DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
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State Demonstrations Group

June 26, 2024

Meghan E. Groen
Senior Deputy Director
Behavioral and Physical Health and Aging Services Administration
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Dear Director Groen:

The Centers for Medicare & Medicaid Services (CMS) completed its review of the Interim Evaluation Report, which is required by the Special Terms and Conditions (STCs), specifically STC #53 "Interim Evaluation Report" of Michigan's section 1115 demonstration, "Michigan 1115 Behavioral Health Demonstration" (Project No: 11-W-00305/5). This report covers the demonstration period from October 2019 to September 2023. CMS determined that the evaluation report, submitted on October 16, 2023, and revised on May 13, 2024 is in alignment with the approved Evaluation Design and the requirements set forth in the STCs, and therefore, approves the state's Interim Evaluation Report.

In accordance with STC #56 "Public Access", the approved evaluation report may now be posted to the state's Medicaid website within thirty days. CMS will also post the evaluation report on Medicaid.gov.

The report provided evidence that the state has made progress on several demonstration goals. The findings evidenced improvements related to creating an integrated behavioral health delivery system and enhancing provider competency related to the use of ASAM criteria. For example, the number of substance use disorder (SUD) providers, medication assisted treatment (MAT) providers, and primary care providers prescribing MAT in the state increased from the baseline to demonstration period. Consistent with these findings, the state also observed an increase in the number of individuals with a SUD diagnosis who received MAT. Furthermore, follow-up care after emergency department visits with a primary SUD diagnosis increased while ED visits and inpatient stays for SUD declined. In addition to these positive findings, the state also identified some challenges related to expanding the treatment continuum, increasing utilization of peer support services, and coordination of care. For example, continuity of pharmacotherapy declined during this period. The state attributes some of this to challenges related to beneficiaries' experience with pharmacies.

While the findings were descriptive in nature, the Interim Evaluation Report offered an insightful discussion of the demonstration's progress. We look forward to reviewing results from further analysis of the demonstration utilizing quasi-experimental methods, such as interrupted time series analyses, as the state continues to refine the program.

We look forward to our continued partnership on the Michigan 1115 Behavioral Health Demonstration. If you have any questions, please contact your CMS demonstration team.

Sincerely,

Danielle Daly -S

Digitally signed by Danielle Daly -S
Date: 2024.06.26 13:51:14 -04'00'

Danielle Daly
Director
Division of Demonstration Monitoring and Evaluation

cc: Keri Toback, State Monitoring Lead, CMS Medicaid and CHIP Operations Group

Michigan 1115 Behavioral Health Demonstration
Interim Evaluation Report

University of Michigan
Institute for Healthcare Policy and Innovation

Demonstration Period: October 1, 2019 – September 30, 2024

Project No. 11-W-00305/5

Revised Report submitted March 27, 2024

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Abbreviations

AOD	Alcohol and other drug abuse or dependence
AUD	Alcohol use disorder
ASAM	American Society of Addiction Medicine
BCHS	Bureau of Community and Health Systems
BHDDA	Behavioral Health and Developmental Disabilities Administration
CC360	CareConnect 360
CDC	Centers for Disease Control and Prevention
CMHSP	Community Mental Health Services Provider
CMS	Centers for Medicare & Medicaid Services
CPT	Current Procedural Terminology
CRM	Customer Relationship Management
DY	Demonstration year
eConsent	Electronic consent
ED	Emergency department
EMR	Electronic medical record
FFCRA	Families First Coronavirus Response Act
FPL	Federal poverty level
GAIN-I	Global Appraisal of Individual Needs-Initial assessment tool
GEE	Generalized estimating equation
ICD-10	International Statistical Classification of Diseases and Related Health Problems, 10th revision
IT	Information technology
ITS	Interrupted time series
HEDIS	Healthcare Effectiveness Data and Information Set
HIPAA	Health Insurance Portability and Accountability Act
IMD	Institution for Mental Disease
LARA	Department of Licensing and Regulatory Affairs
LOC	Level of care
MAPS	Michigan Automated Prescription System
MAT	Medication assisted treatment
MDHHS	Michigan Department of Health and Human Services
MHP	Medicaid Health Plan
MiHIN	Michigan Health Information Network
MODA	Michigan Overdose Data to Action
MOUD	Medications for opioid use disorder
MYTIE	Michigan Youth Treatment Improvement and Enhancement
OHH	Opioid Health Homes
OUD	Opioid use disorder
PCP	Primary care provider
PRC	Peer recovery coach
PDMP	Prescription Drug Monitoring Program
PHE	Public Health Emergency
PIHP	Prepaid Inpatient Health Plans
QR	Quick response (barcode)
STC	Special Terms and Condition
SUD	Substance Use Disorder

A. Executive Summary

A.1. Summary of Demonstration

The Centers for Medicare & Medicaid Services (CMS) approved Michigan's 1115 Behavioral Health Demonstration Waiver (Project No 11-W-00305/5) on April 5, 2019, for the period of October 1, 2019, through September 30, 2024, for beneficiaries with substance use disorder (SUD), including opioid use disorder (OUD).

The demonstration will allow Michigan to broaden the crucial component of residential SUD services in the state's existing network of SUD providers and SUD benefits to provide a broader continuum of care for beneficiaries seeking help with a SUD, including withdrawal management services in residential treatment facilities that meet the definition of an Institution for Mental Disease (IMD). The state and CMS expect that offering a full continuum of SUD treatment and recovery supports based on American Society of Addiction Medicine (ASAM) criteria or other nationally recognized, SUD-specific program standards, will result in improved health outcomes and sustained recovery for this population.

As noted in the Special Terms and Conditions (STCs), the demonstration seeks to improve health outcomes and sustained recovery for beneficiaries with SUD/OUD by:

- Establishing an integrated behavioral health delivery system that includes a flexible and comprehensive SUD benefit;
- Enhancing provider competency related to the use of ASAM criteria or other nationally recognized, SUD-specific program standards, for patient assessment and treatment;
- Expanding the treatment continuum of residential care including medically necessary use of qualified residential treatment facilities, withdrawal management programming, and medication assisted treatment (MAT);
- Expanding the use of recovery coach-delivered support services; and
- Establishing coordination of care models between SUD providers, primary care, and other behavioral health providers.

The state's Health Information Technology (IT) plan outlines strategies to support the demonstration project including inclusion of Prescription Drug Monitoring Program (PDMP) data in health information exchanges; the development of a customer relationship management database to facilitate and track access to needed SUD treatment across providers; modification of CareConnect 360 (CC360), to include SUD information for purposes of care coordination; development of an electronic consent (eConsent) management system to facilitate data sharing; and implementation of an SUD residential bed registry within the context of a broader integrated crisis and access system.

Since 1998, Michigan has operated a behavioral health carve-out for the Specialty Service Populations using county-sponsored Prepaid Inpatient Health Plans (PIHPs). Physical healthcare, including a benefit for persons with mild and/or moderate behavioral health disorders, is operated through Medicaid Health Plans (MHPs). Funding for SUD services was initially managed by regional Coordinating Agencies which contracted for the delivery of SUD services. In 2013, to better integrate behavioral health and SUD services, Coordinating Agencies were incorporated into the management and governance structures of ten regional PIHPs. The PIHPs are responsible for all SUD services and supports (except for certain medically monitored supports) regardless of the severity of condition.

A.2. Summary of Evaluation

This evaluation design responds to the requirements outlined in the STCs. We organize the hypotheses and key research questions for the evaluation into five sections that correspond to the main outcomes of interest highlighted in the STCs:

(1) use of evidence-based standards to support SUD/OUD assessment and placement for care
(2) availability of and access to critical levels of SUD/OUD care
(3) coordination of care across settings
(4) overall impact on health and health services utilization
(5) cost

The mixed methods evaluation plan was designed to identify both positive outcomes and potential adverse consequences, as well as barriers and facilitators to achieving a comprehensive system of SUD/OUD care. The full approved evaluation design is included as Attachment A to this report.

Contextual Factors

Several contextual factors affected the state's implementation of the demonstration project. The key factor is the COVID public health emergency (PHE). The COVID PHE constrained health care delivery for providers and patients. Modified delivery methods (e.g., telehealth) altered the provision of SUD treatment services, yet also created a challenge for providers to adopt new technology and new billing and recordkeeping procedures. COVID PHE funding supported a variety of health care delivery efforts, including support for SUD provider retention; however, that funding required the state to maintain Medicaid eligibility, which led to a dramatic increase in Medicaid enrollment. More broadly, the impact of the COVID PHE delayed the implementation of the demonstration project in several areas.

Other contextual factors included a change in the state's plan to have each PIHP select an ASAM-consistent assessment tool; instead, the state decided that all PIHPs would use one designated assessment tool for adults and one for adolescents. Another important contextual factor was the August 2021 Michigan Medicaid policy to update and expand reimbursement for office-based treatment for alcohol use disorder and opioid use disorder under the beneficiary's physical health benefit, without a requirement for contracting with the PIHP. This policy expands access to SUD services in a setting outside of PIHP oversight; it also raises questions of whether and how PIHPs and Medicaid Health Plans should share information and coordinate care. The 2022 reorganization of the state's behavioral health administration would also be considered a contextual factor with unclear implications for the demonstration project. Finally, the demonstration project has been implemented within the context of a variety of concurrent state efforts to address the opioid epidemic. These efforts include a state task force, an initiative to use data to guide improvements, and enhanced services in primary care settings, emergency departments, obstetric clinics, and jails.

Data Sources and Methodological Limitations

The following sources of data are used in this evaluation:

- Monitoring Metrics
- State administrative data
- State SUD provider availability data
- Key informant interviews
- Beneficiary phone surveys
- State reports

Specific evaluation measures and methodological limitations are described for each data source.

The COVID PHE and other factors delayed the implementation of several activities in the demonstration plan, including implementation of ASAM-consistent assessment tools and health IT strategies to improve care coordination. Additional years of post-implementation are needed to draw reliable conclusions about most evaluation measures.

A.3. Results and Interpretations

Results are presented for each of the main topics in the evaluation plan.

Use of evidence-based standards to support SUD/OUD assessment and placement for care

Findings from key informant interviews suggest an increase in the proportion of beneficiaries assessed using evidence-based standards, due in large part to the required use of the ASAM Continuum for all contracted SUD providers. There are opportunities to refine health IT structures to reduce administrative barriers and to offer consistent guidance to providers on repeat assessments. Providers are combining ASAM Continuum recommendations with client input and their own clinical judgment to make decisions about placement for SUD treatment. Efforts may be warranted to examine the extent to which limited availability of services impedes treatment at recommended levels of care.

Availability of and access to critical levels of SUD/OUD care

The overall number of SUD providers has increased since the start of the demonstration project. Challenges remain with uneven access to all levels of SUD care across the ten PIHP regions, particularly for residential and withdrawal management. For medication assisted treatment, both the number of providers and the type of MAT offered has increased since the start of the demonstration period. However, there is no data source that identifies MAT providers within and outside the PIHP system.

For measures using administrative data, there was little change in utilization during the demonstration period. Additional years of data are needed to determine whether the demonstration has resulted in increased utilization of SUD/OUD treatment. More than one-quarter of beneficiaries from Cohort 1 phone surveys reported difficulties getting counseling or other treatment; they described challenges finding providers who accept Medicaid and figuring out how to access services. The state's health IT initiative to facilitate access to residential treatment was viewed by most PIHP officials as not feasible.

Coordination of care across settings

Administrative data demonstrated a slight increase in follow-up after emergency department (ED) visits for SUD. Key informants suggested state health IT initiatives to facilitate care coordination have had limited impact, while beneficiaries indicated room for improvement in facilitating transitions in care. Additional years of data are needed to determine whether the demonstration improved care coordination.

Administrative data indicated a decline in continuity of medications for opioid use disorder (MOUD) and counseling after residential treatment since the start of the demonstration period. In Cohort 1 beneficiary surveys, transportation and issues with prescription medication refills were common barriers to treatment continuity. PIHP officials confirmed longstanding challenges with transportation and described recent initiatives to expand options for transportation assistance. It is unclear whether pharmacy challenges are well appreciated by state and PIHP officials. Additional years of data are needed to determine whether the demonstration results in increased duration of SUD/OUD treatment.

Receipt of primary care services among beneficiaries with SUD/OUD declined throughout the demonstration period according to administrative data. Most Cohort 1 beneficiaries reported having a primary care provider (PCP), but many reported difficulties getting appointments. Those with no PCP reported difficulty finding a local provider who will accept Medicaid. Additional years of data, including Cohort 2 beneficiary surveys, are needed to determine whether the demonstration improves the health and well-being of beneficiaries with SUD/OUD.

Data demonstrate a decrease in the average number of prescription opioid fills, as well as a decrease in the total number of Medicaid beneficiaries filling at least one opioid prescription. Participation in the state's PDMP is high among prescribers and pharmacists. Opportunities exist to expand PDMP use to include other health professionals involved in providing SUD treatment services.

Overall impact on health and health services utilization

In Cohort 1 beneficiary surveys, some beneficiaries reported improved health status and material well-being from baseline to follow-up interviews. Additional years of data, including Cohort 2 beneficiary surveys, are needed to determine whether the demonstration improves the health and well-being of beneficiaries with SUD/OUD. Overdose death rates among Medicaid beneficiaries have fluctuated; additional years of data are needed to understand trends.

Rates of ED visits and inpatient stays for SUD appeared to be on a downward trend starting in FY2022, while SUD readmissions remained relatively unchanged. In Cohort 1 beneficiary surveys, three-quarters of beneficiaries were very confident they could connect with a provider if they were having a crisis. Additional years of data are needed to determine if the demonstration decreases utilization of crisis care among beneficiaries with SUD/OUD.

Cost

Total spending for the public SUD system decreased through most of the demonstration period but then increased in FY2022. Spending at the PIHP levels varies by PIHP and across years; the proportion spent on each service category is likely related to SUD provider availability in the region. Through FY2022, average spending per member-month increased for medication assisted treatment but remained relatively flat for ED and inpatient services related to SUD. Additional years of data are needed to understand overall cost trends.

Conclusions

Data available for this Interim Evaluation Report indicate the state has made progress toward achieving the goals and objectives of Michigan's 1115 behavioral health demonstration. These include increasing the proportion of beneficiaries assessed using evidence-based standards; expanding the availability of MAT; and decreasing the number of opioid prescriptions. This progress may be related to strategies outlined in the state's implementation plan, such as consistent use of ASAM-based tools for SUD assessments and expanded use of the PDMP. Other factors may have contributed to improvements, including the broad array of state programs to address the opioid crisis; the expansion of SUD treatment under the Medicaid physical health benefit; and regulatory changes that reduced administrative burden for SUD providers.

The overall effectiveness of the demonstration project cannot be evaluated at this point, for two key reasons. First, the disruption in services and inflated Medicaid enrollment related to the COVID PHE make it difficult to detect trends in administrative measures. Second, implementation of some

demonstration activities was delayed, such that the available data do not represent post-implementation outcomes.

Interactions with other state programs

The state's 1115 Behavioral Health Waiver Demonstration is closely intertwined with an array of other initiatives to improve the availability and delivery of SUD services. In addition, Medicaid policy changes to expand SUD treatment services through the physical health benefit have created interactions with demonstration project. Many of the demonstration strategies are targeted at the PIHP system of care; however, coordination and information sharing across the physical health and PIHP systems is essential to ensuring that beneficiaries with SUD have access to the types of services they need.

To a considerable extent, the demonstration relies on Medicaid coverage for adults through the Healthy Michigan Plan; most adult beneficiaries receiving SUD treatment are enrolled in HMP. When the COVID PHE ends, some beneficiaries with SUD will lose this coverage. It will be important to collect information on health insurance coverage, access to and utilization of SUD treatment services, and financial well-being after Medicaid enrollment ends.

A.4. Recommendations

We recommend that the state consider the following actions to enhance the likelihood of showing the effectiveness of the waiver by the end of the demonstration period:

- Take a more active role working with PIHPs to facilitate more consistent implementation of the ASAM Continuum:
  - Establish and disseminate guidance around areas of confusion (e.g., sharing completed assessments, when/how to do updated assessments, how to generate reports)
  - Identify best practice tools and share across all PIHPs (e.g., comprehensive assessment tools that meet certification requirements)
  - Identify and disseminate guidance on alternative placement when recommended levels of care are not available, or when additional service models are available
  - Coordinate guidance and technical assistance for the analysis of concordance between treatment placement and ASAM Continuum recommendations
  - Ensure adequate vendor support for technical issues (e.g., electronic medical record integration)
- Continue conducting detailed assessments and enforcement of PIHP network adequacy at each level of care.
- Improve the usability of eConsent, Open Beds and CC360 to support transitions of care across settings.
- Establish and disseminate guidance around use of Michigan Automated Prescription System (MAPS) for counselors and other non-prescriber SUD providers.
- Ensure that public-facing staff and webpages offer comprehensive information about SUD services (through the PIHP *and* physical health systems of care).

