitated payments to plans for beneficiaries who are in IMDs as an in-lieu-of service (ILOS);[1]
- the number of Medicaid beneficiaries who receive services in IMDs under managed care;
- the range and average number of months, and the length of stay during such months, that beneficiaries are in IMDs;
- how plans determine when to pay for services in IMDs in lieu of other benefits; and
- the extent to which payment for services for beneficiaries in IMDs has affected capitation payments to plans.

Background

Since its inception in 1965, Medicaid has largely prohibited payments for services provided to beneficiaries in IMDs. Generally referred to as the IMD exclusion, this restriction is one of the few instances in the Medicaid program in which federal financial participation (FFP) is not available for medically necessary and otherwise covered services based on the setting in which they are provided.[2] Federal law broadly defines an IMD as a "hospital, nursing facility, or other institution of more than 16 beds that is primarily engaged in providing diagnosis, treatment, or care of persons with mental diseases, including medical attention, nursing care, and related services" (§ 1905(i) of the Social Security Act).

Despite the IMD exclusion, there are multiple ways that states can cover services for beneficiaries in IMDs, including through managed care arrangements. In the 2016 managed care rule, CMS clarified that states can use FFP to make capitation payments to risk-based managed care plans on behalf of non-elderly adults in IMDs in lieu of covered Medicaid services if certain conditions are met (42 CFR § 438.6(e)).[3] Specifically, FFP is available if a beneficiary's length of stay in an IMD does not exceed 15 days in a given calendar month. Services for beneficiaries in IMDs must also meet requirements that apply to ILOS generally, including that such services are medically appropriate and cost-effective alternatives to similar covered services and are selected voluntarily by the beneficiary.

Report summary

The report describes findings from a targeted environmental scan and interviews with subject matter experts in 2018–2019. CMS also surveyed 45 states, the District of Columbia (DC), and territories with risk-based Medicaid managed care arrangements in 2019. This section highlights key findings from the report.

Capitation payments for beneficiaries in IMDs. In 2018, 32 of the 37 states that cover inpatient psychiatric or substance use disorder (SUD) treatment in managed care reported making capitation payments for beneficiaries receiving treatment in IMDs. Most of these states (27) permit plans to cover IMD stays for psychiatric and SUD treatment, while others allow coverage only for one or the other. Some states do not use the IMD ILOS authority, but cover IMD stays for SUD treatment through Section 1115 demonstrations.[4]

States reported using the IMD ILOS authority primarily to increase access to inpatient behavioral health services, and to recognize that IMDs are a critical part of the continuum of care. For instance, states noted they could divert beneficiaries from costly and less appropriate settings, such as acute care hospitals and emergency departments (EDs). Some states reported paying for IMD services with state or local funds prior to the 2016 final rule and saw the new rule as an opportunity to leverage federal funds. Several states reported using the authority to expand their network of inpatient providers and provide access to IMD services while awaiting approval of a Section 1115 demonstration.

Effect of IMDs on capitation payments. Of the 15 states that provided data, 5 reported that use of the IMD ILOS authority contributed to an increase in capitation rates and 4 reported a decrease. (CMS was not able to determine the effect on capitation payments from the responses provided by the remaining states.)

To avoid making full capitation payments to plans when stays exceed 15 days, states most commonly reported prorating the payments, followed by paying for stays with state general funds, and then recouping the full capitation payment.[5] Some states reported using other strategies, such as suspending a beneficiary's enrollment in managed care or disenrolling them entirely.

Beneficiaries receiving services in IMDs. CMS found that the number of beneficiaries with one or more IMD stay covered under the ILOS authority in the prior 12-month period varied widely across the 22 states reporting, ranging from fewer than 100 to nearly 50,000. The percentage of beneficiaries in managed care programs permitted to use the ILOS authority who had at least one IMD stay in this time period ranged from less than 0.1 percent to 3.8 percent. The report does not explain the reasons for the variation, although CMS notes that coverage of IMDs prior to the 2016 final rule may be associated with higher rates of IMD use.[6]

Number of stays and length of stays in IMDs. CMS found that the average number of IMD stays per Medicaid beneficiary ranged from 1.0 to 2.8 stays across the 20 states reporting. The average lengths of stay ranged from 4.2 to 23.2 days, with an average of fewer than 10 days in roughly 80 percent of the 19

states that provided data. The report does not indicate whether these state variations are due to higher levels of need among beneficiaries in some states, different standards of treatment, or other reasons.

