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State Medicaid Agencies' Multi-Faceted Response to the Opioid Epidemic

Abstract

Context: Medicaid is the primary payer for substance use disorder (SUD) treatment in the United States. While some policy changes have been well documented, the operational decisions that guide the implementation of these policies have received insufficient attention. The objective of this analysis is to describe the roles that Medicaid programs have taken to address the opioid epidemic and their policy and operational decisions.

Methods: We conducted 27 key informant interviews with state agency representatives in 9 states, all of which have been substantially impacted by the opioid epidemic. We focused our interviews on 3 distinct state roles: Regulator, Monitor, and Enforcer; Payer and Contractor; and Collaborator, Evaluator, and Educator. Within those roles, we aimed to synthesize the degree of variation of the policies implemented across these states from 2014-2019, given the breadth of policy levers available to them. Interviews were recorded and transcribed, responses were summarized categorically where possible, and the transcripts were reviewed to identify areas of variation.

Findings: We observed substantial convergence in the policies and actions taken by states. All 9 states relaxed or eliminated utilization management policies, such as prior authorization of medications for opioid use disorder, that may be a barrier to access. Most states expanded SUD treatment coverage to align with the American Society of Addiction Medicine continuum of care. As collaborators, Medicaid programs participated in interagency efforts such as opioid task forces, including various levels of data-sharing between agencies. Interviewees discussed ongoing evaluative activities; however, OUD treatment quality measurement remains an area in need of development to support state policymakers.

Conclusions: State Medicaid agencies are engaging in roles that go beyond that of just a payer of health services, especially in expanding access to SUD treatment; however, further support is needed to advance future policy goals, such as value-based payment.

Policy Points

- Policies and operational strategies adopted by state Medicaid programs to expand access and improve substance use disorder treatment quality have received insufficient attention.
- In interviews with 9 state Medicaid agencies, we observed substantial policy convergence between states, including the removal of prior authorization for buprenorphine/naloxone, an expansion of access through coverage and delivery system reforms, and the establishment of intrastate cross-agency collaboratives.
- Our findings are relevant to state policymakers and health services researchers interested in identifying effective approaches to address the opioid crisis, and establishing metrics to advance policies in development, such as value-based purchasing for substance use disorder treatment.

Introduction

Medicaid is the single most important payer for health care services related to the opioid epidemic. State Medicaid programs collectively covered an estimated 38% of nonelderly adults with opioid use disorder (OUD) in 2017, and 54% of those who received treatment for OUD.[1] Thus, the OUD treatment policies set by Medicaid programs can shape how health care systems treat all individuals with OUD.

Federal policies afford state Medicaid programs substantial flexibility as payers of substance use disorder treatment, both in terms of the services they cover and the utilization management policies they use to govern which patients receive care and how it is delivered. In response to the opioid epidemic, Medicaid programs have expanded coverage of SUD treatments, and reformed delivery and payment systems. Some of these policy changes, such as Section 1115 SUD Demonstration Waivers, have been well-documented although most have not yet been rigorously evaluated.[2] The operational decisions that guide how policies are implemented and enforced are nuanced and have received less attention from researchers. For example, while coverage of services is generally well documented, much less is known about the utilization management policies that may affect access and quality, the flexibility provided to Medicaid Managed Care Organizations (MCOs) in applying those policies, or the reasoning and evidence that informs the enactment of those policies. Understanding these operational decisions is critical to understanding how states have acted to counter increases in OUD-related morbidity and mortality, and may explain varying trends in access, quality and outcomes of OUD and other SUD treatment across states.

To advance knowledge about the multiple facets of state Medicaid policy adoption and implementation, we conducted in-depth interviews with policy officials drawn from a multi-state Medicaid collaborative project (Medicaid Outcome Distributed Research Network [MODRN]), that includes many of the states hardest hit by the opioid crisis, including 5 of the 10 states with the highest overdose death rates.[3] We sought to answer the following questions: How have state Medicaid programs changed their coverage and reimbursement policies in response to the opioid epidemic? In what ways do these policies vary across states? Beyond the typical role of payer, what do state Medicaid agency officials see as their role in responding to the epidemic? What do Medicaid agency officials describe as the next frontier of policy changes?

In this report, we first present relevant background on recent policy history that has affected current SUD policy decisions, followed by a description of our methods and findings from the interviews we conducted with state Medicaid agency officials, and finally a discussion of implications of our findings and ways to assist state policymakers in serving the needs of their enrollees with OUD.