Lessons Learned

In conducting this evaluation, we learned that access to the appropriate level of SUD treatment is based on both accurate assessment and available resources. Although all PIHPs are now using the ASAM Continuum assessment with adult Medicaid beneficiaries who seek care in the public SUD system, SUD treatment options are not equally available across all areas of the state. This presents a challenge when evaluating whether treatment placement is consistent with the evidence-based assessment. For other

states interested in implementing a standardized assessment tool, we recommend incorporating network adequacy into training and technical assistance.

We learned that SUD providers are eager for tools to facilitate access to and coordination of care. Michigan's PIHP system of care presents a challenge for developing and deploying tools that will be compatible across the variety of electronic medical records (EMRs) and administrative systems. Moreover, health IT vendors accustomed to developing projects for large health systems may not appreciate the technical constraints of SUD providers and their client populations.

Regarding beneficiary phone surveys, we learned that we need to offer numerous opportunities for participation. While scheduled appointments were completed for some beneficiaries in our target population, missed appointments were more common. We implemented several strategies to increase the number and ease of opportunities for participation.

B. General Background Information about the Demonstration

B.1. Overview and History of the Demonstration

The Centers for Medicare & Medicaid Services (CMS) approved Michigan's 1115 Behavioral Health Demonstration Waiver (Project No 11-W-00305/5) on April 5, 2019, for the period of October 1, 2019, through September 30, 2024, for beneficiaries with SUD, including opioid use disorder (OUD).

As noted in the Special Terms and Conditions (STCs), the demonstration will allow Michigan to broaden the crucial component of residential substance disorder services (SUD) in the state's existing network of SUD providers and SUD benefits to provide a broader continuum of care for beneficiaries seeking help with a SUD, including withdrawal management services in residential treatment facilities that meet the definition of an Institution for Mental Disease (IMD). The state and CMS expect that offering a full continuum of SUD treatment and recovery supports based on American Society of Addiction Medicine (ASAM) criteria or other nationally recognized, SUD-specific program standards, will result in improved health outcomes and sustained recovery for this population.

Since 1998, Michigan has operated a behavioral health carve-out for the Specialty Service Populations using county-sponsored Prepaid Inpatient Health Plans (PIHPs). Physical healthcare, including a benefit for persons with mild and/or moderate behavioral health disorders, is operated through profit and not-for-profit Medicaid Health Plans (MHPs). Funding for substance use disorder (SUD) services was initially managed by regional Coordinating Agencies, which contracted for the delivery of SUD services. In 2013, to better integrate behavioral health and SUD services, Coordinating Agencies were incorporated into the management and governance structures of ten regional PIHPs. The PIHPs are responsible for all SUD services and supports (except for certain medically monitored supports) regardless of the severity of condition.

Building upon the strong foundation of covered benefits, evidence-based practices, and service delivery infrastructure, the state believes that offering a full continuum of SUD treatment and recovery supports based on ASAM criteria will result in improved outcomes and sustained recovery for this Specialty Services population.

B.2. Population Groups Impacted by the Demonstration

Medicaid eligibility will not change under the demonstration; standards for eligibility remain set per the state plan. The demonstration will also allow Medicaid beneficiaries 21-64 years to receive SUD/OUD treatment services in residential and inpatient treatment settings that qualify as an IMD.

The state's implementation plan notes the unique circumstances surrounding provider capacity for youth and describes the Michigan Youth Treatment Improvement and Enhancement (MYTIE) initiative. The ongoing MYTIE activity is separate from this demonstration project.

B.3. Goals of the Demonstration

As noted in the Special Terms and Conditions, the demonstration seeks to improve health outcomes and sustained recovery for beneficiaries with SUD/OUD by:

- Establishing an integrated behavioral health delivery system that includes a flexible and comprehensive SUD benefit;
- Enhancing provider competency related to the use of ASAM criteria or other nationally recognized, SUD-specific program standards, for patient assessment and treatment;
- Expanding the treatment continuum of residential care including medically necessary use of qualified residential treatment facilities, withdrawal management programming, and medication assisted treatment (MAT);
- Expanding the use of recovery coach-delivered support services; and
- Establishing coordination of care models between SUD providers, primary care, and other behavioral health providers.

Michigan's revised implementation plan, approved on September 17, 2019, proposes specific strategies to accomplish the goals of the demonstration waiver, organized by the following milestones:

1. Access to Critical Levels of Care for OUD and other SUDs
2. Use of Evidence-based, SUD-specific Patient Placement Criteria
3. Use of Nationally Recognized SUD-specific Program Standards to Set Provider Qualifications for Residential Treatment Facilities
4. Sufficient Provider Capacity at Critical Levels of Care including for Medication Assisted Treatment for OUD
5. Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse and OUD
6. Improved Care Coordination and Transitions between Levels of Care

The state's Health Information Technology (IT) plan outlines strategies to support the demonstration project including inclusion of Prescription Drug Monitoring Program (PDMP) data in health information exchanges; the development of a customer relationship management database to facilitate and track access to needed SUD treatment across providers; modification of CareConnect 360 (CC360), to include SUD information for purposes of care coordination; development of an electronic consent (eConsent) management system to facilitate data sharing; and implementation of an SUD residential bed registry within the context of a broader integrated crisis and access system.

B.4. Relevant Contextual Factors

COVID Public Health Emergency

A key contextual factor that affected the state's implementation of demonstration project milestones is the COVID public health emergency (PHE) which began January 31, 2020, and ended May 11, 2023. The first two years of the COVID PHE had a dramatic effect on virtually all aspects of health and health care delivery, including constrained in-person health services, staffing shortages, and patient reluctance to seek health care services to avoid exposure to COVID. In addition, the COVID PHE demanded the attention of state, PIHP and clinic administrators to develop and disseminate new policies and procedures. At the same time, certain oversight activities, such as in-person site visits and audits, were paused. It is likely that COVID PHE demands impeded progress toward implementation of the state's demonstration activities.

The state used the flexibility of the PHE to enact policies to address constraints on the health care system. The state expanded the list of services that could be delivered via telehealth, including initiation of medication assisted treatment, and allowed telephone-only (i.e., no video component) visits from the beneficiary's home for most of the expanded services. These policy changes altered the provision of SUD treatment services, yet also created a challenge for providers to adopt new technology and new billing and recordkeeping procedures.

The US Congress authorized increased Medicaid funding to states through the Section 6008 of the Families First Coronavirus Response Act (FFCRA). To receive FFCRA funds, states were required to meet a maintenance of effort provision that prohibited termination of Medicaid coverage. This led to a dramatic increase in Medicaid enrollment, from approximately 2,387,133 individuals in March 2020 to over 2,919,492 individuals as of March 2022, a 22.3% increase. With limited information on the number or proportion of enrollees who have moved out of state, obtained other health insurance coverage or would be otherwise ineligible, it is difficult to interpret measures calculated "per Medicaid member" for the PHE period.

The COVID PHE created financial pressures for many SUD providers. Michigan used FFCRA funding to allow flexibility for PIHPs to use a variety of methods to maintain SUD provider capacity, including staff retention. Broadly, the overwhelming impact of the COVID PHE confounds any assessment of spending trends during this period.

Changes in SUD-related Policies and Programs

Several SUD-related policies and programmatic decisions likely affected the state's implementation of the demonstration project. The state's implementation plan called for each PIHP to select an assessment tool consistent with ASAM criteria. However, in consultation with PIHP leadership, state officials selected the ASAM Continuum as the statewide standard assessment tool for adults, with the Global Appraisal of Individual Needs-Initial (GAIN-I) identified as the standard tool for youth.

The implementation plan called for expanding CareConnect 360 to enable providers across several settings to see SUD diagnoses and utilization, in order to improve care coordination across physical and SUD care. However, the state Department of Regulatory and Licensing Affairs (LARA) disallowed broad sharing of SUD data, limiting the expanded CC360 "SUD Provider View" to the PIHP level.

In August 2021 Michigan Medicaid enacted a new policy to update and expand reimbursement for office-based treatment for alcohol use disorder and opioid use disorder in primary care and other office-

based settings under the beneficiary's physical health benefit, without a requirement for contracting with the PIHP.[1] This policy expands access to SUD services in a setting outside of PIHP oversight; it also raises questions of whether and how PIHPs and Medicaid Health Plans should share information and coordinate care to ensure that beneficiaries have access to needed services.

Beyond the activities outlined in the demonstration implementation plan, the state has taken a multi-faceted approach to addressing opioid addiction.[2] In 2019 the Michigan Department of Health and Human Services (MDHHS) received a grant from the Centers for Disease Control (CDC) focused on providing real-time actionable data on the drug overdose crisis entitled Michigan Overdose Data to Action (MODA); this grant enabled the 2021 launch of the public-facing, interactive MODA data dashboard. The Opioid Task Force spans across state government departments; in 2021 the Task Force updated its strategic plan and established a stakeholder advisory group to guide its efforts. Other activities support the expansion of medication assisted treatment (MAT) and other SUD services in jails and prisons, emergency departments, obstetric clinics, and other settings.

Opioid Health Homes (OHH) is a model that provides a higher level of care management for individuals with OUD and co-occurring diagnoses. Using a state plan amendment, the state launched OHH in FY2019 with a single PIHP region and expanded incrementally each year. As of FY2023, nine of ten PIHP regions have at least one OHH site. Additionally, two regions have launched Alcohol Health Homes using a comparable approach.

In March 2022 state officials announced a restructuring of MDHHS units.[3] The Behavioral Health and Developmental Disabilities Administration (BHDDA), which had oversight of the PIHPs, was shifted to different divisions within MDHHS to improve coordination of services. Several BHDDA officials were reassigned to other areas not directly related to SUD administration. It is unclear how this organizational change has affected the state's ability to sustain progress toward demonstration project milestones.

C. Evaluation Questions and Hypotheses

This evaluation design responds to the requirements outlined in the Special Terms and Conditions. We organized the hypotheses and key research questions for the evaluation into five sections that correspond to the main outcomes of interest highlighted in the STCs: (1) use of evidence-based standards to support SUD/OUD assessment and placement for care; (2) availability of and access to critical levels of SUD/OUD care; (3) coordination of care across settings; (4) overall impact on health and health services utilization; and (5) cost.

The mixed methods evaluation plan was designed to identify both positive outcomes and potential adverse consequences, as well as barriers and facilitators to achieving a comprehensive system of SUD/OUD care. The full approved evaluation design is included as Attachment A to this report; evaluation questions and hypotheses are presented below.

[1] www.michigan.gov/-/media/Project/Websites/mdhhs/Folder3/Folder17/Folder217/MSA_21-19.pdf?rev=190055b6082c49c48a661b0dfce810ff

[2] www.michigan.gov/mdhhs/-/media/Project/Websites/mdhhs/Inside-MDHHS/Budget-and-Finance/Legislative-Reports-FY23/Section_1151-2_PA_166_of_2022.pdf?rev=70d1dc0baafb4d05a701e70f9a1c4324

[3] https://www.michigan.gov/mdhhs/inside-mdhhs/newsroom/mdhhs-realigns-to-improve-coordination-of-behavioral-health-services-farah-hanley-appointed-chief-d

Evidence-Based Standards for Assessment and Placement

Hypothesis 1: Implementation of Michigan's Behavioral Health Demonstration Waiver will increase utilization of evidence-based standards for patient assessment and treatment placement.

Primary research question 1: Does the proportion of beneficiaries assessed and recommended for placement using evidence-based standards increase over the demonstration period?

> ***Subsidiary research question 1a****:* Are there differences by PIHP and by assessment tool in provider utilization of evidence-based standards for assessment and treatment placement?
> ***Subsidiary research question 1b:*** What are key barriers and facilitators to evidence-based SUD/OUD assessment and placement?

Expanding Availability and Access to SUD/OUD Levels of Care

Hypothesis 2: Implementation of Michigan's Behavioral Health Demonstration Waiver will expand availability of critical levels of SUD/OUD treatment, including residential treatment, withdrawal management, and MAT.

Primary research question 2: Does the number of qualified SUD providers increase over the demonstration period?

> ***Subsidiary research question 2a:*** Are there differences by PIHP region in the number of qualified SUD providers?
> ***Subsidiary research question 2b:*** What strategies are successful, and what are key barriers, to hiring and retaining SUD/OUD providers?

Hypothesis 3: Implementation of Michigan's Behavioral Health Demonstration Waiver will increase utilization of SUD treatment.

Primary research question 3**:** Does utilization of SUD treatment increase over the demonstration period?

> ***Subsidiary research question 3a*****:** Are there differences by PIHP region in utilization of SUD treatment?
> ***Subsidiary research question 3b*****:** What are key barriers and facilitators to beneficiary utilization of recommended SUD treatment?

Care Coordination and Transitions in Care

Hypothesis 4: Implementation of Michigan's Behavioral Health Demonstration Waiver will improve care coordination and transitions in care for beneficiaries with SUD/OUD.

Primary research question 4: Does care coordination for beneficiaries with SUD increase over the demonstration period?

> ***Subsidiary research question 4a***: Are there differences by PIHP region in care coordination?
> ***Subsidiary research question 4b***: What strategies are successful to engage providers and beneficiaries in care coordination? What are key barriers?

Hypothesis 5: Implementation of strategies to improve care coordination and transitions in care will result in increased duration of SUD/OUD treatment.

Primary research question 5: Does the duration of SUD/OUD treatment increase over the demonstration period?

> ***Subsidiary research question 5a***: Are there region differences by PIHP in SUD/OUD treatment duration?

Hypothesis 6: Implementation of care coordination will increase the receipt of primary care services during or after SUD/OUD treatment.

Primary research question 6: Does the proportion of beneficiaries with SUD/OUD who receive primary care services increase over the demonstration period?

> ***Subsidiary research question 6a***: What are barriers and facilitators to receipt of primary care?

Hypothesis 7: Implementation of high-risk management strategies will result in decreased number of opioid fills among beneficiaries with OUD.

Primary research question 7: Does the average number of opioid fills among enrollees with OUD decreased over the demonstration period?

> ***Subsidiary research question 7a***: What are unique barriers and facilitators to effective high-risk management?

Health and Health Care Outcomes

Hypothesis 8: Implementation of the demonstration will improve the health and well-being of beneficiaries with SUD/OUD.

Primary research question 8: Do beneficiaries with SUD/OUD report improved health and well-being over the demonstration period?

> ***Subsidiary research question 8a***: What are continued barriers to improved health and well-being?

Hypothesis 9: Implementation of the demonstration will decrease utilization of crisis care among beneficiaries with SUD/OUD.

Primary research question 9*:* Do rates of crisis care for SUD/ODU decrease over the demonstration period?

> ***Subsidiary research question 9a***: Are there differences by PIHP region in utilization of crisis care for SUD/OUD?

Costs of the Demonstration

Hypothesis 10: Implementation of Michigan's Behavioral Health Demonstration Waiver will be sustainable for the Medicaid program with regard to costs.

Primary research question 10: Does the average total cost for beneficiaries with SUD/OUD change over the demonstration period?

> ***Subsidiary research question 10a***: Does average total cost differ by PIHP region or beneficiary characteristics?

D. Methodology

D.1. Evaluation Summary

The evaluation plan, approved by CMS on June 9, 2020,[4] uses multiple approaches, including analysis of state administrative data, and primary data collected through key informant interviews and beneficiary phone surveys. These data sources are described in detail below.

The evaluation design (see Attachment A) was deemed exempt by the University of Michigan Medical School Institutional Review Board under Exemption 5 as an evaluation of a government health program. The evaluation plan was also determined to be exempt by the MDHHS Institutional Review Board, with approval of a Health Insurance Portability and Accountability Act (HIPAA) Privacy Waiver for the use of protected health information.

The state's implementation plan describes the Michigan Youth Treatment Improvement and Enhancement (MYTIE) initiative to address issues of provider capacity and access to SUD services for youth, but notes that MYTIE activity is separate from this demonstration project. Thus, our evaluation focuses on adult Medicaid beneficiaries.

D.1.1. Impact of Contextual Factors on Evaluation Design

Contextual factors described in Section B.4 delayed the implementation of several key activities in the demonstration plan, as well as several health IT elements. Our approved evaluation plan outlined a quasi-experimental evaluation design based on the expected timing of implementation for key strategies outlined in the state's implementation plan. Annual measures would be evaluated through descriptive comparisons over time. Quarterly measures would be analyzed using an interrupted time series (ITS) analysis to assess changes from pre-implementation to transitional implementation, and then post-implementation. Measures based on beneficiary phone surveys would compare Cohort 1 (those who receive SUD/OUD services pre-implementation) against Cohort 2 (those who receive SUD/OUD services post- implementation). Our evaluation plan labelled FY2021 and FY2022 as transitional years of implementation. However, given the delays in implementation for several key strategies, we have designated FY2021 as pre-implementation while maintaining FY2022 as a transitional year. In this Interim Evaluation Report, we will use this realigned design (Table 1) in determining whether the state has been successful in achieving the goals of the demonstration waiver.