Decisions to pay for services in IMDs. Most states and plans reported that determinations about when to use IMDs are based on the availability of beds in alternative settings at the same level of care. In general, beneficiaries are placed in IMDs when beds in other settings are not available. Plans focus on finding the most clinically appropriate setting for the level of care required, and they consider IMD beds to be clinically equivalent to other inpatient settings. Managed care plans use a variety of criteria (e.g., clinical guidelines from the American Society of Addiction Medicine) to guide their medical necessity and utilization review processes; guidelines apply to a number of inpatient settings and are not specific to IMDs.

State contracts with managed care plans include provisions governing the use of the IMD ILOS authority, including general ILOS requirements that services are medically appropriate, cost-effective, and voluntarily chosen by the beneficiary. One state reported requiring plans to consult with the beneficiary to assess whether IMD services would likely improve the beneficiary's health status and quality of life compared to anticipated effects of the customary covered service.

MACPAC comments

Below we comment on CMS findings that are consistent with observations from MACPAC's prior work, as well as areas where the report raises additional questions.

Given the widespread use of managed care in Medicaid and previously documented gaps in the behavioral health continuum of care for Medicaid beneficiaries in many states, it is not surprising that a majority of states use the IMD ILOS authority to cover these services. The Commission has previously discussed the role of IMDs in supporting access to inpatient and residential treatment, which, depending on an individual's treatment plan, may be the most appropriate setting for care (MACPAC 2017). In prior work, the Commission has also noted that nearly all states are making payments for services in IMDs via various exemptions and authorities, including statutory exemptions for older adults and children, Section 1115 demonstrations, a limited state plan option, and managed care (MACPAC 2019).

This report fills an important gap by documenting the extent to which states are using the IMD ILOS authority and the different ways that states and plans are operationalizing this flexibility. It also suggests areas where additional information could provide a fuller understanding of the findings presented and potential lessons learned for states and managed care plans:

Factors affecting state variation in IMD use. While the report describes how the use of IMDs differs by state, there is limited discussion about the factors contributing to this variation. CMS notes that the concurrent use of Section 1115 demonstrations does not appear to be associated with the percentage of beneficiaries receiving services in an IMD, and suggests that state policies regarding payment for IMDs as an ILOS prior to the 2016 rule may contribute to higher rates of IMD use. However, other factors, such as placement criteria and the availability of community-based treatment options, may also affect the rate at

which beneficiaries receive services in IMDs. Similarly, it is unclear why some states reported a higher average number of IMD stays and substantially longer average lengths of stays than others. These differences could reflect poor discharge planning or difficulty arranging services and social supports for beneficiaries in the community. Understanding these circumstances, particularly in states with the highest rates of IMD use, may inform efforts to ensure that beneficiaries with behavioral health conditions have access to appropriate services in community-based and other non-IMD settings.

Beneficiary choice. The report raises important questions about how managed care plans are engaging beneficiaries prior to placement in an IMD when using the ILOS authority and whether beneficiaries have the information needed to make informed choices. While state contracts with managed care plans typically specify the voluntary nature of IMD placement in lieu of other covered services, CMS found little in the way of detailed requirements or guidance to ensure that beneficiaries have a meaningful choice between IMD and non-IMD settings. Only one state instructs managed care plans to consult with beneficiaries to consider how their health and quality of life may be affected by being placed in an IMD versus the use of an alternative covered service or setting.