Background

Evidence-based treatment and clinical guidelines

SUDs in the United States have been treated historically as social disorders stemming from moral or spiritual failings.[4] Only in 1987 did the American Medical Association (AMA) classify all drug addictions as medical diseases.[5] Since then, 40-50 different treatment approaches emerged for clinical application, some with poorly developed theories of change and questionable efficacy.[6,7] Payers like state Medicaid programs were left to decide which set of criteria were most effective or appropriate, without sufficient research or clinical consensus upon which to base their decisions.

In 1988, the American Society of Addiction Medicine (ASAM) was accepted into membership by the AMA as a national medical specialty society, with addiction medicine becoming a self-designated practice specialty in 1990.[8] Since 1992, ASAM has developed patient placement criteria for treating SUD, publishing its first set in 1994 and the most recent version, *The ASAM Criteria: Treatment Criteria for Addictive, Substance-Related, and Co-Occurring Conditions*, in 2013. The "ASAM Criteria" (as that document is known) created a standardized comprehensive assessment model from which placement recommendations for appropriate treatments are derived.[9] The clinically-derived system assesses patients over 6 biopsychosocial domains, focusing on outcomes, team-based approaches and recommendations.[9] In 2015 and 2017, the Centers for Medicare and Medicaid Services (CMS) encouraged state Medicaid programs to improve SUD treatment coverage and delivery systems by using the ASAM Criteria.[10-12] As of 2017, 33 state Medicaid agencies required the use of the ASAM Criteria at least in part or in principle by their Medicaid MCOs and providers.[9,13,14]

Federal Legislation and Regulation

Federal legislation enacted in recent years further informed and shaped SUD treatment and recovery efforts by state Medicaid programs. The Mental Health Parity Act of 1996, the Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity Act of 2008 (MHPAEA) and the Affordable Care Act (ACA) each took incremental steps towards broadening the coverage of behavioral health services by health insurers.[15-19] This required states and Medicaid MCOs to implement and analyze mental health parity in their own programs.[20] More recently, the 21st Century Cures Act of 2016 and The Substance Use Disorder Prevention that Promotes Opioid Recovery and Treatment for Patients and Communities Act (SUPPORT Act) of 2018 have more directly targeted the opioid epidemic. The former included $1 billion to support states in a variety of programs to improve access to OUD treatment and to prevent future OUD from occurring.[21] The latter mandated coverage of buprenorphine, methadone and naltrexone for OUD (otherwise known as Medications for Opioid Use Disorder (MOUD)) by state Medicaid programs, among other OUD-related policies.[22]

Methods

Sample

The state Medicaid agencies represented in this report participate in the MODRN project.[23] MODRN is a multi-state collaboration founded by participants in AcademyHealth's State-University Partnership Learning Network (SUPLN)[24] and Medicaid Medical Directors Network (MMDN).[25] The objectives of the MODRN-OUD project are to provide a comprehensive assessment of OUD treatment quality and outcomes in Medicaid, and to inform policy decisions on coverage and payment for evidence-based OUD treatments.

We first present the characteristics of the 9 participating state Medicaid programs (Kentucky, Maryland, Michigan, North Carolina, Ohio, Pennsylvania, Virginia, West Virginia, and Wisconsin) in Table 1. Next, we describe specific policies related to each state's response to the opioid epidemic specifically and, more broadly, SUD treatment. As death and addiction rates have continued to rise, 3 of the 9 states have used emergency declarations to address the crisis.[26,27] Our sample of states also reflected the diversity of Medicaid programs in the US. Seven of the states expanded Medicaid under the ACA, and 4 states carved-out behavioral health care management from their physical health MCO contracts (2 other states not included in the analysis do this as well), decisions that predate the opioid crisis. All 9 states received approval for 1115 SUD demonstration waivers between 2016 and 2019.

Key Informant Interviews

Information on state Medicaid SUD policies was collected through a series of interviews with state officials in each of the 9 MODRN states. We developed and refined an interview guide with input from MODRN investigators in the 9 participating universities, Medicaid clinical leaders (i.e., Chief Medical Officers), and state SUD policy experts from 2 National Institute on Drug Abuse (NIDA)-funded centers of excellence.

The interview guide focused on 10 key policy domains where states have substantial discretion in how they address the needs of Medicaid enrollees with OUD or other SUDs. We present each domain in Table 2. We focused primarily on state Medicaid program policy and the administrative decisions Medicaid agencies made to address the opioid epidemic. Specifically, we asked states about MOUD and OUD treatment utilization management and payment policies as they have been shown to affect access to treatment.[28-31] Due to its relevance towards both quality of care and access,[32-35] we asked states about delivery system reforms, care coordination, transition, and integration with other health care services. In addition, we asked if Medicaid agencies had partnered with other organizations of state government to address the opioid epidemic, and in what capacity. Finally, we inquired about activities that often fall outside of the responsibility of a state Medicaid agency, such as licensing of SUD providers, but closely intersect with Medicaid agency responsibilities and other interagency efforts.