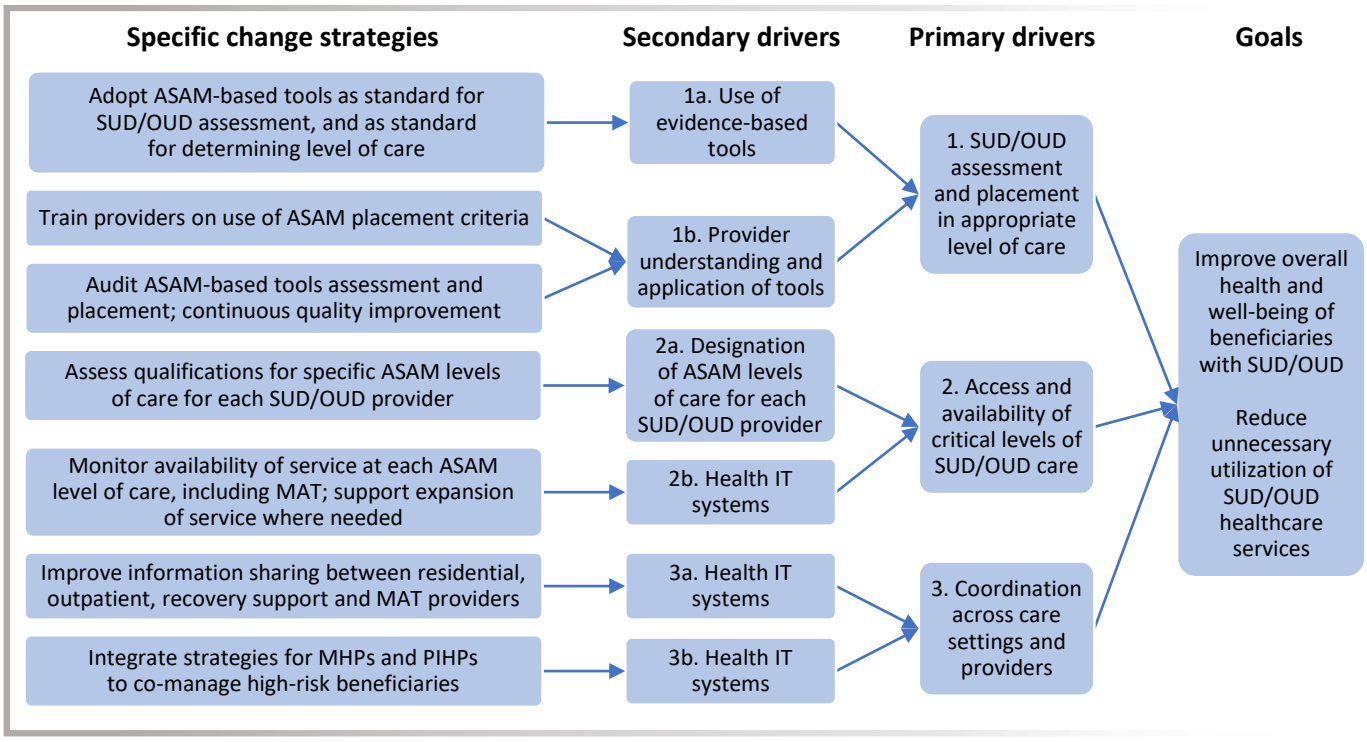
Table 1. Fiscal year designations in realigned evaluation design

State Fiscal Year	**FY2018** 10/2017 - 9/2018	**FY2019** 10/2018 - 9/2019	**FY2020** 10/2019 - 9/2020	**FY2021** 10/2020 - 9/2021	**FY2022** 10/2021 - 9/2022	**FY2023** 10/2022 - 9/2023	**FY2024** 10/2023 - 9/2024
Demonstration Year (DY)			DY1	DY2	DY3	DY4	DY5
Original Evaluation Design	Pre	Pre	Pre	Transitional	Transitional	Post	Post
Realigned Evaluation Design	**Pre**	**Pre**	**Pre**	**Pre**	**Transitional**	**Post**	**Post**

[4] www.medicaid.gov/sites/default/files/2020-06/mi-pathway-integration-appvd-sud-eval-des-10012019.pdf

The link between the implementation plan and demonstration project outcomes is highlighted in the driver diagram (Figure 1). The delay in implementation of the change strategies is likely to delay improvement in the secondary and primary drivers.

Figure 1. Driver diagram



D.2. Data sources, target and comparison populations, evaluation period, evaluation measures, and analytic approach

The following sources of data are used in this evaluation:

- Monitoring Metrics
- State administrative data
- State SUD provider availability data
- Key informant interviews
- Beneficiary phone surveys
- State reports

Descriptions of each of these data sources and methods are presented below.

D.2.1. Monitoring Metrics

Data source

For each demonstration milestone, CMS identified a subset of Monitoring Metrics that the state must include in its Monitoring Plan. The state also selected state-specific metrics. The state's contracted vendor generates the Monitoring Metrics. Attachment B presents definitions of Monitoring Metrics associated with each milestone, as well as results at baseline (FY2020) and interim (FY2022).

This data source was used to examine evaluation questions 2, 4, and 8.

Target and comparison populations/Study population

The target population for the Monitoring Metrics includes individuals enrolled in Medicaid. Inclusion and exclusion criteria are outlined in the Monitoring Metrics specifications (Attachment B).

Evaluation period

For this Interim Evaluation Report, Monitoring Metric data were available for different timeframes, depending on periodicity:

- Monthly metrics are available from October 2019 (start of FY2020) to September 2022 (end of FY2022).
- Annual metrics are available for three time periods: demonstration year 1 (FY2020), demonstration year 2 (FY2021), and demonstration year 3 (FY2022).

Evaluation measures

Monitoring Metric data used for specific evaluation measures include:

- SUD provider availability (Number of Medicaid-enrolled providers qualified to deliver SUD services; subset who meet standards to provide buprenorphine or methadone as part of MAT)
- PDMP checking by provider (Number of Medicaid registered in Michigan's PDMP)
- Care Management (Number of PIHP regions utilizing the CC360 care coordination module for quality management and planning purposes)
- Consent Management (Number of PIHP regions utilizing eConsent management for information sharing)
- Overdose death rate (Number of overdose deaths among Medicaid beneficiaries)

Analytic methods

For specific evaluation measures, we described Monitoring Metric data year over year. As a complementary view, we calculated the percent change from baseline (FY2020) to interim (FY2022):

Percent Change = (FY2022 Interim Value – FY2020 Baseline Value) / FY2020 Baseline Value)

Methodological limitations

We identified data points that appear to be inaccurate for the FY2022 Interim Value. These include:

- Use of Opioids at High Dosage in Persons Without Cancer
- Concurrent Use of Opioids and Benzodiazepines

Additionally, Continuity of Pharmacotherapy for Opioid Use Disorder was missing from the FY2022 Interim Values. It is possible that these data points will be corrected in future Monitoring Metric reports.

Future analyses for Summative Evaluation Report

The Summative Evaluation Report will include Monitoring Metric data through the end of the demonstration period.

D.2.2. State administrative data

Data source

Administrative data is available from the State of Michigan's Enterprise Data Warehouse. Data from Medicaid enrollment files include age, gender, race/ethnicity, and income level (documented as percent of federal poverty level (FPL)), and Medicaid enrollment start and end dates. We used beneficiary county of residence to categorize geographic region, mapping to PIHP region because within-region residence is required for Michigan's public system of SUD care.

Data from administrative claims encompass service-level data on paid claims (fee-for-service) and encounters (managed care), with accompanying billing and reimbursement information (e.g., CPT and ICD-10 diagnosis codes, billing modifiers, billing/rendering provider, paid amount) for inpatient, outpatient, pharmacy, and other services. Administrative data include services provided through the PIHP system of care as well as through the physical health benefit.

Data were extracted by an authorized member of the evaluation team under the authority of a Business Associates Agreement between MDHHS and the University of Michigan. Data processing, encryption and storage were conducted in accordance with established data security protocols.

This data source is used to examine evaluation questions 2, 3, 4, 5, 6, 7, 9, and 10.

Target and comparison populations/Study population

The target populations included (a) adults with any Medicaid enrollment and (b) adults with any Medicaid enrollment who had evidence of SUD diagnosis or SUD-related treatment. Demographic characteristics of these two populations are shown in Tables 2 and 3 on the following page. Of note, there is a notable increase in both populations in FY2021 and FY2022, consistent with the maintenance of eligibility requirements of the FFCRA.

Longitudinal comparisons evaluate the overall impact of the demonstration project. Demographic comparisons highlight patterns for subgroups of Medicaid enrollees, including by age, race/ethnicity, geographic region, and whether the beneficiary received services through the PIHP system of care. Additional subgroup comparisons reflect type of SUD, based on diagnosis codes during the measurement period. We used a hierarchical approach to characterize each beneficiary's SUD type as:

OUD (with or without co-occurring SUD)
AUD (alcohol use disorder with no co-occurring OUD, without or without co-occurring SUD)
Other SUD only (no co-occurring OUD or AUD)

Evaluation period

The evaluation period is FY2018 to FY2022.

Table 2. Demographic characteristics of all adult Medicaid beneficiaries

	FY2018	FY2019	FY2020	FY2021	FY2022
Total N	1,635,756	1,622,538	1,601,482	1,784,660	1,962,354
Age	%	%	%	%	%
18-49 years	66.86	66.46	66.39	67.57	68.01
50-64 years	23.16	23.24	22.93	22.33	21.88
65 years or older	9.98	10.30	10.69	10.10	10.11
Gender	%	%	%	%	%
Female	56.97	56.86	56.96	56.19	55.44
Male	43.03	43.14	43.04	43.81	44.56
Race/Ethnicity	%	%	%	%	%
Non-Hispanic White	58.78	58.64	58.76	58.54	58.14
Non-Hispanic Black	27.21	27.35	27.30	27.12	26.86
Hispanic	4.98	5.08	5.16	5.41	5.76
All Other Groups	9.03	8.93	8.78	8.93	9.23
Receipt of PIHP Services within the Prior Year	%	%	%	%	%
No PIHP services	97.14	97.05	97.06	97.44	97.57
≥1 PIHP service	2.86	2.95	2.94	2.56	2.43

Column totals may not sum to 100.0% due to rounding.

Table 3. Demographic characteristics of adult Medicaid beneficiaries with an SUD diagnosis within the prior year

	FY2018	FY2019	FY2020	FY2021	FY2022
Total N	160,672	162,238	160,519	161,075	176,394
Age	%	%	%	%	%
18-49 years	67.07	66.39	66.42	68.02	67.71
50-64 years	29.23	29.31	28.75	27.23	27.09
65 years or older	3.69	4.30	4.83	4.75	5.20
Gender	%	%	%	%	%
Female	45.20	45.52	45.45	44.28	43.92
Male	54.80	54.48	54.55	55.72	56.08
Race/Ethnicity	%	%	%	%	%
Non-Hispanic White	60.47	62.13	62.65	63.67	63.75
Non-Hispanic Black	30.33	28.58	28.12	26.83	26.31
Hispanic	3.02	3.17	3.24	3.45	3.69
All Other Groups	6.18	6.12	5.99	6.05	6.25
Receipt of PIHP Services within the Prior Year	%	%	%	%	%
No PIHP services	71.68	70.90	71.10	72.21	73.63
≥1 PIHP service	28.32	29.10	28.90	27.79	26.37

Column totals may not sum to 100.0% due to rounding.

Evaluation measures

Evaluation measures based on administrative data include the following:

Provider measures

- Number of primary care providers with at least one claim as rendering provider for MAT
- Type of MAT (methadone, buprenorphine, naltrexone) provided within the measurement year

Utilization of SUD treatment

- Initiation of any SUD treatment within 14 days, among beneficiaries with a new SUD diagnosis
- Engagement in SUD treatment (receipt of two additional treatment services within 30 days) among those initiating SUD treatment
- Receipt of any SUD treatment (among all beneficiaries)
- Receipt of residential SUD treatment (among all beneficiaries and among those with an SUD diagnosis within the prior year)
- Average length of residential treatment (days)
- Receipt of withdrawal management (among all beneficiaries and among those with an SUD diagnosis within the prior year)
- Receipt of medication assisted treatment (among all beneficiaries and among those with an SUD diagnosis within the prior year)
- Continuity of pharmacotherapy for OUD through 90, 180 and 270 days (among beneficiaries with an OUD diagnosis who initiated pharmacotherapy)
- Continuation of counseling (at least 2 visits) within 60 days after SUD residential treatment

Access to other services

- Receipt of preventive/ambulatory care (among beneficiaries with an SUD diagnosis within the prior year and among the subset with chronic medical conditions)

High-risk management

- Average number of opioid prescriptions (among beneficiaries with at least one filled opioid prescription)

Use of crisis services

- Rate (per member-month) of ED visits with a primary diagnosis of SUD
- Rate (per member-month) of inpatient stays with a primary diagnosis of SUD
- Primary SUD readmission within 30 days of an inpatient visit with a primary diagnosis of SUD

Costs of SUD-related services

- Spending ($ per member-month) for SUD inpatient treatment
- Spending ($ per member-month) for medication assisted treatment
- Spending ($ per member-month) for ED visits with a primary diagnosis of SUD

Analytic methods

For each annual and quarterly measure, we generated stratified results by demographic characteristics for each measurement period from FY2018 to FY2022. We performed multivariate generalized estimating equation (GEE) regression analyses to assess changes over the demonstration period (FY2019 to FY2022), examining the association between various quarterly outcome measures and fiscal year/quarter, geographic region, receipt of any PIHP services, SUD type, age, gender, and race/ethnicity.

The GEE approach accounts for the correlated nature of the longitudinal outcome data for each beneficiary.

Multivariate GEE logistic, Poisson and linear regressions were fit for binary, count (rate) and cost outcomes, respectively. First, we fit a main effects model including fiscal quarter, receipt of any PIHP services in the measurement period, age group, gender, and race/ethnicity. Depending on the outcome, we calculated odds ratios, rate ratios, or expected mean difference for each main effect compared to the reference category. When models did not converge and a specific predictor was at issue, we excluded that predictor from the model and obtained the main effect regressions with the remaining predictors. In some instances, inclusion of receipt of any PIHP services as a predictor created a convergence problem and the variable was excluded.

A second set of models was considered that replaced receipt of any PIHP services with geographic region. In the second set, we also considered interaction terms of fiscal quarter, PIHP region and (when applicable) SUD type, adjusted for age, gender, and race/ethnicity. If no significant interactions were observed, the main effects model was fitted. We calculated and graphed predicted probabilities, predicted rates and predicted means. While we present these models in the Administrative Data Appendix, we do not discuss regional patterns in our main report.

Results of stratified and multivariate models are presented in the Administrative Data Appendix (Attachment E).

Methodological limitations

Several limitations may affect measures of health care utilization.

We modified our criteria to differ from established measures (e.g., HEDIS, National Quality Forum) to allow our results to represent a broad population of Medicaid beneficiaries. For example, we did not require continuous Medicaid enrollment for annual measures, as this minimizes the experiences of subgroups likely to have enrollment disruptions, including beneficiaries with periods of incarceration. We included Medicaid beneficiaries 65 years or older; this group typically has concurrent Medicare coverage and thus may receive services not represented in Medicaid data. Still, we felt this subgroup should be included, as they receive SUD services through Medicaid providers. We modified criteria for other measures to isolate key elements of SUD treatment: our measures of residential treatment do not include residential detoxification; our measures of emergency department visits do not include ED visits that result in an inpatient stay.

Our categorization of SUD type is based on diagnosis codes in administrative claims data, which do not necessarily represent a full and accurate description of the beneficiary's substance use.

For race/ethnicity, the number of individuals categorized as American Indian/Native Alaskan and Asian/Pacific Islander was insufficient for multivariate analyses. For this reason, we operationalized race/ethnicity as Hispanic, Non-Hispanic White, Non-Hispanic Black, and All Other Groups.

We designated providers as primary care providers (PCP) if they were listed on the state's PCP table at any time between FY2017 and FY2022. Some providers may have changed settings during this time.

Spending measures included only those associated with Medicaid paid claims. We did not include amounts linked to denied claims or services paid by other sources.

Data extraction occurred 7 months after the end of FY2022; our experience indicates that this is sufficient lag time for over 98% of claims. However, it is possible that FY2022 data are incomplete; of particular concern are the substantial decreases in FY2022Q4 for Hypothesis 5 measures of continuity.