Managed care disenrollment. The report also raises questions about why states disenroll certain beneficiaries receiving treatment in IMDs from managed care and the effect of that practice on continued access to services. The report notes that a few states suspend or terminate a beneficiary's enrollment in managed care to avoid making a full capitation payment when IMD stays exceed 15 days. CMS explains that these practices may be underrepresented in the survey data collected for this study, as other data sources suggest that disenrollment is more common. CMS provides a few examples of states in which beneficiaries with long stays are moved from managed care to fee for service (FFS) if they are in a public IMD or awaiting placement in a state hospital. While all such strategies are described as ways to avoid making full capitation payments when IMD stays exceed 15 days, it is unclear why states appear to take different approaches based on the type of IMD. Moreover, while one state reported requiring plans to facilitate the transition to FFS and ensure there is not a break in coverage, it is unclear to what extent disenrollment from managed care may affect care continuity.

While the focus of this report is on the IMD ILOS authority in managed care, mandatory monitoring and evaluation requirements for Section 1115 demonstrations may help fill gaps in our understanding of how payment for IMDs affects utilization and outcomes for beneficiaries with behavioral health conditions. States receiving FFP for IMD stays under Section 1115 authority must conduct an independent evaluation to assess whether their demonstrations meet certain goals, such as reduced use of EDs and acute care hospitals. States are also required to report regularly on certain monitoring metrics, including those related to improving transitions between levels of care and increasing access to a continuum of behavioral health services (CMS 2022).

State Challenges and Best Practices Implementing PDMP Requirements Under Section 5042 of the SUPPORT Act

Section 5042(b) of the Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment (SUPPORT) for Patients and Communities Act (SUPPORT Act, P.L. 115-271) directed the Secretary, in collaboration with the Centers for Disease Control and Prevention (CDC), to report on best practices for the use of prescription drug monitoring programs (PDMPs) and for protecting the privacy of Medicaid beneficiary information in PDMPs. Section 5042(c) directed the Secretary to develop and publish model practices regarding data sharing agreements between state Medicaid programs and PDMPs to monitor and prevent fraud, waste, and abuse, and to improve health care for individuals transitioning in and out of Medicaid coverage, as well as those who pay for prescription drugs with cash.

Background

PDMPs are electronic databases that track prescriptions of controlled substances in order to reduce prescription drug abuse and misuse and prevent adverse medication interactions. As of fiscal year (FY) 2018, all but one state had a PDMP.[7] These are typically operated by state boards of pharmacy or departments of health.[8]

State policies governing the operation of and access to PDMPs vary. For example, each state specifies which providers are required to check the PDMP and how often, as well as the frequency with which prescription information is reported. States also differ on the types of controlled substances tracked, as well as the extent to which PDMP data can be integrated into electronic health records (EHRs) or health information exchanges (HIEs), or shared across state agencies and with other states (CMS 2021).[9] As of FY 2018, 32 states allowed state Medicaid agencies to query the PDMP (MACPAC 2020).[10] The SUPPORT Act established standards for qualified PDMPs, including prescription information for the most recent 12-month period and the name, location, and contact information of each prescriber. All states were required to comply with these new requirements by October 2021.[11]

Report summary

To complete this report, HHS reviewed state advanced planning documents (APDs) from the 14 states and 1 territory that received the 100 percent enhanced federal Medicaid match for PDMP enhancements available in FYs 2019 and 2020 under the SUPPORT Act.[12] HHS also conducted a literature review and interviews with a range of stakeholders. This section highlights key findings from the report.

State use of the 100 percent enhanced federal match. States indicated that they planned to use the enhanced federal match to bring their PDMPs into compliance with federal requirements for qualified PDMPs, as well as other operational improvements. These included activities related to planning and development (e.g., creating a patient-matching algorithm), system integration (e.g., integrating with EHRs and HIEs), infrastructure development (e.g., upgrading technology and licenses), and enhancements in data and analytics (e.g., improving data reporting infrastructure). Six states planned to use the enhanced federal match to expand access to the PDMP for non-clinician entities, including Medicaid agencies.[13]

Challenges implementing qualified PDMP requirements under the SUPPORT Act. Challenges in complying with the new PDMP requirements included a lack of coordination between state Medicaid agencies and the PDMP, and constraints imposed by state and federal privacy laws. Coordination between the state Medicaid agency and the state entity operating the PDMP can be especially difficult when they are not located within the same state agency. In addition, few states have successfully integrated PDMP and Medicaid data, although the report notes that many states are working to do so. Integration of these data sources is often impeded by state privacy laws, which limit the ability of Medicaid staff to access data fields in the PDMP. Additionally, states must comply with both federal and state requirements on data privacy and security protections.