Table 1: Key Characteristics of State Medicaid Programs Included in the Policy Inventory Related to Substance Use Disorder Policies

States	Number of Enrollees as of Dec 2019[47]	Percent of population in Medicaid[48]	Percent of Medicaid population in Managed Care[49]	Medicaid Expansion, Date of Effect[50]	Behavioral Health Carve-out	Age-Adjusted Drug Overdose Mortality Rate per 100,000 (Rank), 2019[3]
Kentucky	1,187,843	26.8%	89%	Yes, Jan 2014		32.5 (7)
Maryland	1,328,704	21.9%	85.7%	Yes, Jan 2014	X	38.2 (4)
Michigan	2,320,304	22.8%	76%	Yes, Apr 2014	X	24.4 (20)
North Carolina	1,772,156	16.8%	NA	No	X	22.3 (23)
Ohio	2,609,614	14.9%	89%	Yes, Jan 2014		38.3 (3)
Pennsylvania	2,938,411	22.8%	77%	Yes, Jan 2015	X	35.6 (5)
Virginia	1,414,239	15.9%	82%[51]	Yes. Jan 2019		18.3 (28)
West Virginia	507,398	29.3%	77%	Yes, Jan 2014		52.8 (1)
Wisconsin	1,046,309	17.8%	72%	No		21.1 (25)

Table 2: Ten Domains from Key Informant Interview Guide

General overview of the state's SUD treatment landscape
PAYER & CONTRACTOR
Medications for opioid use disorder (MOUD) coverage and utilization management
Other SUD treatment coverage and utilization management
SUD provider payment
Delivery system reforms
SUD-related care coordination, managing care transitions, and integration of SUD
COLLABORATOR, EVALUATOR, & EDUCATOR
Coordinated interagency and multiagency state efforts
Naloxone coverage and availability
REGULATOR, MONITOR, & ENFORCER
Network development and licensing of SUD providers
Quality and outcome measurement improvement initiatives for SUD providers

Participants included state agency representatives, representing Medicaid, behavioral health, and public health agency staff. The roles of participants included Medicaid clinical leaders, senior Medicaid pharmacy directors, Medicaid data analytics managers, senior Medicaid strategists, behavioral health/drug & alcohol policy advisors and analysts, and other state representatives with programmatic knowledge. The interviews (n = 27) were conducted with each state via a series of phone calls (median 3-4 hours per state Medicaid program). The interviews were conducted from June to October 2019 and were recorded with permission from the state agency representatives and then transcribed. After the interviews, we followed up with interview participants and their designated subject matter experts to clarify details (e.g., specific dates of policy implementation) and compile supplemental information cited on the call (e.g., opioid treatment guidelines, Medicaid preferred drug lists).

Following the completion of the interviews, we organized the information in 3 ex ante identified state roles: 1) Regulator, Monitor and Enforcer, 2) Payer and Contractor; and 3) Collaborator, Evaluator, and Educator. Within those roles, we aimed to synthesize the degree of variation of the policies implemented across this group of states, given the breadth of policy levers available to them. We summarized answers categorically where possible, such as the coverage of certain SUD treatment services. Transcripts from the interviews for other questions were analyzed to identify areas of variation. This included identifying programs, policies, and approaches discussed by each state for specific questions in the interview guide and comparing against responses to the same question from other states. Our analysis was then reviewed by interviewees and university partners to ensure accuracy.

Results

Regulator, Monitor and Enforcer

In their roles as regulators, monitors and enforcers, states made determinations on how services for SUD were defined, who may provide them, and what requirements must be met by those providers. These functions included both Medicaid and other state agencies.

Clinical Criteria

Seven of nine states reported using ASAM criteria to guide SUD coverage decisions. Similarly, 6 states used ASAM criteria to guide SUD treatment placement decisions, whereas another state reported the use of criteria similar to that of ASAM. Among the 2 states that did not use ASAM criteria, Wisconsin commented that the MCOs may use alternative criteria that cannot be more restrictive than ASAM, and West Virginia clarified that while providers should use ASAM, some choose not to and opt for the Clinical Opiate Withdrawal Scale[36] instead.