Some evaluation measures overlap with the state's Monitoring Metrics. We did not aim to replicate the Monitoring Metrics data. Some evaluation measures use different specifications for diagnosis or procedure codes. Even when specifications are identical, specific results will differ due to timing of data extraction, as claims are continually added and modified in the Data Warehouse.

More broadly, the COVID PHE had a significant impact on the availability and delivery of health services, on the health and health-seeking behaviors of beneficiaries. State officials, PIHP leaders, SUD providers, and beneficiaries all reported disruptions related to COVID. In reviewing administrative measures over time, results for FY2020 and FY2021 may be difficult to appreciate. Similarly, the increased Medicaid enrollment during the COVID PHE makes it difficult to interpret measures that rely on rates per beneficiary or per member-month.

As noted in Section D.1.1, our realigned evaluation design does not the support the ITS analysis of change, as the data available does not include at least 8 quarters of transitional/post-implementation data. The ITS analysis, based on the realigned designation of the post-implementation period, will be incorporated in the Summative Evaluation Report.

Future analyses for Summative Evaluation Report

The Summative Evaluation Report will include:

- Additional years of annual measures (FY2023-FY2024) to allow for descriptive analysis of trends after full implementation of key demonstration project activities.
- Evaluation of change before and after the full implementation of demonstration project activities using ITS analysis of quarterly measures

D.2.3. State SUD Provider Availability Data

Data sources

The state has a variety of data sources related to SUD provider availability.

The Bureau of Community and Health Systems (BCHS) in the state Department of Licensing and Regulatory Affairs (LARA) maintains a public directory[5] of licensed SUD providers, location, and the type of service/program (residential, residential detoxification, MAT-methadone, outpatient, prevention, screening and assessment, inpatient, MAT-buprenorphine, and MAT-naltrexone).

The state developed a customer relationship management (CRM) database as part of the demonstration project. The CRM details the level of care (LOC) services for each SUD provider that contracts with one or more PIHP regions. Providers submit information through the CRM to support their designation to provide services at specific levels of care; that information is reviewed by the PIHPs, with a final review by the state.

In FY2022, the state contracting office initiated an effort to document the contracted providers at each level of care for each PIHP region. This process involved data collection from PIHPs, review by state officials, and follow-up interactions. The state repeated this process in FY2023.

[5] https://www.michigan.gov/lara/bureau-list/bchs/directory

Combined, these data sources are used to examine evaluation question 2.

Target and comparison populations/Study population
The target population is the state of Michigan, with comparisons of the ten PIHPS.

Evaluation period
FY2019-FY2023

Evaluation measures
Number of beds licensed for residential treatment
Number of PIHPs with at least one contracted provider at each ASAM level of care

Analytic methods
We compared data from the different data sources over time to describe changes in SUD provider availability.

Methodological limitations
Each source of SUD provider availability data has limitations.

The LARA directory does not reflect the specific ASAM levels of care for each provider, nor whether the provider serves Medicaid beneficiaries and/or contracts with at least one PIHP. Moreover, it reflects the period for licensure, which varies for each provider based on the date of license approval. SUD providers are listed in the directory if their license is active. Therefore, it is not possible to generate an accurate annual count of beds licensed for residential treatment.

At the outset of the waiver demonstration period, the state was using an Excel file to document the ASAM level of care information from SUD providers contracting with at least one PIHP. In FY2022, the state began transitioning to its new online CRM system. However, the CRM system was not designed to monitor provider availability; for example, there is no expectation to amend CRM data when a provider leaves or limits services.

A recent state initiative to document provider availability at each ASAM level of care has yielded a detailed data source for FY2022 and FY2023; comparable information is not available for previous years.

Finally, since the outset of the COVID PHE, many providers have been operating at less than capacity. None of the SUD provider data sources capture real-time provider capacity.

Future analyses for Summative Evaluation Report
The Summative Evaluation Report will include SUD provider availability measures through FY2024.

D.2.4. Key Informant Interviews

Data source
The evaluation plan calls for conducting key informant interviews with a range of professional stakeholders, including state officials, PIHP leadership and staff, and SUD treatment providers across a variety of settings. The goal is to describe the experiences of stakeholders in implementing the strategies outlined in the state's implementation plan.

We conducted two rounds of interviews (FY2020-FY2021 and FY2022-FY2023). Generally, interviews with state and PIHP officials lasted 45-60 minutes, while interviews with SUD providers lasted 30-45 minutes. In some cases, we followed up by email to pursue additional information mentioned during interviews. Interviews were conducted via teleconference and recorded with the approval of all participants.

This data source is used to examine evaluation questions: 1, 2, 3, 4, and 7.

Target and comparison populations/Study population

Our target population was state officials with responsibilities related to the PIHP system of care; officials in all ten PIHPs; and SUD treatment providers in a variety of settings. Table 4 presents the number of interview participants in each category.

Table 4. Key informant interview participants

Key Informant Category	FY2020-FY2021 Interviews	FY2022-FY2023 Interviews
State officials	4 participants	9 participants
PIHP leaders/staff	46 participants from 10 PIHPs	25 participants from 10 PIHPs
SUD treatment providers	37 providers	29 providers

Evaluation period

The initial set of key informant interviews were conducted in FY2020-FY2021, focused on demonstration years 1 and 2. The second set of key informant interviews were conducted in FY2022-FY2023 and focused on demonstration years 3 and 4.

Evaluation measures

We developed structured interview protocols for each group of key informants; protocols were refined in an iterative process as interview participants raised new topics. Interview guides can be found in Attachment C.

Interviews with PIHP leadership and staff explored their experiences with implementation of the ASAM Continuum assessment and using new health IT tools. Interviews explored barriers and facilitators to ensuring that beneficiaries have access to all levels of SUD care, including their efforts to assess and address their own network adequacy and provider capacity issues, and efforts to support their contracted SUD providers with recruitment and retention of staff. PIHP informants also provided follow-up information describing results of their recent SUD provider audits related to the proportion of records with ASAM Continuum assessment and recommendation for treatment placement.

Interviews with SUD treatment providers (physicians, clinicians, and clinical administrators) focused their experiences with implementation of the ASAM Continuum assessment, use of health IT tools, staff retention, and barriers and facilitators to ensuring clients have access to SUD treatment and recovery services.

Interviews with state officials explored their efforts to assess PIHP network adequacy, support PIHPs in maintaining SUD provider capacity, direct PIHPs in implementing the ASAM Continuum, working with vendors and other partners to implement health IT strategies, and addressing administrative barriers to

implementation of key elements of the demonstration. Several state officials also provided follow-up information, typically programmatic data that supported their description of trends or data points.

Analytic methods

We used contemporaneous notes and interview transcriptions to conduct thematic analysis of interviews with each subgroup of key informants. We identified major themes and subthemes related to the research questions and compared themes across subgroups to highlight areas of concordance and disagreement.

Methodological limitations

Although we sought to include a broad range of participants, our key informants do not represent all potential experiences and perspectives. Some key informants had been in their positions only a brief time, so they could not provide the history or rationale for certain decisions or processes. However, they did offer the valuable perspective of a new staff member trying to understand and implement policies and programs.

Our evaluation design called for comparison of PIHPs based on their selected assessment tool; however, with the statewide requirement for a single tool, ASAM Continuum, there is no basis for comparison.

Although we assured confidentiality, some key informants may have limited their comments to avoid being viewed as critical of state decisions. Nonetheless, we found that interviewees were quite candid, sharing both challenges and successes of efforts to implement the demonstration project strategies.

Future analyses for Summative Evaluation Report

The Summative Evaluation Report will incorporate data from a third round of interviews conducted in FY2024.

D.2.5. Beneficiary Phone Surveys

Data source

We conducted phone surveys with adult Medicaid beneficiaries with SUD/OUD to collect key patient-reported measures. We developed baseline and follow-up survey instruments that asked fixed-choice and open-ended questions about use of SUD treatment and support services; interactions with providers around choice of treatment; barriers to care; and receipt of assistance to access care. Other questions documented receipt of primary care and beneficiary well-being such as health status, employment, housing, and food insecurity. The Cohort 1 baseline and follow-up phone survey instruments are found in Attachment D.

This data source is used to examine evaluation questions 3, 4, 5, 6, and 8.

Target and comparison populations/Study population

The beneficiary phone surveys are designed as a pre/post comparison. Data collection for Cohort 1 surveys occurred prior to full implementation of the statewide ASAM-based assessment tool and health IT improvements to support care coordination. Cohort 2 surveys are being fielded in FY2023-2024, after implementation. The target population is beneficiaries who initiated SUD treatment 2-3 months prior to selection for the baseline survey. Identification of the target population was done monthly based on Medicaid claims. Of the eligible population, a stratified sample was selected for recruitment to ensure adequate representation of all ten PIHPs.

The demographic characteristics of the 1,608 beneficiaries in Cohort 1 who completed both the baseline and follow-up phone surveys are in Table 5, with additional information in Attachment F.

Table 5. Demographic characteristics, Cohort 1 follow-up completers

	N	%
Age		
18-49 years	1,103	68.6%
50-64 years	486	30.2%
65 years or older	19	1.2%
Gender		
Female	819	50.9%
Male	789	49.1%
Race/Ethnicity		
Non-Hispanic White	1,158	72.0%
Non-Hispanic Black	312	19.4%
Hispanic	61	3.8%
All Other Groups	77	4.8%
FPL		
0%	1,140	70.9%
0.1-99.9%	318	19.8%
100% or higher	150	9.3%
Geographic Region (mapped to PIHP)		
1	96	6.0%
2	154	9.6%
3	175	10.9%
4	177	11.0%
5	257	16.0%
6	108	6.7%
7	251	15.6%
8	122	7.6%
9	100	6.2%
10	168	10.5%
Type of SUD Service at Identification*		
MAT	589	36.6%
Residential	228	14.2%
Outpatient	966	60.1%

* *More than one type of SUD service possible*

Phone survey administration – Cohort 1 baseline. We pilot tested the draft survey instrument for clarify and flow; we modified question wording and order based on pilot test results. We mailed recruitment materials to the selected beneficiaries to introduce the project, provide phone/text/email options to schedule an interview time, and to note the $25 incentive for completion. Trained interviewers made at least three attempts to contact selected beneficiaries by phone. Due to the substantial number of non-working phone numbers and bad addresses, we conducted monthly re-checks of Medicaid enrollment files, and recontacted selected beneficiaries who had new contact information.

Upon contacting selected beneficiaries, interviewers introduced the project, and stated that completing the interview was voluntary and that individual responses would be kept confidential. Interviewers requested permission to record the interview for quality assurance purposes; nearly all (99.4%) agreed to be recorded. At the completion of the survey, interviewers asked for agreement to recontact for the follow-up survey and recorded preferred contact methods. Survey respondents received a $25 gift card to compensate them for their time and phone minutes used to complete the interview. Median interview duration was 21 minutes; average duration was 23 minutes.

Phone survey administration – Cohort 1 follow-up. We mailed recruitment materials for the follow-up phone survey approximately six months after completion of the baseline survey; we also sent recruitment information by email or text message if those contact methods were suggested at baseline. We obtained updated contact information from Medicaid enrollment files. Trained interviewers made at least three attempts to contact selected beneficiaries by phone for the follow-up survey.

Upon making contact for the follow-up survey, interviewers introduced the project, and stated that completing the interview was voluntary and that individual responses would be kept confidential. Interviewers requested permission to record the interview for quality assurance purposes; nearly all (99.3%) agreed to be recorded. At the completion of the survey, interviewers asked for agreement to recontact for potential follow-up surveys and recorded preferred contact methods. Survey respondents received a $25 gift card to compensate them for their time and phone minutes used to complete the interview. Median interview duration was 19 minutes; average duration was 20 minutes.

Evaluation period

The evaluation period for Cohort 1 was March 2021 to March 2022; the period for Cohort 2 is expected to be January 2023 to February 2024. See Table 6 for fielding dates and response rates, where available. Survey questions asked about beneficiaries' experiences in the 6-12 months prior to the survey.

Table 6. Beneficiary phone interview cohorts

	Cohort 1	**Cohort 2**
Baseline	Fielded March 2021 to September 2021 N=2,210 (37% response rate)	Fielded January 2023 to July 2023 N=2,353
Follow-up	Fielded November 2021 to March 2022 N= 1,608 (79% response rate)	*Expected: August 2023 to March 2024*

Evaluation measures

Evaluation domains from the beneficiary phone surveys include the following:

Access to SUD treatment and recovery services

- Receipt of counseling or therapy; barriers to counseling or therapy
- Participation in peer support activities; provider recommendation for peer support
- Barriers to sticking with treatment

Overall facilitation of health care

- Having a primary care provider; barriers to accessing primary care
- Adequate information about treatment options, input into treatment decisions
- Assistance with arranging for health care services
- Provider knowledge about medical history
- Unmet healthcare needs

Overall health and well-being

Ability to accomplish things that want to do
Physical and mental health status
Days (in past 30) where poor physical or mental health limited usual activities
Employment status; barriers to employment
Housing status
Food insecurity

Analytic methods

Interviewers recorded responses using a computer assisted telephone interviewing software. We reviewed data entry files to ensure adherence to skip patterns. We listened to all available recordings to verify the accuracy of data entry, verify/modify categorization of open-ended responses, and document comments made in addition to direct responses to questions.

We generated initial frequencies for each fixed-choice item. We used frequencies of open-ended response categorizations to guide our thematic analysis. We returned to interview recordings to transcribe specific responses and reviewed those transcriptions to further understand key themes.

This Interim Evaluation Report includes unweighted descriptive results from Cohort 1 baseline and follow-up phone surveys. The quantitative results and summary of open-ended responses represent the views of beneficiaries during the pre-implementation period.

Methodological limitations

Our Cohort 1 response rates were slightly lower than the estimates in the evaluation design, and we had a higher proportion of bad addresses compared to prior phone surveys of Medicaid beneficiaries. A likely factor is MDHHS administrative changes during the COVID PHE. For example, county DHHS offices were closed to in-person services; the increased Medicaid enrollment added to the workload of administrative staff. During phone surveys, a considerable number of beneficiaries described an inability to contact their caseworker.

For the Cohort 1 baseline phone survey, respondents and non-respondents were similar in terms of PIHP region, income level, and race/ethnicity; males and individuals 18-49 were less likely to participate. There may be other differences between those who completed the survey and those who refused participation or could not be contacted. Detailed response rate analysis is found in Attachment F.

We offered the phone survey in English only. We had planned to include Spanish and Arabic but were unable to recruit bilingual interviewers. Beneficiaries whose preferred language is Spanish, Arabic, or other languages were unable to participate and are not represented in these results.

The phone survey instrument was designed to allow respondents to self-identify as needing or receiving services for SUD or mental health. Some respondents were reluctant to disclose this information; however, only a limited number of survey items required this disclosure.

As with any survey, some responses could be inaccurate due to misinterpretation of questions or limited ability to recall certain events. We tried to minimize this by pilot testing the survey items, giving interviewers suggested language to use in clarifying ambiguous responses, and including open-ended questions where participants could clarify the meaning of their responses.

Future analyses for Summative Evaluation Report

The Summative Evaluation Report will include the planned analyses comparing Cohort 1 vs Cohort 2, including weighted bivariate and multivariate analyses, and incorporating SUD treatment patterns observed in administrative claims.

D.2.6. State Reports

Data source

Cost reports are filed each year per legislative requirement and posted on the state website.[6] These reports reflect expenditures by funding source and by service category, statewide and for each PIHP.

The Department of Licensing and Regulatory Affairs (LARA) has oversight for users of the state's prescription drug monitoring program (PDMP), a component of the state's high-risk management strategy. LARA generates counts of approved PDMP users, overall and by user role.

This data source is used to examine evaluation questions 7 and 10.

Target and comparison populations/Study population

The target population is the state of Michigan population.

Evaluation period

The evaluation period for data from state cost reports is FY2018 to FY2022. The evaluation period for PDMP user data from LARA is FY2018 to FY2023.

Evaluation measures

Evaluation measures drawn from state cost reports:

- Total dollars reported as spent on SUD, statewide, overall and by service category
- Proportion of PIHP spending by service category

Evaluation measures drawn from the LARA reports:

- Number of approved PDMP users

Analytic methods

Descriptive review of data year over year.

Methodological limitations

A limitation of state cost reports is that they only reflect spending in the public PIHP SUD system of care, and do not reflect SUD services provided through a beneficiary's physical health benefit. MDHHS officials indicated that they currently do not have a report that combines SUD-related spending for both the physical and behavioral health components.

Comparison of state cost report data across years – both for statewide data and for PIHP-level data – is challenging due to the availability of different funding streams in different fiscal years (e.g., COVID PHE funds), as well as changes in definitions and categories over time. We found isolated errors and internal inconsistencies in the cost reports; when possible, we used other data within the same report to verify or correct the data points in question.