Promising practices. While the Secretary was charged with reporting on PDMP best practices (including those for protecting Medicaid beneficiary information and establishing data-sharing agreements between Medicaid and the PDMP), the report notes that there was not enough information or time to discern best practices generally or specific to Medicaid. Collaborative efforts between state Medicaid agencies and PDMPs are still in their early stages. Moreover, states had only two years to apply for and use the enhanced federal match for PDMP improvements, and CMS was required to complete this report shortly after.

That being said, the report notes some promising practices. These include:

- establishing formal lines of communication between state agencies requiring access to the PDMP to help overcome data silos and administrative barriers;
- forming multistate partnerships to facilitate information exchange and joint applications for federal funding;
- using other funding sources (e.g., CDC cooperative agreements) to augment state funding for PDMP improvements; and
- granting PDMP access for emergency medical services personnel so that prescription data from PDMPs can be used in overdose fatality reviews.[14]

The report also provides three state case studies to highlight other noteworthy practices. For example, Colorado maintains a formal work group between the two HIEs in the state, the PDMP, and various state agencies, including Medicaid, to promote cross-agency collaboration and access to PDMP data. Nebraska's PDMP captures all prescription medications dispensed, not just controlled substances. Rhode Island requires all pharmacists to enroll in the PDMP to track dispensing patterns.

The report also describes PDMP best practices identified by stakeholders. These include integrating PDMP data into EHRs, state HIEs, and vaccine and cancer registries; allowing prescribers to delegate access to individuals without prescribing authority to reduce the burden on clinical providers; establishing state mandates to increase the frequency with which the PDMP is queried; and mandating that the PDMP is housed in the department of health.

Lessons learned. The report notes that the timeframe for implementing the PDMP changes in the SUPPORT Act was insufficient. Many states were unable to develop the APD, apply for the enhanced federal match, and implement the PDMP changes by the end of FY 2020 when the enhanced match expired. Some states also commented that federal guidance was needed to facilitate cross-state data sharing and clarify the requirements for qualified PDMPs. States also voiced frustration that the multiple federal funding streams for PDMPs had different requirements for coordination and reporting.

The report also identifies several lessons learned regarding opportunities to increase provider use of PDMPs. These include ensuring PDMPs include data in as close to real-time as possible, integrating PDMP data with EHRs to provide seamless access at the time of patient encounters or when prescribing a controlled substance, and facilitating provider registration to the PDMP at the time of licensure or renewal.

MACPAC comments

The report provides valuable information about challenges and opportunities related to the use of PDMPs. However, due to limitations of available information and the short reporting timeframe, it includes limited information on using PDMPs in Medicaid. More research and information-sharing on PDMP best practices generally (e.g., integrating PDMP data into EHRs) are needed. This includes how best to protect Medicaid beneficiary information and establish data-sharing agreements between state Medicaid agencies and PDMPs. Areas of interest include how such agreements can be used to track prescriptions paid for with cash and how to segment PDMP data when beneficiaries opt out of having their records shared with an HIE.

As states implement PDMPs and gain more experience using them in Medicaid, promising state approaches may emerge. In addition, the Commission notes that states not included in this study—those that did not receive the enhanced federal match rate—may be able to offer insights on best practices that are not captured in this report. Future state reporting and another CMS report on PDMP best practices, both required by the SUPPORT Act, will be important opportunities to learn more about state approaches.[15]

Sincerely,

Melanie Bella, MBA
Chair

Cc: Chiquita Brooks-LaSure, Administrator, Centers for Medicare & Medicaid Services
Daniel Tsai, Deputy Administrator and Director, Center for Medicaid & CHIP Services

Endnotes

[1] An in-lieu-of service is a service or setting that is not included under the state plan, but is a clinically appropriate, cost-effective substitution for a covered service or setting (42 CFR 438.3(e)(2)).