SUD Provider Licensing

All states reported that SUD inpatient, residential, and most outpatient providers had to be licensed by the state, often using national credentialing standards. In addition, some states reported that each MCO was permitted to have their own credentialing process. Specific to residential treatment facilities, states that had adopted ASAM used the criteria to license and/or credential facilities (i.e., ensure that the facility offers the services as defined in the criteria). All states required (or were moving towards requiring) residential treatment facilities to either provide MOUD onsite or facilitate referrals so that their patients had access to MOUD while in residential treatment, which is meaningful as many residential programs abide by abstinence-based treatment.[37]

Though licensing administration and enforcement typically falls to a separate state agency, many Medicaid agencies described a role in informing licensing standards in their state. Some states reported that Medicaid representatives play an advisory role to the licensing agency, such as ensuring that those with licensing responsibilities are fully aware of ASAM criteria. One state commented that their Medicaid program works with the licensing agency by informing them of providers who have been reported by patients or other providers for delivering low-quality or inappropriate care.

Payer and Contractor

As a health insurer, Medicaid programs can affect access and quality through the use of delivery and payment reforms, as well as coverage decisions.

MOUD Coverage and Access

We observed many areas where the states included in this analysis appeared to be converging in their OUD treatment policies. First, MOUD coverage had been expanded, and accompanying utilization management policies had been relaxed, typically in both fee-for-service (FFS) and MCO programs. All 9 state Medicaid programs covered buprenorphine, naltrexone, and methadone, although West Virginia and Kentucky began covering methadone only recently, in 2018 and 2019, respectively. A common change we observed was that all states removed prior authorization policies for buprenorphine/naloxone,[38] and all but one state had done so within the last 5 years. Interviewees provided varying reasons for the use and operationalization of their previous prior authorization policies. Interviewees in one state described the flexibility that was initially given to MCOs to set their own prior authorization policies on MOUD; however, this created a burden on providers to understand and comply with an array of policies. Another state's prior authorization policy was implemented with the intent to control quality and required prescribers to attest that the patient had been diagnosed with OUD, that an informed consent was signed, that the prescription drug monitoring program had been checked, and that the patient had been referred to counseling. Similarly, another state's policy included a requirement that the enrollee demonstrate they were in or were seeking an active treatment program. In these cases, any potential quality control benefit or flexibility granted to MCOs were counterbalanced by increased provider or enrollee burden that limited access.

Beyond prior authorization, states did not widely use enrollee-based utilization management policies (e.g., patient compliance requirements), rather clinically-based utilization management (e.g., prescribing dosage and quantity limits) were commonly applied. We asked interviewees specifically if their state applied patient compliance, completion of treatment, or step therapy requirements to patients either beginning or maintaining treatment. Only 1 had a requirement related to step therapy which was applied to all MOUD medications. This required enrollees to receive 4 hours of counseling per month and 2 urine drug screens during an initial phase of treatment. If the enrollee had complied with therapy and did not have a positive urine drug test, they could drop to 1 counseling session and 1 urine drug screen per month. The majority of states did not have extensive monitoring requirements for continuation of MOUD either, and during the interview would often point to the other utilization management policies as sufficiently restricting MOUD prescribing to appropriate cases, as well as relying on the provider to adhere to what is medically appropriate, as satisfactory.