[6] Information regarding state cost reports can be found at: https://www.michigan.gov/mdhhs/inside-mdhhs/budgetfinance/boilerplate

Future analyses for Summative Evaluation Report

The Summative Evaluation Report will include state cost reports and LARA data through FY2024.

E. Methodological Limitations

Methodological limitations specific to each data source are described above in Section D.2. In some cases, these limitations caused a lack of data for specific evaluation measures; in other cases, the limitations contributed to changes in evaluation measure definitions and/or sources. The changes are outlined below.

Hypothesis 1:

- Proportion of beneficiaries with ASAM-consistent assessment (annual) – *data not available*
- Proportion of beneficiaries with ASAM-consistent recommendation for treatment placement (annual) – *data not available*

  During the COVID PHE, the state paused/altered some aspects of PIHP site visits and audits, while PIHPs paused/altered some aspects of SUD provider audits. In years prior to and after the PHE, audits focused on providing technical assistance, rather than documenting these data elements. In place of these measures, we included relevant findings from key informant interviews.

- Number of providers trained on selected assessment tool (annual) – *data not available in all years*

  The state arranged for all providers in the public SUD system to complete training before the implementation date. This initial training effort required provider registration, so participation could be tracked. Subsequently, the training moved to a free, online, self-paced format that does not require registration; thus, participation cannot be tracked. While PIHPs must ensure that their contracted provider organizations have adequately trained staff, they do not count the number of providers newly trained in this tool. Therefore, FY2021 is the only year with accurate counts of ASAM Continuum training. There is no replacement for this measure; however, we added information about training through a state-sponsored conference.

Hypothesis 2:

- Number of beds licensed for SUD residential treatment (annual) – *data not available*

  LARA does not release an annual report on licensed SUD residential treatment beds and, as noted in Section D.2.3, LARA data cannot be used to derive an annual measure. In place of this measure, we described an MDHHS effort to document the number of residential beds in FY2020 and FY2023.

Hypothesis 4:

- Experiences of primary care providers and ED staff with new health IT tools – *data not available*

  The LARA decision to limit the expansion of CareConnect360, as noted in Section B.4, meant that primary care and ED providers did not have access to this tool. There is no replacement for this measure.

Hypothesis 6:

- Usual source of primary care (beneficiary report) – *measure modified*

  Our initial beneficiary survey asked the question as described in the evaluation plan. However, during pilot testing, many beneficiaries expressed confusion about how to answer, noting that they would go to their PCP for some things and their SUD provider for other things. We thus modified the question to ask specifically if they have a primary care provider, and report results of this modified question.

F. Results

The results presented in this Interim Evaluation Report include data available to the evaluation team and summarized as of August 2023. The results are organized by evaluation topic and corresponding hypotheses and research questions. Data sources are described above in Section D.2.

F.1. Evidence-Based Standards for Assessment and Placement

Hypothesis 1**:** Implementation of Michigan's Behavioral Health Demonstration Waiver will increase utilization of evidence-based standards for patient assessment and treatment placement.

Primary research question 1: Does the proportion of beneficiaries assessed and recommended for placement using evidence-based standards increase over the demonstration period?

- ***Subsidiary research question 1a****:* Are there differences by PIHP and by assessment tool in provider utilization of evidence-based standards for assessment and treatment placement?
- ***Subsidiary research question 1b:*** What are key barriers and facilitators to evidence-based SUD/OUD assessment and placement?

Data sources used: Key informant interviews

Results

In consultation with PIHP leadership, state officials selected the ASAM Continuum as the standard assessment tool for adults, with the GAIN-I Core identified as the standard tool for youth. The state communicated to PIHPs the expectation that all contracted SUD providers are required to be trained in and use the ASAM Continuum as of October 2021. Key informant interviews confirmed that prior to this statewide requirement, SUD providers were using a variety of assessments; PIHP officials could not confirm that assessments were fully aligned with ASAM standards.

The state supported the implementation of the new ASAM Continuum requirement. They contracted with a vendor to embed the ASAM Continuum software within each PIHP's electronic medical record (EMR). In FY2021 the state facilitated a series of virtual trainings with 1,275 SUD providers which featured a combination of live training and asynchronous learning. Starting in FY2022, the ASAM Continuum training was changed to an online, self-paced format; there is no registration requirement, but the vendor estimates that approximately 50 providers completed the training in FY2022. Additionally, training was delivered to 100 providers in both FY2022 and FY2023 through the ASAM Continuum Clinical Hours hosted at the annual Substance Use and Co-Occurring Disorder Conference.

In post-training evaluations, 70% of providers reported that the ASAM Continuum will be *very useful* (70%) or *somewhat useful* (27%) to their SUD assessment and treatment recommendations. SUD providers considered the virtual training as a good introduction to the ASAM Continuum and emphasized that they would need much more training and practice to become comfortable using the tool in practice. PIHP officials reported that they devoted substantial effort throughout FY2022 to providing guidance and technical support, both responding to provider queries and using proactive approaches (e.g., reviewing common issues at provider meetings, conducting quality reviews, disseminating tip sheets and frequently asked question documents) to help providers better understand how to complete the assessment.

During FY2023 provider audits, all PIHPs confirmed that all contracted providers are using the ASAM Continuum as the assessment tool for adults. Interviews with SUD providers and PIHP officials identified several ongoing challenges:

- *Time to complete the assessment*. SUD providers agreed that the time to complete the ASAM Continuum assessment had decreased as they became more familiar with the tool, but over half of SUD providers reported that assessments routinely took more than an hour. PIHP officials confirmed this view. Most PIHPs have increased the reimbursement rate for assessments and/or allow providers to bill for another session to complete the assessment.
- *Administrative inefficiency.* Although the ASAM Continuum is embedded within the EMR of the PIHP, it is typically not embedded within the EMR of the SUD provider organization. SUD providers report that this causes administrative redundancy such as double entering information in two systems and/or having to upload documents. SUD providers who work with more than one PIHP report challenges with different administrative processes to access and complete the ASAM Continuum, while some PIHP officials report issues with incomplete or unsigned assessments. Some PIHPs have struggled to coordinate technical assistance between the ASAM Continuum vendor and their EMR vendor.
- *Need for supplemental assessment tools*. SUD providers and PIHPs agreed that the ASAM Continuum does not include all components (e.g., trauma assessment) required for accreditation. Several provider organizations have developed add-on modules that include the missing components, as well as crosswalks between ASAM Continuum components and accreditation requirements. Many providers expressed a desire for the state and/or PIHPs to endorse a uniform comprehensive tool that would meet all requirements.

Two important aspects were particularly vexing for many SUD providers:

- *Sharing ASAM Continuum assessments.* Many SUD providers expressed some confusion about the process of sharing ASAM Continuum assessments (with patient consent) with other provider organizations. PIHP officials emphasized that when someone changes to a different level of care, the transferring provider should share relevant information, including the ASAM Continuum assessments. However, SUD providers note that they often get new clients who are not directly transferred from another provider; clients may be unsure about whether and when they completed the ASAM Continuum assessment; and messages to the previous SUD provider go unanswered. SUD providers suggest that PIHPs could and should facilitate the sharing of ASAM Continuum assessments.
- *Reassessment.* SUD providers gave inconsistent responses on when to do another ASAM Continuum assessment. Some felt the full assessment should be redone when an individual moves to a different level of care; others disagreed. Several PIHP officials described "mini-assessments" as appropriate for a level of care change, and that the ASAM Continuum software facilitated such updated assessments because it pre-filled many elements; few SUD providers mentioned updated or mini-assessments as an option.

Placement Recommendations. A demonstration project goal is to enhance the use of ASAM criteria for treatment placement, so individuals receive treatment at recommended levels of care. However, determining whether a placement is consistent with ASAM criteria goes beyond matching the recommended ASAM Continuum level to the actual placement. ASAM recommendations direct providers to consider their own clinical judgment as well as patient motivation.[7]

[7] https://www.asam.org/asam-criteria/criteria-intake-assessment-form

SUD providers indicated it is not uncommon for their clinical judgment to differ from the ASAM Continuum's assessment. Factors that may contribute to differences include the ASAM Continuum's focus on the last 30 days and limited inclusion of trauma or long-term treatment. Providers also noted that the ASAM Continuum tends to recommend a higher level of care, which clients may not be willing to accept. They also note instances where the ASAM levels don't reflect services such as recovery management and other community-based support models, which offer intensive services while being more acceptable to clients.

When a client begins treatment at a level that differs from the ASAM Continuum recommended level of care, providers are instructed to document the reason within the assessment software. SUD providers and PIHP officials report that common reasons are the provider's clinical judgment and patient refusal to accept higher levels of care. However, SUD provider interviews suggest that availability of services also plays a role; for example, a provider noted that because options are limited at level 3.7, they recommend 3.5 with referrals and coordination on other issues.

Audits of SUD provider records are intended to assess whether placement is consistent with ASAM level of care recommendations. The state divests the responsibility for provider audits to the PIHPs; PIHP audit protocols vary and include only a sample of records. According to PIHP officials, recent audits have focused more on whether the client's record has completed ASAM Continuum assessment; this varied by PIHP, ranging from 77%-100%. Four PIHPs indicated their FY2023 audits examined whether the treatment placement differed from the ASAM Continuum recommendation, focusing on whether there was documentation that justified the decision.

Officials from several PIHPs expressed interest in a more systematic analysis to compare the level of care recommended by the ASAM Continuum assessment with the actual treatment placement, to examine whether provider availability and capacity are impeding placement at recommended levels. Some PIHP officials believe that MDHHS officials have access to this type of data; MDHHS officials believe that PIHPs can conduct this type of analysis for their own clients but may need technical assistance.

Summary of response to primary research question 1

The state implemented a statewide requirement to use the ASAM Continuum as the standard assessment tool for adults seeking care in the public SUD system and facilitated SUD provider training prior to statewide implementation. Findings from key informant interviews indicate that there are opportunities to refine health IT structures to reduce administrative barriers and to offer consistent guidance to providers on repeat assessments. Providers are combining ASAM Continuum recommendations with client input and their own clinical judgment to make decisions about placement for SUD treatment. Efforts may be warranted to examine the extent to which limited availability of services impedes treatment at recommended levels of care.

F.2 Expanding Availability and Access to SUD/OUD Levels of Care

Hypothesis 2: Implementation of Michigan's Behavioral Health Demonstration Waiver will expand availability of critical levels of SUD/OUD treatment, including residential treatment, withdrawal management, and MAT.

Primary research question 2: Does the number of qualified SUD providers increase over the demonstration period?

> ***Subsidiary research question 2a:*** Are there differences by PIHP region in the number of qualified SUD providers?
>
> ***Subsidiary research question 2b:*** What strategies are successful, and what are key barriers, to hiring and retaining SUD/OUD providers?

Data sources used: Provider enrollment database / state monitoring reports, administrative claims, state licensing data, and key informant interviews

Results

SUD Providers. The overall number of Medicaid-enrolled SUD providers increased slightly FY2020 to FY2022, but the rate per 1,000 beneficiaries overall and among those with an SUD diagnosis has decreased (see Table 7). This trend is likely related to the expanded Medicaid enrollment during the COVID PHE.

Table 7. Medicaid-enrolled SUD providers by fiscal year

Medicaid-enrolled SUD Providers (all types)	**FY2020**	**FY2021**	**FY2022**
Number	19,128	19,576	19,468
Number per 1000 beneficiaries	10.19	9.89	9.13
Number per 1000 beneficiaries with an SUD diagnosis	114.87	110.19	106.75

Medication Assisted Treatment Providers. The number of MAT providers, as well as the rate per Medicaid beneficiary, has increased consistently over the past five years, both for providers of buprenorphine or methadone, as well as for a broader definition that includes naltrexone (Table 8).

Table 8. MAT providers across fiscal years

	FY2018	**FY2019**	**FY2020**	**FY2021**	**FY2022**
Buprenorphine/Methadone Providers					
Number with at least one claim	693	1,014	1,475	1,821	2,242
Rate per 1,000 Medicaid beneficiaries	0.37	0.54	0.79	0.92	1.05
Rate per 1,000 Medicaid beneficiaries with an SUD diagnosis	3.98	5.83	8.86	10.25	12.29
All MAT Providers (includes naltrexone)					
Number with at least one claim	2,563	3,068	3,590	4,319	4,951
Rate per 1,000 Medicaid beneficiaries	1.36	1.64	1.91	2.18	2.32
Rate per 1,000 Medicaid beneficiaries with an SUD diagnosis	14.73	17.65	21.56	24.31	27.15

Figure 2 presents the combination of MAT types provided to at least one Medicaid beneficiary during the fiscal year. While the most pronounced increase was in the number providers administering or

prescribing naltrexone only, there were noticeable increases across years in the number of providers prescribing buprenorphine alone or in combination with another MAT type.

Figure 2. Types of MAT prescribed/administered, among all MAT providers

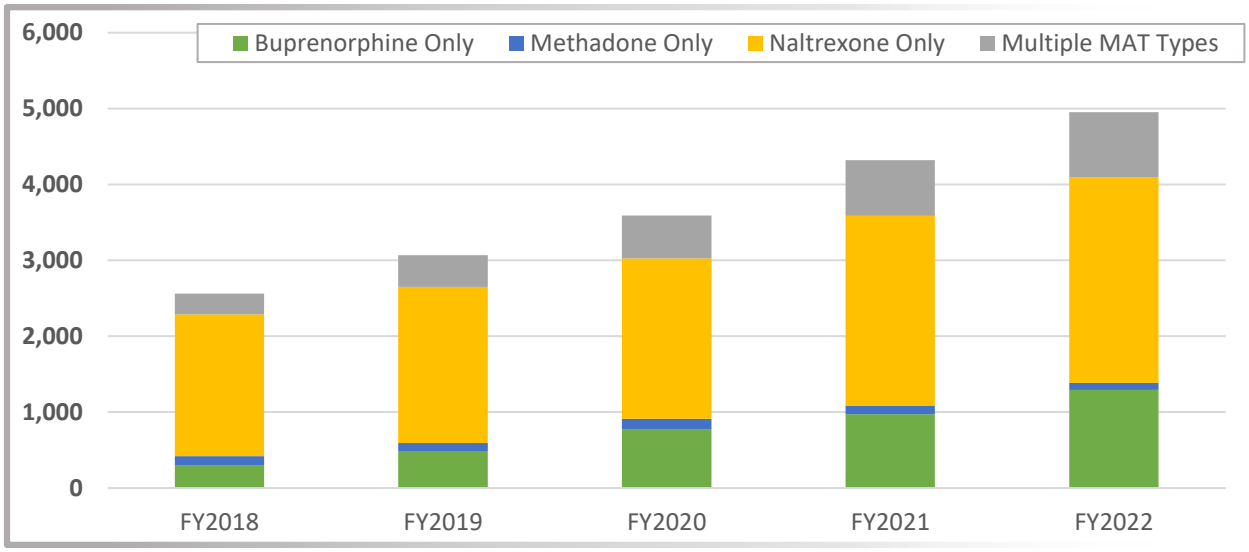
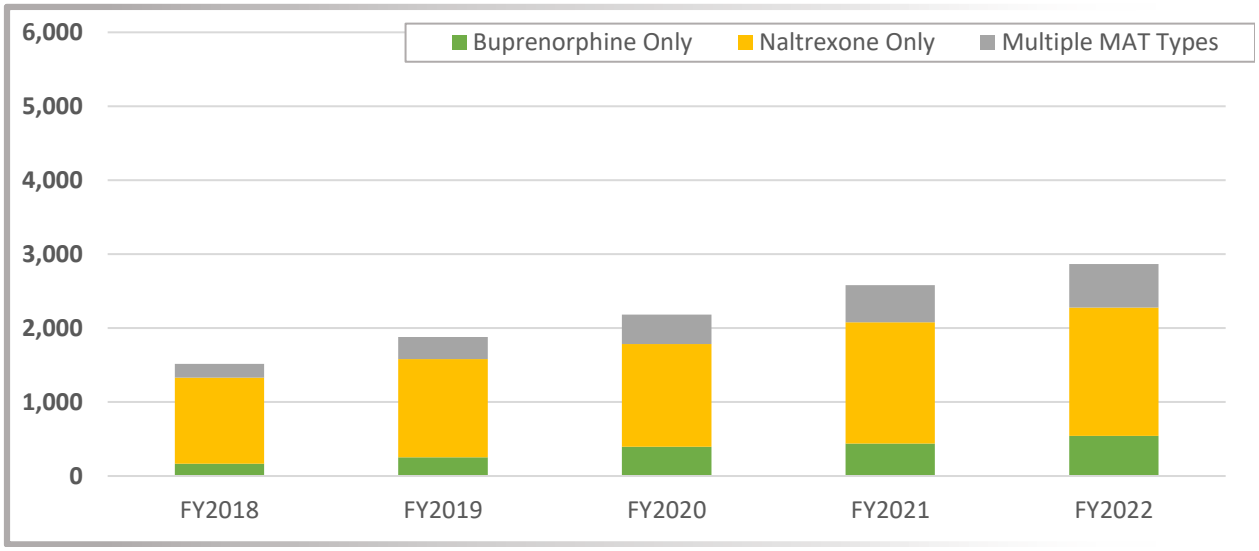


Figure 3 demonstrates the steady increase in the number of primary care providers who prescribed or administered MAT, as well as the type of MAT prescribed or administered. The predominant MAT type among primary care providers continues to be naltrexone, but the proportion prescribing buprenorphine increased across years.