[2] There are two main statutory exemptions to this policy: (1) an exemption for adults over the age of 65 has been in place since the program's inception in 1965 and (2) an exemption for children and youth under the age 21 that was implemented in the Social Security Amendments of 1972 (P.L. 92-603). For children and youth under age 21, only services delivered in a psychiatric residential treatment facility, a psychiatric hospital, or a psychiatric unit of a general hospital are exempt from the Medicaid IMD exclusion. Other exceptions to the IMD exclusion have been made available through regulations governing managed care, Section 1115 demonstrations, and a limited state plan option. Disproportionate share hospital payments are also used by some states to make payments to IMDs (MACPAC 2019).

[3] The Substance Use-Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act (SUPPORT Act, P.L. 115-271) codified this provision in 2018.

[4] States with approved Section 1115 demonstrations may receive FFP for services delivered to beneficiaries with SUD and mental illness receiving treatment in IMDs (CMS 2017b, CMS 2018). To date, 31 states and the District of Columbia (DC) have approved demonstrations for beneficiaries with SUD; 7 states and DC have demonstrations for beneficiaries with serious mental illness or serious emotional disturbances (KFF 2022). There are no day limits on IMD stays under SUD demonstrations and states are permitted to maintain a 30-day average length of stay under demonstrations for beneficiaries with mental illness. Section 1115 demonstrations are time-limited and require states to report on progress related to the use of evidence-based placement criteria, nationally recognized standards for residential treatment providers, and access to the full continuum of behavioral health treatment services, among other milestones. States are also required to conduct an independent evaluation of their demonstrations.

[5] CMS has clarified that states can make prorated (i.e., partial) capitation payments to managed care plans to cover the days in the month when the beneficiary is not a patient in an IMD when the conditions of 42 CFR § 438.6(e) are not met (CMS 2017a).

[6] CMS estimated that in 2010, 17 states were using the in-lieu-of services provision to pay for services in IMDs without federally imposed day limits on the length of stay. Another nine states were potentially using this authority (GAO 2017).

[7] Forty-six states and DC had operational PDMPs prior to the passage of the SUPPORT Act in October 2018 (CMS 2021).

[8] The PDMP is under the board of pharmacy in 20 states and under the department of health in 18 states. Other states house the PDMP under substance abuse agencies, professional licensing agencies, consumer protection agencies, law enforcement agencies, and offices of inspector general (CMS 2021).

[9] As of FY 2018, in 46 states and DC, providers must check the PDMP when prescribing an opioid and at regular intervals thereafter. Providers in 45 states and DC may delegate this task to another member of the staff other than the prescriber. Only 33 states and territories allow Medicaid fraud and abuse analysts to access the PDMP. Cross-state PDMP data sharing with at least one neighboring state exists between 49 states, Puerto Rico, and DC (CMS 2021).

[10] Even when access is allowed, Medicaid agencies often encounter barriers with the PDMP. For example, they may only be able to access one patient record at a time, real-time data may not be available, or they may only have limited PDMP access when an active investigation underway (MACPAC 2020).

[11] Section 5042(a) of the SUPPORT Act requires states to ensure that Medicaid providers use a qualified PDMP to check their patients' prescription drug history prior to prescribing a controlled substance. A qualified PDMP is one that meets certain statutory standards, including prescription information for the most recent 12-month period and the name, location, and contact information of each prescriber. Beginning in 2023, states are required to report to the Secretary on various aspects of their qualified PDMP, including the percentage of Medicaid providers who checked the PDMP prior to prescribing a controlled substance, and any data on privacy breaches, including the number of individuals affected and steps being taken to address the breach.

[12] Section 5042(a) of the SUPPORT Act authorizes CMS to provide a 100 percent federal match to states in FY 2019 and 2020 for investments related to design, development, and implementation of a qualified PDMP. Not all states applied for the 100 percent matching funds. The report notes that the availability of other funding sources beyond FY 2020 for PDMP development, such as CDC and Department of Justice grants, may have influenced state decisions to forgo the enhanced match. States can also receive 90 percent federal match for efforts related to design, development, and installation of a PDMP, and for a 75 percent federal match for operations of a PDMP that support Medicaid (CMS 2021).