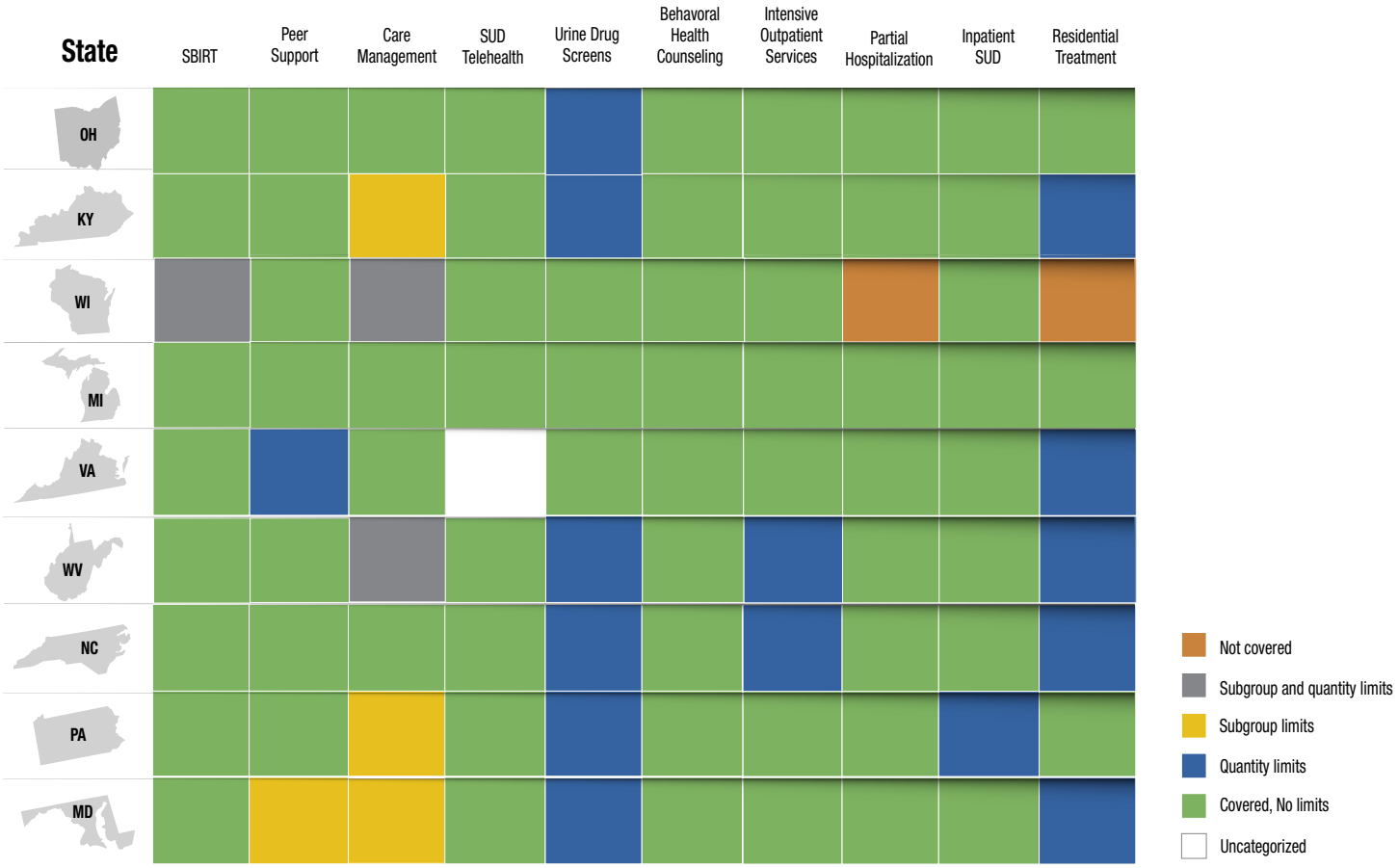
The most commonly used utilization management policies were 2 clinical requirements: quantity limits and dosage requirements. These policies tended to be used in conjunction with one another, as states referenced restrictions such as a maximum of 24 mg of buprenorphine for induction, and 16 mg for maintenance.[39] Dosages above those levels were available but subject to prior authorization. In contrast, Virginia's Board of Medicine required that enrollees be initiated on buprenorphine starting at 8 mg per day and increase to higher dosages as necessary. Duration limits or caps on the amount of time an enrollee may receive MOUD were not used by any state.

SUD Treatment Services

States had made changes to expand the services for SUD treatment covered by the Medicaid program. In Figure 1 we present indicators of coverage for each service and each state, representing 4 broad categories: coverage without limits, limits on coverage for certain subgroups, quantity limits, or if the service is not covered. Services were broadly covered across states, with the exception of partial hospitalization and residential treatment in Wisconsin.[40] Officials in 6 states commented that they had adopted policies to formally cover or enhance access to residential SUD services within the last 5 years. Three states began covering inpatient SUD care, 3 states adopted policies to reimburse for peer support services, and 3 states added or enhanced access to partial hospitalization services. Interviewees from Kentucky described major changes to coverage of SUD services in their state that occurred in 2014, which included expanding coverage to all Medicaid enrollees for residential services, partial hospitalization, intensive outpatient services, psychotherapy, peer support services, and targeted case management. Relative to before the period in question (2014 and later), these states broadened the coverage of inpatient and residential SUD services to a degree previously not available to enrollees.

States frequently reported utilization management policies for

Figure 1: State Coverage of Other SUD Treatment Services as of 2019



care management and residential treatment that either limited the quantity of services an enrollee could receive or required a documented diagnosis to receive the service (i.e., subgroup coverage limits). Examples of subgroup coverage limits for care management included a diagnosis of SUD and chronic physical pain, moderate to severe SUD, or a mental health diagnosis and an intellectual disability. Quantity limits for residential treatment were often specified as a 30-day length of stay, but that could be extended with prior authorization.