Figure 3. Types of MAT prescribed/administered, among primary care providers



Interviews with PIHP officials confirmed that outside of Opioid Health Homes, PIHPs are not aware of which primary care sites are offering MAT, and there is no data source that tracks this information. Thus, when assessing availability of MAT providers within their region, PIHPs are not well-positioned to incorporate options outside the PIHP system of care.

Residential beds. State officials confirmed the challenge of maintaining accurate data on SUD residential beds. In FY2020, BHDDA officials attempted to document the number of beds at licensed SUD residential/residential detoxification providers, identifying 124 provider-sites with 5,574 residential beds and 378 residential detox beds. August 2023 data from LARA BCHS shows 109 residential providers, with 44 providers also offering residential detoxification. LARA officials reported that bed count is determined at the local level, so there is no statewide tracking/count. Of note, not all licensed providers serve Medicaid beneficiaries, so these counts overstate the availability of services under Medicaid.

SUD Provider Distribution by PIHP and by ASAM Level of Care. PIHPs are responsible for maintaining adequate networks of contracted providers at all ASAM levels of care for the public SUD system of care. Several data sources offer different measures of PIHP provider networks.

According to the state's CRM database, the number of SUD providers contracting with at least 1 PIHP increased from FY2020 to FY2022 at every level of care except withdrawal management. All ten PIHPs had at least one contracted provider at outpatient levels of care, but some had no contracted providers at certain levels of residential care and withdrawal management. Table 9 presents contracted provider data by ASAM levels of care.

Table 9. CRM data on contracted provider data by ASAM levels of care

	# of SUD providers contracting with ≥1 PIHP		# of PIHPs (out of 10) with ≥1 contracted provider
	FY2020	FY2022	FY2022
Outpatient Services			
0.5 - Early Intervention	93	116	10
Level 1 - Outpatient Services	266	315	10
Level 2.1 - Intensive Outpatient Services	99	121	10
Level 2.5 - Partial Hospitalization Services	16	22	10
Residential services			
Level 3.1 - Clinically Managed Low-Intensity Residential Services	20	32	10
Level 3.3 - Clinically Managed Population-Specific High Intensity Residential Services	9	13	9
Level 3.5 - Clinically Managed High Intensity Residential Services	46	64	10
Level 3.7 - Medically Monitored High-Intensity Inpatient Services	8	10	9
Withdrawal services			
Level 1-WM - Ambulatory Withdrawal Management without Extended On-Site Monitoring	6	6	5
Level 2-WM - Ambulatory Withdrawal Management with Extended On-Site Monitoring	2	2	9
Level 3.2-WM - Clinically Managed Residential Withdrawal Management	17	19	10
Level 3.7-WM - Medically Monitored Inpatient Withdrawal Management	14	19	9

In FY2022 the state contracts section conducted a detailed review of PIHP-contracted providers at each level of care. By the FY2023 follow-up review, several PIHPs expanded their contracts for FY2023, and

additional PIHPs noted that they have opened Requests for Proposal and/or are working with existing providers to expand to additional levels of care (see Table 10).

Table 10. Contracted provider data from CRM and state contracts section by ASAM levels of care

	# of PIHPs (out of 10)		
	with ≥1 contracted provider (CRM)	with ≥1 contracted provider located within their region (State contracts section)	
	FY2022	FY2022	FY2023
Outpatient Services			
0.5 - Early Intervention	10	8	9
Level 1 - Outpatient Services	10	10	9
Level 2.1 - Intensive Outpatient Services	10	9	10
Level 2.5 - Partial Hospitalization Services	10	5	8
Residential services			
Level 3.1 - Clinically Managed Low-Intensity Residential Services	10	10	10
Level 3.3 - Clinically Managed Population Specific High Intensity Residential Services	9	8	9
Level 3.5 - Clinically Managed High Intensity Residential Services	10	10	9
Level 3.7 - Medically Monitored High-Intensity Inpatient Services	9	9	9
Withdrawal services			
Level 1-WM - Ambulatory Withdrawal Management without Extended On-Site Monitoring	5	4	6
Level 2-WM - Ambulatory Withdrawal Management with Extended On-Site Monitoring	9	5	5
Level 3.2-WM - Clinically Managed Residential Withdrawal Management	10	8	10
Level 3.7-WM - Medically Monitored Inpatient Withdrawal Management	9	10	9

SUD provider hiring and retention. Challenges with provider hiring and retention were consistent themes in interviews with both PIHP officials and SUD providers. The most cited barrier to hiring and retention was compensation; SUD providers have higher-paying options in physical health and behavioral health systems. COVID exacerbated the situation, with staffing shortages forcing some providers to operate at less than capacity. PIHPs offered provider stabilization and staff retention payments during the PHE and expressed concern that staff retention will drop when those payments are discontinued.

Burnout was often mentioned as a cause of staff turnover, due both to the challenging population and to administrative burdens. SUD providers mentioned specific strategies such as growth and leadership opportunities, schedule flexibility when possible, and trauma training for staff. Regulatory requirements at both the individual (e.g., state certification requirements for counselors and peer recovery coaches) and organizational level (e.g., staffing requirements for residential treatment, drug testing requirements for providers with more than 100 patients receiving buprenorphine) were cited as causing financial and administrative burdens. SUD providers and PIHP officials expressed appreciation for recent changes easing some of these regulations.[8]

[8] https://michiganopioidcollaborative.org/wp-content/uploads/2023/07/BCHS-SUD-Rules-FAQs-2023.pdf

Summary of response to primary research question 2

The number of SUD providers, including those offering medication assisted treatment, has increased since the start of the demonstration project. Challenges remain with uneven access to all levels of SUD care across the ten PIHP regions, particularly for residential and withdrawal management. Additional years of data are needed to evaluate trends across all levels of SUD care.

Hypothesis 3: Implementation of Michigan's Behavioral Health Demonstration Waiver will increase utilization of SUD treatment.

***Primary research question 3*:** Does utilization of SUD treatment increase over the demonstration period?

> ***Subsidiary research question 3a*:** Are there differences by PIHP region in utilization of SUD treatment?
>
> ***Subsidiary research question 3b*:** What are key barriers and facilitators to beneficiary utilization of recommended SUD treatment?

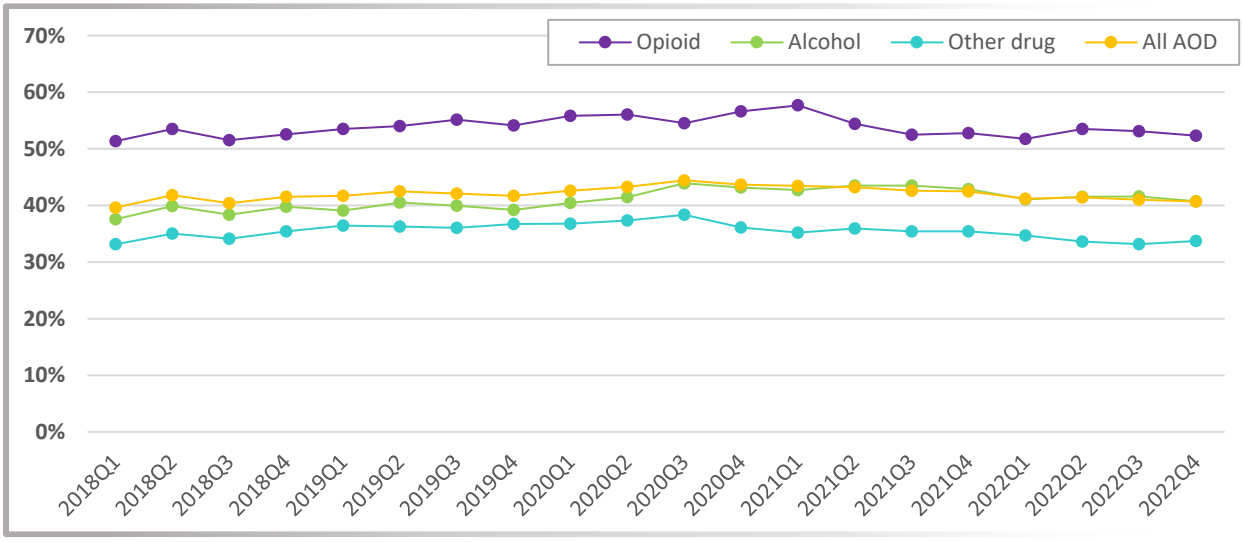
Data sources used: Administrative claims, key informant interviews, and beneficiary phone surveys

Results

Overall results from administrative data are presented here, while stratified and multivariate results are presented in Administrative Data Appendix (Attachment E).

Initiation and engagement. Administrative data showed small quarterly fluctuations in the proportion of beneficiaries who initiated treatment within 14 days of a new diagnosis of AOD; beneficiaries diagnosed with OUD had consistently higher initiation than those diagnosed with alcohol use or other drug disorders (Figure 4).

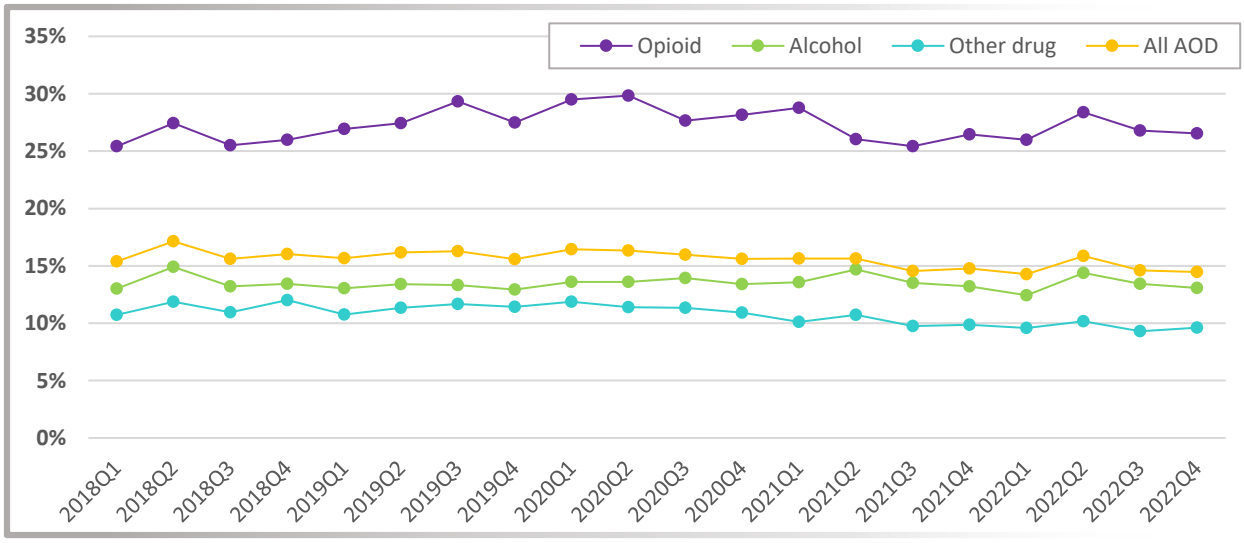
Figure 4. Initiation of treatment among beneficiaries with a new episode of AOD, by SUD type



Multivariate analyses found initiation was higher among beneficiaries over 50 years, males, and those receiving services through the PIHP system, and lower among Black and Hispanic beneficiaries and those with SUD diagnoses other than OUD (Appendix E Table H3-1).

Administrative data demonstrated small fluctuations in the proportion of beneficiaries who had engagement with treatment through two or more additional services (Figure 5); beneficiaries diagnosed with OUD had higher levels of engagement.

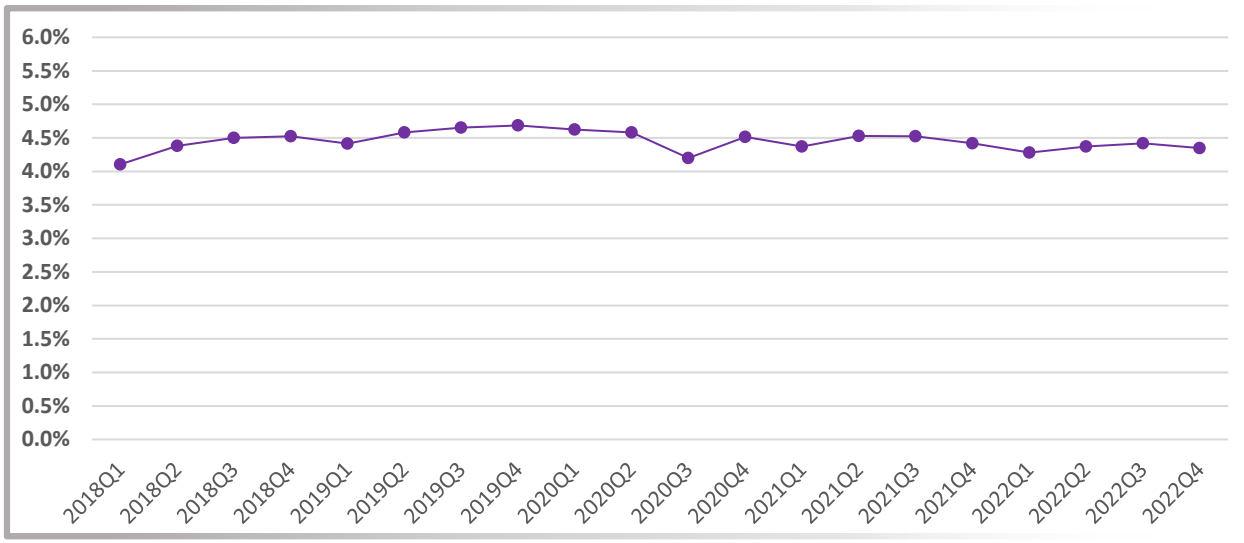
Figure 5. Engagement of treatment among beneficiaries with a new episode of AOD, by SUD type



Multivariate analyses found engagement was higher among males and those receiving PIHP services, and lower among Black and Hispanic (vs White) beneficiaries, those with AUD or other SUD diagnoses (vs OUD), and those over 50 years (vs 18-49 years) (Appendix E Table H3-1).

Receipt of any SUD treatment. The proportion of beneficiaries receiving any SUD treatment dropped during the initial months of the COVID PHE but then rebounded to similar levels as pre-COVID (Figure 6).

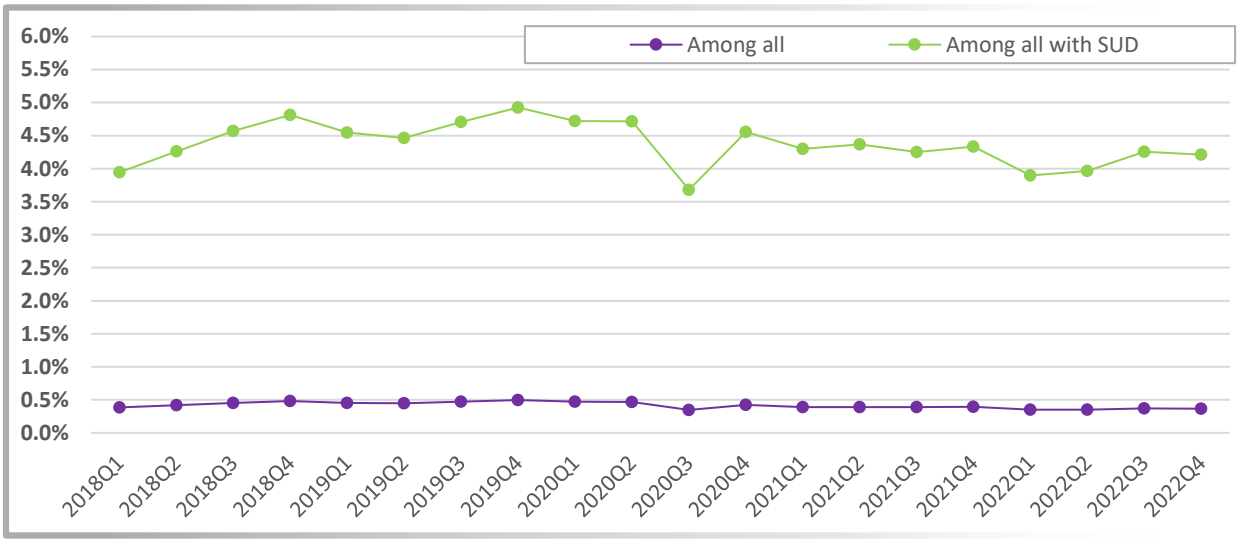
Figure 6. Proportion of beneficiaries receiving any SUD treatment



Multivariate analyses found receipt of SUD treatment was higher among males, those receiving PIHP services, those 50-64 years (vs 18-49 years) and lower among Black and Hispanic (vs White) beneficiaries and those over 65 years (vs 18-49 years) (Appendix E Table H3-2).