[13] The state APDs describe planned activities for PDMP improvements and may not reflect actions ultimately taken or completed enhancements.

[14] Overdose fatality review is a process for understanding the risk factors and circumstances that lead to fatal overdoses, and identifying opportunities to prevent future overdoses. Overdose fatality reviews can help states direct proactive treatment and social services to high-risk areas and populations (Wisconsin DHS 2021).

[15] Section 5042(b)(2) of the SUPPORT Act requires CMS to issue a report by October 1, 2023, containing guidance for states on increasing the number of covered providers who use qualified PDMPs and best practices for how states and covered providers should use qualified PDMPs to reduce abuse of controlled substances. This report may shed additional light on general PDMP best practices, how PDMPs can protect the data of Medicaid beneficiaries, and how state Medicaid agencies and PDMPs can productively share data.

References

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2022. 1115 Demonstration state monitoring and evaluation resources. Baltimore, MD: CMS. https://www.medicaid.gov/medicaid/section-1115-demonstrations/1115-demonstration-monitoring-evaluation/1115-demonstration-state-monitoring-evaluation-resources/index.html.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2021. Report to Congress: State challenges and best practices for implementing PDMP requirements under section 5042 of the SUPPORT Act. June 30, 2021. https://www.medicaid.gov/medicaid/data-and-systems/downloads/rtc-5042-state-challenges.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2018. Letter from Mary Mayhew to state Medicaid directors regarding "Opportunities to design innovative service delivery systems for adults with serious mental illness or children with a severe emotional disturbance." November 13, 2018. https://www.medicaid.gov/federal-policy-guidance/downloads/smd18011.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2017a. Medicaid and CHIP managed care final rule (CMS-2390-F) frequently asked questions: Section 438.6(e). Baltimore, MD: CMS. https://www.medicaid.gov/federal-policy-guidance/downloads/faq08172017.pdf.

Centers for Medicare & Medicaid Services (CMS), U.S. Department of Health and Human Services. 2017b. Letter from Brian Neale to state Medicaid directors regarding "Strategies to address the opioid epidemic." November 1, 2017. https://www.medicaid.gov/federal-policy-guidance/downloads/faq08172017.pdf

Kaiser Family Foundation (KFF). 2022. Medicaid waiver tracker: Approved and pending Section 1115 waivers by state. March 22, 2022. Washington, DC: KFF. https://www.kff.org/medicaid/issue-brief/medicaid-waiver-tracker-approved-and-pending-section-1115-waivers-by-state/

Medicaid and CHIP Payment and Access Commission (MACPAC). 2020. *Pharmacy and provider lock-in programs in Medicaid fee for service*. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2019/08/Pharmacy-and-Provider-Lock-in-Programs-in-Medicaid-Fee-for-Service.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2019. *Report to Congress on oversight of institutions for mental diseases*. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2020/01/Report-to-Congress-on-Oversight-of-Institutions-for-Mental-Diseases-December-2019.pdf.

Medicaid and CHIP Payment and Access Commission (MACPAC). 2017. Chapter 2: Medicaid and the Opioid Epidemic. In *Report to Congress on Medicaid and CHIP*. June 2017. Washington, DC: MACPAC. https://www.macpac.gov/wp-content/uploads/2017/06/Medicaid-and-the-Opioid-Epidemic.pdf.

U.S. Government Accountability Office (GAO). 2017. *Medicaid: States fund services for adults in institutions for mental disease using a variety of strategies*. Report no. GAO-17-652. Washington, DC: GAO. https://www.gao.gov/products/gao-17-652.

Wisconsin Department of Health Services (DHS). 2021. Overdose fatality reviews: A coordinated, multi-agency response. Madison, WI: Wisconsin DHS. https://www.dhs.wisconsin.gov/publications/p02550.pdf.