Delivery Reforms

States reported the use of specific innovative delivery reforms with the goal of improving OUD treatment as well as the coordination of care for Medicaid enrollees in specific programs rather than system-wide changes. We define the key terms related to these reforms in the call out box. Pennsylvania and Maryland have both implemented health homes in the last 5 years. Pennsylvania's Centers of Excellence program includes a range of SUD providers, primary care providers, hospitals, and county agencies that were funded through lump sum payments to provide SUD treatment directly while coordinating care for other physical and mental health conditions.41 Maryland utilized a state plan amendment (SPA) to implement a comprehensive health home program42 for Medicaid participants who have serious and persistent mental illness; OUD and are at risk of additional chronic conditions due to tobacco, alcohol, or other non-opioid substance use; or children with serious emotional disturbances. In addition, Michigan launched an opioid health home pilot program with federally qualified health centers located in rural areas, funded through a hybrid of federal, grant, and waiver resources. While enhancing access to treatment, these programs also sought to improve care coordination and transitions for specific vulnerable populations (e.g., pregnant women, co-occurring serious mental illness), and to reduce acute care utilization for OUD.

Delivery reforms intended to improve transitions across care settings were a common theme across states. Two care settings where states reported major efforts included the hospital (both inpatient and the ED) and residential treatment centers. For example, Michigan used various grants, including the SAMHSA-funded State Opioid Response (SOR) grant, to support ED-initiated buprenorphine and warm handoffs to providers in addition to identifying community providers for referral. The State also utilized their contracts with prepaid inpatient health plans to require providers to incorporate a warm handoff as patients are transitioned from one

level of care to the next. In residential settings, states required MCOs to implement warm handoffs from discharge to outpatient treatment programs, so that MOUD treatment is coordinated while the enrollee is being served in a residential treatment facility. Through a SPA, Kentucky added coverage of methadone for the treatment of OUD, included care coordination in residential treatment locations, and allowed peer support services to bridge the transition from ED to treatment. These ED-Bridge clinics were funded using a SAMHSA State Targeted Response (STR) grant, which are aimed towards support services that address the continuum of care.

Similar to certain delivery reforms, interviewees often reported that care coordination activities targeted priority populations, such as pregnant women. Other reported priority populations included parents at risk of losing custody of their children, people with injection drug use, and incarcerated or criminal justice-involved individuals.

- **Health Home** – Health homes provide coordinated care for physical and behavioral health conditions for vulnerable populations with multiple comorbidities,[52] and their use accelerated after the ACA. Some health homes focus on individuals with SUD, and coordinate community supports, care management services, referrals, along with treatment for both physical and behavioral health needs.
- **Care Coordination** – Form of care delivery where multiple providers coordinate health services to address the physical and behavioral health needs of the patient.[53]
- **Integrated Care** – A systematic approach to blending physical and behavioral health care, extending to mental health, substance abuse, and primary care, in a single setting.[54,55]
- **Warm Handoff** – An intervention where a provider conducts an in-person introduction between the patient and the behavioral health provider they are being referred to, with the goal of improving the initiation and coordination of behavioral health treatment.[56]

Value-Based Purchasing

We observed that value-based purchasing was of great interest to states, but this payment model had not been widely implemented. Interviewees broadly reported that FFS payments either from the state or the MCOs was the primary method of reimbursement to SUD providers. Most states reported that MCOs must, at a minimum, reimburse what the FFS program would pay, but were then granted flexibility to set rates with contracted providers. While MCOs could create reimbursement arrangements other than FFS, interviewees believed that MCOs were typically reimbursing providers via FFS payments, and at a similar level to what the state would reimburse in its own FFS program. While value-based purchasing was of interest to states to incentivize providers to improve quality of care and outcomes for Medicaid enrollees, no state had fully implemented such a policy at the time of the interviews. Examples of reimbursement policies that states had recently implemented or were developing were cited during the interviews. In Pennsylvania, the Medicaid agency implemented a per-member-per-month (PMPM) rate for their Centers of Excellence, which both FFS and MCOs must pay. Another state utilized a similar payment mechanism to pay for care coordination for enrollees with OUD. Officials in a third state reported they were in the process of drafting a policy that would reimburse outpatient OUD treatment using a weekly bundled rate.

Integration

States described efforts to make systemic changes in the financing and delivery of behavioral health services to better integrate care with the management and delivery of physical health care. For example, in 2018, Ohio undertook a behavioral health redesign that included a number of policy changes to improve integrated care. The state carved-in behavioral health services, which also allowed behavioral health providers to render existing physical health services if they had qualified clinicians on staff. The redesign expanded coverage for a myriad of treatment services and adopted ASAM criteria as guidance for levels of care. Another state used a SAMHSA-funded Young Adult Substance Abuse Treatment grant to develop a comprehensive strategic plan to improve SUD treatment services for adolescents and/or transition-age youth with SUD or co-occurring substance use and mental health disorders. This state was planning to use the SUPPORT Act to further increase access to evidence-based treatment for OUD and SUD, especially for pregnant, parenting, and justice-involved enrollees.