Receipt of residential SUD treatment. The proportion of beneficiaries receiving residential SUD treatment saw a pronounced drop in utilization during the initial months of the COVID PHE with an immediate rebound (Figure 7). In multivariate analysis focused on beneficiaries with an SUD diagnosis, receipt of residential treatment was higher among males, those receiving PIHP services, those 50-64 years (vs 18-49 years), and Black (vs White) beneficiaries, and lower among Hispanic (vs White) and those over 65 years (vs 18-49 years) (Appendix E Table H3-4).

Figure 7. Proportion receiving residential SUD treatment, among all adult Medicaid beneficiaries and among beneficiaries with an SUD diagnosis within the prior year



Among beneficiaries receiving residential treatment, the average length of treatment showed a steady decline from FY2018 to FY2022 (see Table 11). While the proportion of those with very short stays (0-3 days) declined, and the proportion with stays of ≥15 days increased, from FY2018 to FY2019, that trend did not continue through the COVID PHE.

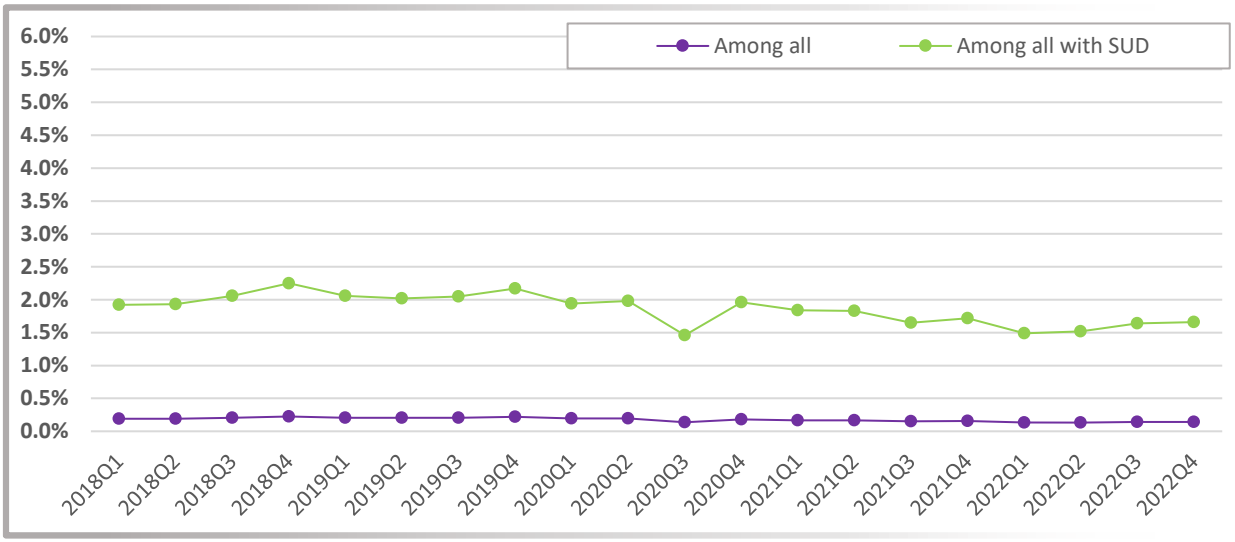
Table 11. Average Length of Residential SUD Treatment (days)

Fiscal year	Average length (days)	Proportion with length of stay lasting		
		0-3 days	4-14 days	15+ days
2018	13.85	21.40%	32.10%	46.50%
2019	13.50	20.87%	32.07%	47.07%
2020	13.19	22.06%	32.83%	45.11%
2021	13.10	24.06%	32.53%	43.40%
2022	13.04	22.56%	32.36%	45.08%

In stratified analyses, longer length of residential stays was observed for beneficiaries older than 65 years (Appendix E Table H3-6) and those receiving PIHP services (Appendix E Table H3-9).

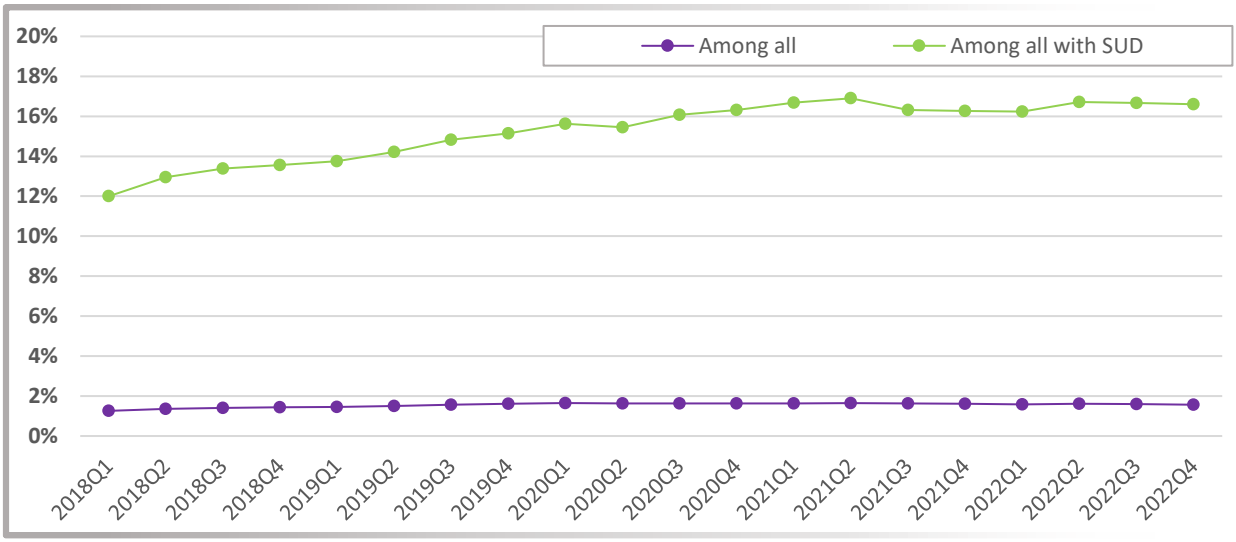
Receipt of withdrawal management services. The proportion of beneficiaries receiving withdrawal management services saw a pronounced drop in utilization during the initial months of the COVID PHE and never returned to pre-PHE levels (Figure 8). In multivariate analysis, receipt of residential treatment was higher among males and lower among Black and Hispanic (vs White) beneficiaries, those ≥50 years (vs 18-49 years), and those with AUD or other SUD diagnoses (vs OUD) (Appendix E Table H3-12).

Figure 8. Proportion receiving withdrawal management services, among all adult Medicaid beneficiaries and among beneficiaries with an SUD diagnosis within the prior year



Receipt of medication assisted treatment (MAT). Unlike other administrative data measures, the proportion of beneficiaries with SUD who received MAT increased through most of the demonstration period (Figure 9).

Figure 9. Proportion receiving MAT, among all adult Medicaid beneficiaries and among beneficiaries with an SUD diagnosis within the prior year



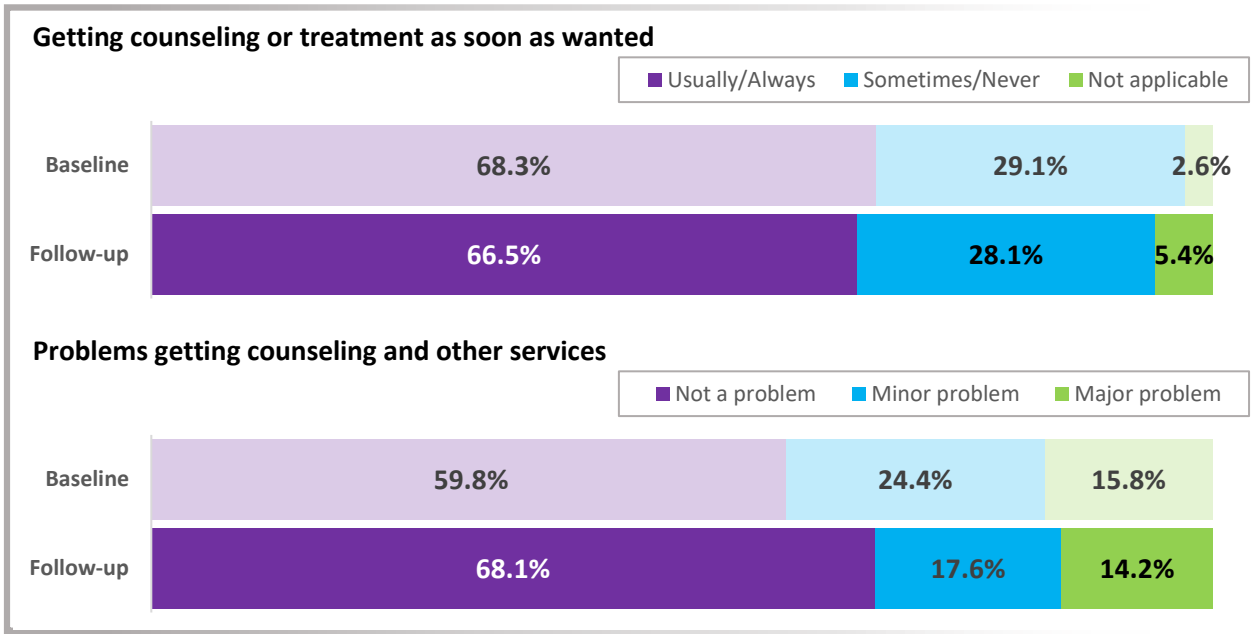
In multivariate analysis of beneficiaries with an SUD diagnosis, receipt of MAT was higher among those receiving PIHP services, and lower among males, Black and Hispanic (vs White) beneficiaries, those over 50 years (vs 18-49 years), and those with AUD or other SUD (vs OUD) (Appendix E Table H3-14).

PIHP and provider experiences facilitating residential treatment. Interviews with PIHPs and SUD providers confirmed that the availability of residential care varies by location, with estimated access ranging from on-demand to waits of 2 weeks or more. In areas without a residential provider, transportation often impedes a person's ability to access residential care. Some residential providers have been unable to operate at full capacity due to staffing shortages. Frontline staff working at regional intake centers and SUD providers trying to get clients to a higher level of care described a burdensome process of getting PIHP authorization for residential treatment, identifying the client's willingness to begin residential treatment, calling residential providers to find an open bed, and identifying transportation options. Frontline staff also noted that lack of clinician availability can delay scheduling of comprehensive assessments up to two weeks, which in turns delays the request for PIHP authorization; this can impact the client's resolve to follow through with treatment.

The state's health IT strategy to facilitate referral to residential treatment is Open Beds. Many PIHP officials expressed skepticism about the feasibility of centralized, real-time referral for SUD residential treatment. They noted that bed availability changes minute to minute; that it is difficult to predict whether or when patients will show up; and that PIHPs do not contract with all residential providers. Officials from two PIHPs felt the centralized system could work if residential providers were required to maintain up-to-date information, while others felt that was infeasible.

Beneficiary experiences initiating treatment. In Cohort 1 phone surveys, a segment of beneficiaries indicated challenges getting counseling or treatment in a timely fashion (Figure 10).

Figure 10. Beneficiary report of treatment initiation experiences



Beneficiaries expressed frustration at their inability to find treatment services. Many described calling provider after provider, repeatedly hearing there was no availability or the provider did not accept

Medicaid. Many were confused about PIHP eligibility screening, especially when told they were "out of region" for SUD services. Some beneficiaries reported getting assistance from their health plan or from a county hotline or access center. When they finally were accepted, many were frustrated that they could not begin services immediately, describing delays in scheduling their assessment and/or initial visit.

Summary of response to primary research question 3

For most measures, quarterly administrative data did not demonstrate clear trends; the exception was a steady increase in the proportion of beneficiaries receiving MAT. Additional years of data are needed to determine whether the demonstration has resulted in increased utilization of SUD treatment. Beneficiaries described challenges finding providers who accept Medicaid and figuring out how to access services. The state's health IT initiative to facilitate access to residential treatment was viewed by most PIHP officials as not feasible.

F.3. Care Coordination and Transitions in Care

Hypothesis 4: Implementation of Michigan's Behavioral Health Demonstration Waiver will improve care coordination and transitions in care for beneficiaries with SUD/OUD.

Primary research question 4: Does care coordination for beneficiaries with SUD increase over the demonstration period?

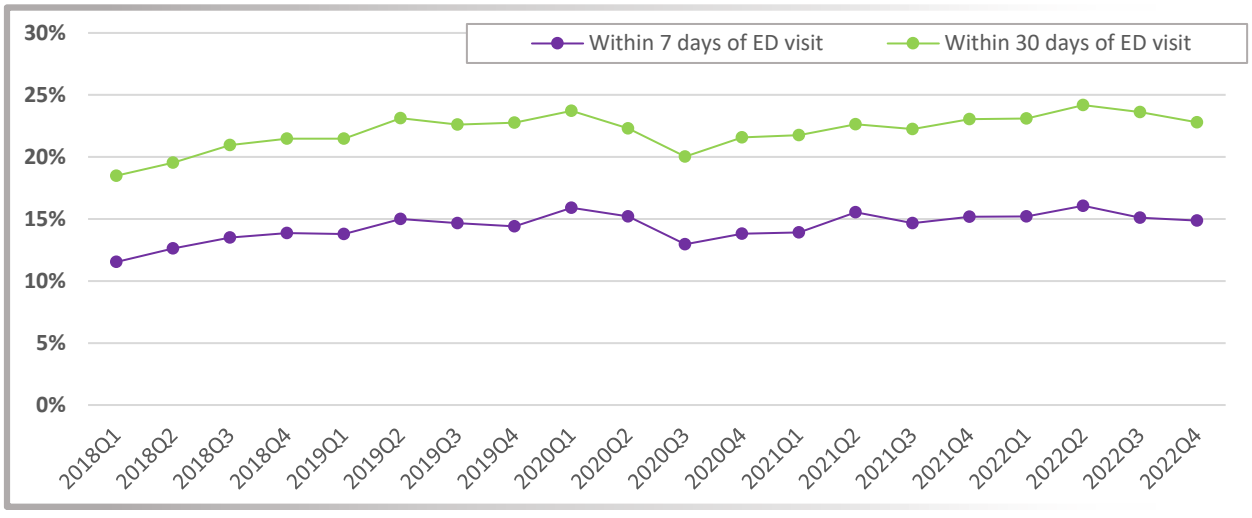
> ***Subsidiary research question 4a***: Are there differences by PIHP region in care coordination?
>
> ***Subsidiary research question 4b***: What strategies are successful to engage providers and beneficiaries in care coordination? What are key barriers?

Data sources used: Administrative claims, beneficiary phone surveys, state health IT office, and key informant interviews

Results

Follow up after ED visits for SUD. Administrative data demonstrated that rates of follow-up after ED visits for SUD decreased at the outset of the COVID PHE and increased slightly thereafter (Figure 11).