Collaborator, Evaluator, and Educator

States can engage as a collaborator through working and sharing data with agencies at the state and county levels, as an evaluator by leveraging their large amount of claims data to track key metrics and outcomes for enrollees with OUD, and as an educator by working with providers to ensure the needed skills to treat OUD are available in the community.

Education

Interviewees described their participation in numerous interagency training initiatives including those intended to increase the number of providers prescribing MOUD to Medicaid enrollees. For example, Virginia's Medicaid agency in collaboration with their state's Department of Health offered a free Project ECHO initiative to provide training on buprenorphine prescribing where providers could earn Continuing Medical Education credits. States also highlighted that these efforts were often in collaboration with their mental health agency using federal STR or SOR funds. Three states specifically noted the use of SOR funds to educate the provider workforce to offer MOUD, including support in obtaining their DATA 2000 waivers.

Quality Measurement

Interviewees pointed to limited development and use of standardized SUD quality measures across state Medicaid programs. Most states continued to monitor levels of prescribed opioids, and some specifically highlighted tracking acute events such as inpatient and ED use for OUD. MOUD-specific measures included duration of pharmacotherapy, retention in treatment, counseling rates, along with other national measures calculated by their state university partners. In some cases, states focused their outcome measures on a particular initiative, such as programs specific to pregnant enrollees with OUD, and non-claims-based measures, such as average wait time to assessment and client experience. Other states reported that they were still identifying outcome or quality measures to target for ongoing monitoring.

Collaboration

Multi-agency collaboration within states to address the opioid epidemic was novel in its extensiveness. All 9 states had established interagency task forces or command centers, which were typically created and overseen by the state's governor and were being used to bring leaders from multiple state agencies together on a regular basis to identify problems, share information and advance programs. At least one state included community representatives in their opioid task force or worked with community-based organizations on local initiatives.

One of the most common agencies that Medicaid officials reported ongoing collaborations with were departments of corrections. In these collaborations, corrections and state Medicaid programs typically were working together to ensure MOUD access for incarcerated individuals within jails and prisons or for recently released individuals. For example, one state discussed an initiative to offer MOUD in county jails so that induction could occur there, and then to have an outpatient appointment arranged for the individual upon release.

To improve transitions within the community, some interviewees cited collaborations between Medicaid and a broad spectrum of health and social services, including the state's public health agency, child welfare, or county-level agencies. Partnerships with counties included initiatives with county jails, local public health departments, and social service front-line workers. Partnerships between the states and multiple stakeholders at the county-level were built to ensure that their approach to address the opioid crisis was as comprehensive as possible.

Discussion

The objective of our study was to understand how state Medicaid programs responded to the opioid epidemic through policy changes, as well as how those changes were operationalized. Since Medicaid programs play a disproportionate role in covering individuals with SUD, they have a significant impact on their state's SUD delivery system, and thus Medicaid policies have the potential to mold the way care is delivered for all patients with SUD. While our aim was to describe the degree of variation in policies, we broadly found a high degree of convergence in the approaches taken by these 9 states over recent years.

States have the potential to serve as the laboratories of the US federal system, and in the case of Medicaid programs, have the flexibility to use federal and state funds to test policies and programs to better serve their populations. Given the latitude that state policymakers have to shape Medicaid, the degree of policy convergence we observed in our sample of states is noteworthy. The experience of dramatic increases in OUD rates and overdose in this sample of states may have led them to relax utilization management policies and expand covered SUD treatment services to prioritize access above other considerations. For example, all 9 states had removed prior authorization for buprenorphine/naloxone by 2019; however, according to a report to Congress, MACPAC found that 30 states (including those less impacted by the opioid epidemic) at that time still required prior authorization.[43] The expansion of coverage of the continuum of care in these states appears to be facilitated by the recent adoption of the ASAM criteria, which defines what is included in each type of service with greater clarity, and thus makes it easier for state agencies to operationalize these coverage policies. While the states in this study diverged somewhat in the delivery models they have tested, developing and piloting models for SUD care delivery was the norm.

Our experience in collecting data on operational decisions and implementation can be instructive to other researchers and policymakers at the state and federal level who seek to understand the impact of various policies. Generally, it is simultaneously infeasible to conduct secondary data analyses to study Medicaid programs with

precision without understanding the way they are implemented, and impractical to collect the information required to completely understand the implementation process, as the necessary information is often not formally documented and/or publicly available. In particular, where MCOs do and do not have flexibility in the timing or method of adopting a policy is unclear, but potentially consequential for evaluating the impact of certain policies. Various organizations admirably document variation in Medicaid policies by state and should continue to do so; however, researchers should partner with state Medicaid agencies whenever possible to ensure that they completely understand the inevitable caveats that exist for these policies.

Our finding of where states have converged will be valuable to state and federal policymakers, as Medicaid programs often look to each other to learn how to improve care for their own enrollees. By identifying and disseminating areas of policy convergence, along with the reasons provided by interviewees that the potential gain in quality was not worth the reduced access to evidence-based treatment, policymakers in Medicaid agencies can better weigh their options regarding MOUD treatment moving forward. Existing learning collaboratives including state policymakers, such as the Medicaid Medical Director's Network,[25] the State University Partnership Learning Network,[24] and the Medicaid Demonstration Waiver Evaluation Learning Collaborative[44] can facilitate shared policy practices and dissemination so that states can learn from each other.

We found that states are interested in but have not yet adopted value-based purchasing for SUD treatment providers. Our findings indicate that the lack of standardized quality metrics on SUD treatment may be holding back state Medicaid agencies from pursuing value-based purchasing and limiting states' understanding of the outcomes associated with the care that SUD providers are delivering. Namely, in the 2019 Core Set of Adult Health Care Quality Measures for Medicaid collected by CMS,[45] just two measures were related to the quality of care for SUD. Many states focused predominantly on measuring access or utilization rather than quality or outcomes, and states reported that they were still identifying the measures beyond rates of opioid prescribing they want to focus on as indicators of improved quality. However, state Medicaid agencies are often not equipped to create and validate their own quality measures, and each state doing so may be problematic towards comparing quality and outcomes across states. Our findings point to an opportunity for states to lead the demand for such measures and work with researchers to produce policy-relevant metrics. State policymakers and researchers must collaborate as to which measures are both feasible and meaningful to support policy efforts. This is one objective of the MODRN project.

Thus, the need for more research on SUD treatment effectiveness to support policymakers is essential for multiple reasons. First, given the expansion of SUD treatment services now available to many Medicaid enrollees (especially residential treatment), studies on what treatment yields the best outcomes and for whom would inform how Medicaid programs apply and refine utilization management policies for different levels of care. The priority for the states in our sample has been improving access; the next logical steps would include evaluating trajectories in recovery, coordination and outcomes after residential or inpatient treatment, and evidence-based prescribing of MOUD, among others, to refine policies that ultimately improve the lives of individuals with SUD. Second, delivery and reimbursement approaches that best incentivize coordination across settings were of great interest to interviewees, who were using grant funds to support such services. Building a sustainable system of coordination, either through MCOs or provider groups, that integrates physical and behavioral health and limits the possibility that enrollees "fall through the cracks" was a high priority for all stakeholders involved. And third, studying the degree to which recent changes to utilization management policies and treatment coverage have affected access and quality would inform other states who have yet to take such action. Similarly, disseminating the lessons learned by states as they develop their SUD treatment policies will likely be of great benefit to all states.

Our findings can be viewed in light of recent changes to and disruptions in OUD treatment due to the COVID-19 pandemic for 2 primary reasons. The first is that data from the early months of the pandemic suggest an acceleration in opioid-related overdose deaths, potentially reversing previous gains made against the opioid epidemic.[46] The second is the subsequent emphasis on telemedicine for all treatment types, including for SUD. In addition to the research gaps described above, policymakers must now understand how telemedicine can be efficiently used in the continuum of SUD treatment. Further, the relaxation of other OUD treatment requirements during the pandemic, such as the frequency of urine drug tests and limits to take-home methadone quantities, will need to be evaluated to determine if these changes were associated with poor treatment outcomes, or is worth the tradeoff for enhanced access to MOUD.

Our analysis is primarily limited in that our sample of states may not be generalizable to other states in the US. The states are not distributed evenly across the US geographically, had higher rates of overdose death rates, and were more likely to expand Medicaid eligibility under the ACA. The views on and policies that affect SUD treatment in the southeast or southwest (for example) may not reflect those of this group of states. In addition, our analysis is best viewed as a series of case studies rather than other qualitative

studies that seek to achieve thematic saturation. Our interviewees were from a convenience sample of Medicaid agency staff who were connected to our broader project, and those who were referred to us by those staff members.

Conclusion

The trend of convergence towards less restrictive utilization management policies for MOUD, broader coverage of SUD treatment services, and push to innovate in the delivery and coordination of care is a meaningful shift for Medicaid programs. States will need to continue to modify and test policies to counter the negative economic and health effects of the COVID-19 pandemic on SUD. We believe that the cross-state policy and quantitative analyses that are the aim of the MODRN project will help inform policymakers as to which policies have been most successful in serving Medicaid enrollees with OUD.

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