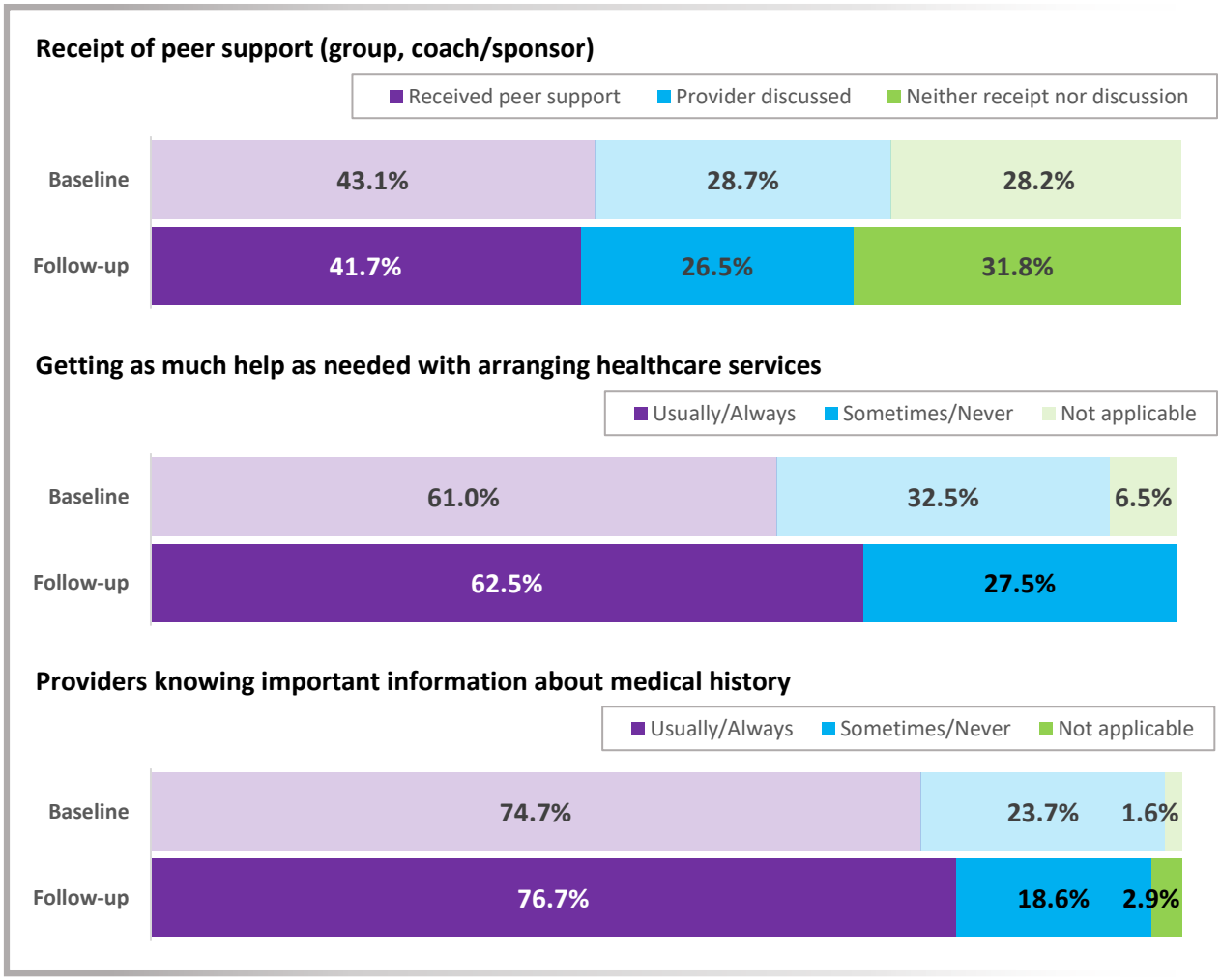
Figure 11. Proportion with follow-up within 7 and 30 days of an ED visit with an AOD diagnosis



Although beneficiaries with OUD demonstrated greater follow-up in stratified analyses (Appendix E Figure H4-10 and H4-11), multivariate results showed that beneficiaries with AUD had higher odds of follow-up after ED visits, adjusted for age, gender, and race/ethnicity, at both 7 and 30 days (Appendix E Table H4-2). Multivariate results also showed that beneficiaries 50-64 years (vs 18-49 years) had higher odds of follow-up, while Black and Hispanic (vs White) beneficiaries and those receiving services in the PIHP system had lower odds of follow-up after ED visits at both 7 and 30 days (Appendix E Table H4-2).

Beneficiary views on care coordination and support for transitions in care. Beneficiaries reported experiences related to care coordination and support in Cohort 1 phone surveys (Figure 12). Most had engaged with peer support services (groups and/or individual coach) or recalled that providers discussed peer support services in the months prior to the phone survey. Over one-quarter felt they did not consistently get the help they needed with arranging for healthcare services, which may reflect both SUD and other types of services. Roughly 1 in 5 felt their providers did not know important information about their medical history.

Figure 12. Beneficiary report of care coordination and support for transitions in care



PIHP and provider experiences with CareConnect 360. Expansion of CC360 is a key state strategy to improve follow-up after ED visits. Due to LARA interpretation of federal regulations (42 CFR Part 2) related to confidentiality requirements for SUD treatment data, the CC360 expansion was limited both in terms of what data are included and who has access to the data.

Monitoring Metrics show an increase in users of the CC360 SUD module from 29 in FY2021 to 92 in FY2022. As described in key informant interviews, CC360 SUD users are predominantly PIHP and CMHSP staff involved in integrated care initiatives with Medicaid health plans and utilization management staff working on population health metrics. The lag time for data, lack of event- or individual-level data, and limited amount of SUD data are impediments to broader use of CC360 at the PIHP level. PIHP officials suggested that CC360 could be more helpful with the addition of filters and custom report options. Several regions felt they needed more training and targeted technical assistance to be make use of the CC360 data.

Staff from OHH sites described alternate strategies to obtain data to facilitate follow-up after ED visits. One practice belongs to a regional health information exchange, which provides data on ED and hospital admissions, discharges, and transfer for their patients. Another site puts in the OHH release that data can be shared with the OHH provider, which has facilitated ED willingness to share information.

PIHP experiences with eConsent. In general, PIHP officials enthusiastically support initiatives to facilitate information sharing across providers. Three PIHPs have participated in the pilot test of the eConsent system, working with Michigan Health Information Network (MiHIN) Shared Services and specific providers. In its current iteration, PIHP officials indicated that the eConsent system requires time-consuming administrative action and coordination from the SUD provider with little in return; nothing is being "pushed out" to the beneficiaries' providers, even if the person has eConsent. In addition, the pilot eConsent system assumes a level of access to technology (cell phone or computer) and technical savvy that many beneficiaries with SUD do not have. PIHP officials felt it was unlikely that SUD providers would be willing to adopt a process that was so burdensome.

Summary of response to primary research question 4

Administrative data demonstrated a slight increase in follow-up after ED visits for SUD across the demonstration period. Key informants suggested state health IT initiatives to facilitate care coordination have had limited impact, while beneficiaries indicated room for improvement in facilitating transitions in care. Additional years of data are needed to determine whether the demonstration was effective in improving care coordination.

Hypothesis 5: Implementation of strategies to improve care coordination and transitions in care will result in increased duration of SUD/OUD treatment.

Primary research question 5: Does the duration of SUD/OUD treatment increase over the demonstration period?

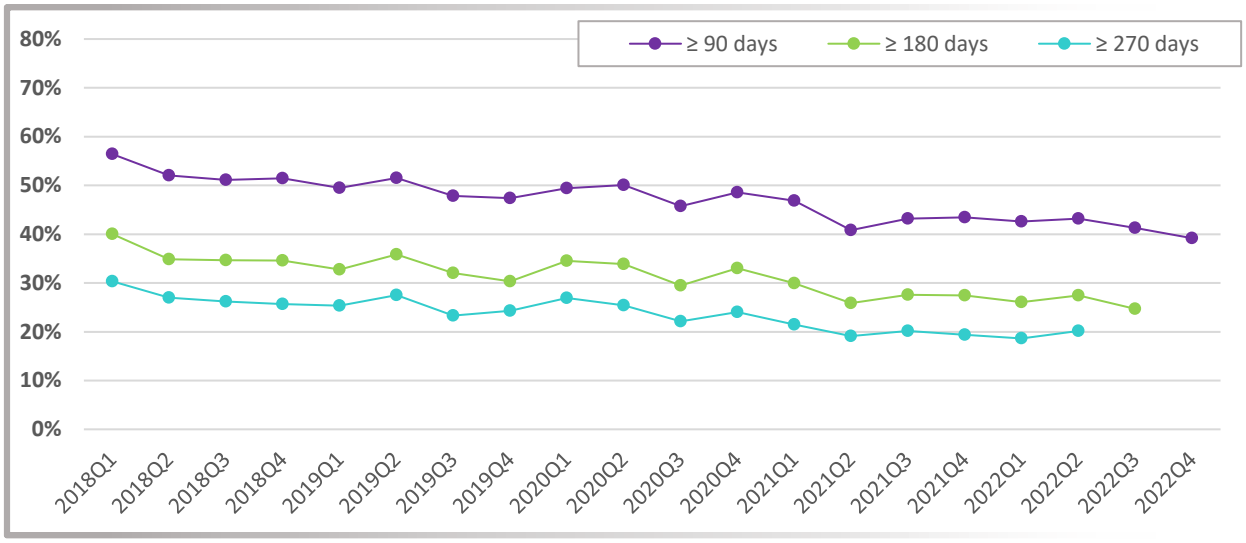
> ***Subsidiary research question 5a***: Are there region differences by PIHP in SUD/OUD treatment duration?

Data sources used: Administrative claims and beneficiary phone surveys

Results

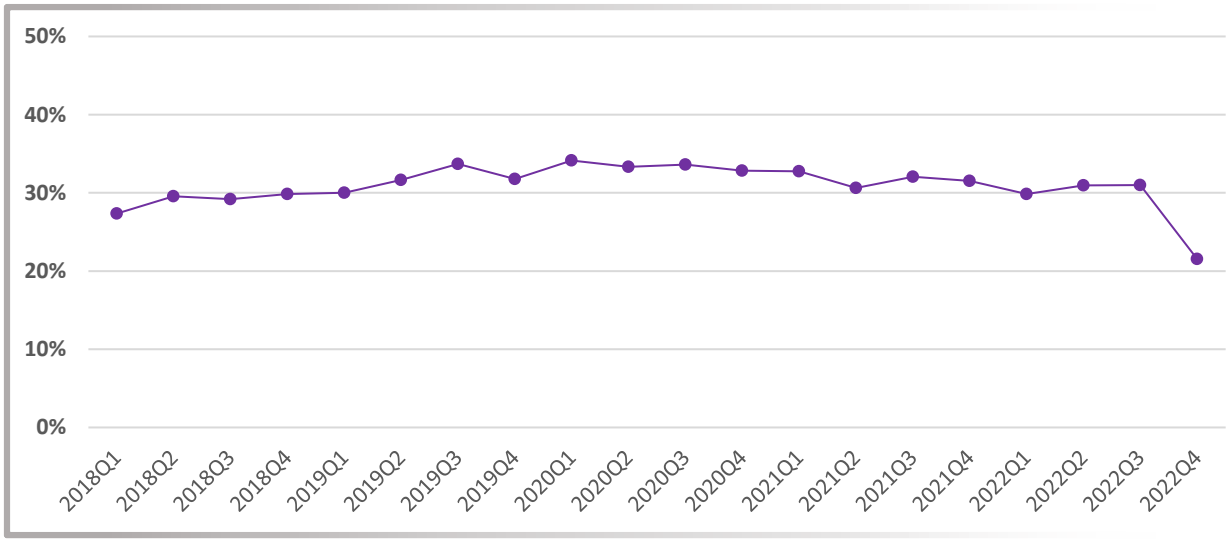
Continuity of pharmacotherapy for MOUD. Administrative data demonstrated that the proportion of beneficiaries who had continuous pharmacotherapy for medications for opioid use disorder (MOUD) through 90, 180 and 270 days declined (Figure 13). Multivariate analysis revealed lower adjusted odds of continuous MOUD pharmacotherapy among males, Black (vs White) beneficiaries, and those receiving PIHP services, and higher odds for those 50-64 years (vs 18-49 years) (Appendix E Table H5-1).

Figure 13. Proportion with continuous pharmacotherapy for MOUD



Continuation of counseling after SUD residential treatment. The proportion of beneficiaries who received counseling after residential treatment initially increased then declined over the course of the demonstration period (Figure 14).

Figure 14. Proportion with continuation of counseling after SUD residential treatment



Multivariate analysis revealed lower adjusted odds of continuous MOUD pharmacotherapy among males, Black (vs White) beneficiaries, and those receiving services through the PIHP system, and higher odds for those 50-64 years (vs 18-49 years) (Appendix E Table H5-1).

Beneficiary views on barriers to continuity. Cohort 1 follow-up phone surveys asked beneficiaries to rate factors that might have made it hard to stick with treatment over the prior 6 months. Only 25.6% reported no problems. The most frequent factor rated as a major or minor problem was transportation (34.6%), feeling like treatment wasn't helping (27.1%), and time conflicts due to work or school (25%).

In Cohort 1 follow-up phone surveys, 33.8% of beneficiaries indicated that they missed doses of their medication because they didn't get a refill on time. Many described difficulties with the pharmacy. For example, some pharmacies refuse to stock buprenorphine and will order it only when the beneficiary presents the refill; because refills cannot be given until near the end of the month's supply, the time it takes for the pharmacy to order and receive the buprenorphine often forces the beneficiary to go without their medication. Some beneficiaries reported being told at the pharmacy that their Medicaid insurance did not cover their MAT. Others described problems with their MAT provider, including inability to get an appointment with the provider to obtain the refill. Some beneficiaries felt their primary care provider had insufficient knowledge about MAT options and did not know how to deal with "typical" behavior of people with addictions, such as missed appointments or positive drug tests.

Beneficiaries noted that staff retention resulted in either delays to start counseling or being switched to a new counselor without their consultation (e.g., when their counselor quit or was reassigned). When the beneficiary had established a good rapport with the counselor, it felt especially demoralizing to start over with someone new. At both baseline and follow-up, more than one-quarter of beneficiaries were not fully confident that they could connect with a provider if they were having a crisis.

PIHP and provider views on transportation. PIHP officials confirmed longstanding challenges with transportation. For physical health care, beneficiaries arrange transportation assistance through their Medicaid Health Plan; beneficiaries get confused and frustrated when told that they cannot receive assistance for SUD care. Options for SUD transportation assistance are segmented through a separate process described by both providers and beneficiaries as difficult to understand. In FY2022-FY2023 interviews, officials from several PIHPs described the impact of new funding to expand transportation assistance options, such as allowing SUD providers to offer gas cards or rideshares, or purchase vehicles to transport beneficiaries to residential and outpatient carer. Some PIHPs encourage the use of peer recovery coaches as transportation providers. Recent changes in LARA regulations have prompted one PIHP to plan for a mobile methadone clinic. Still, PIHP officials worry that these efforts are insufficient, and that options continue to be limited in rural areas.

PIHP and provider experiences with peer recovery coaches. Both PIHPs and SUD providers emphasized that peer recovery coaches (PRCs) can play an important role in helping patients initiate, continue, and re-engage in treatment. PRCs are especially valuable to patient engagement because they have broad availability to patients by cell or email after hours; some PRCs assist with transportation or visit the patients at the hospital. PIHPs have deployed peer recovery coaches to stay connected with clients when they are waiting to begin services and to connect with clients after ED visits, to ensure they get follow-up care. However, PIHP officials described several regulatory barriers to hiring and deploying PRCs, including requirements to have received SUD treatment in the public system (since revoked), to obtain state-specific certification, and to have numerous years free of a felony conviction. The result is that PIHPs or SUD provider organizations either cannot hire certain individuals who may be effective

coaches, or they must use block grant or other flexible funding sources for PRCs who do not meet requirements for Medicaid reimbursement.

Cost was cited as another factor in hiring and deploying peer support. Some PIHPs and SUD providers said that limited ability to recoup costs is a factor in willingness to bring on peer recovery coaches. SUD providers in the ED noted that PRCs are very effective in convincing patients to seek SUD treatment but are not available on a consistent basis due to cost. Wages for PRCs are low and often do not include benefits. Current and former peer recovery coaches said that low wages and lack of benefits make it infeasible to view this role as a viable long-term job option.

Opioid Health Homes clinic administrators acknowledged they initially were unsure of how to best utilize PRCs, but eventually found ways to deploy PRCs, such as assisting with social determinants of health needs so therapists can focus on providing therapy, or having the first face-to-face engagement with new enrollees to start the process of developing a care plan. Clinic administrators have observed that their clinicians appreciate the PRCs as the point person between the patients and the doctor.

Justice-system barriers to treatment continuity. PIHP officials and SUD providers indicated that the justice system can impede treatment continuity; providers described their inability to communicate with clients while they are in jail, lack of cooperation from those working in justice-involved settings, and lack of understanding on the part of law enforcement officials on the needs of individuals requiring SUD treatment. Providers felt their interactions were largely dependent on individual decisions made by those working in local justice system settings, and that the ability of individuals to receive SUD screening, assessment and treatment was largely dependent on where they were jailed.

Several Community Mental Health Services Providers (CMHSPs) and PIHPs have a dedicated staff member working as a justice system liaison, which they felt improved their ability to serve individuals with SUD. Several PIHPs have attempted to place peer recovery coaches in jails and prisons but faced restrictions on individuals with criminal backgrounds. Some PIHPs noted efforts to work with the court system to facilitate access to treatment, but stigma toward SUD clients and negative attitudes about medication assisted treatment can impede buy-in from justice personnel.

Summary of response to primary research question 5

Administrative data indicated a decline in continuity of MOUD and counseling after residential treatment since the start of the demonstration period. Transportation and issues with MAT refills were common barriers to treatment continuity. PIHP officials described recent initiatives to expand options for transportation assistance. It is unclear whether pharmacy challenges are well appreciated by state and PIHP officials. Additional years of data are needed to determine whether the demonstration results in increased duration of SUD/OUD treatment.

Hypothesis 6: Implementation of care coordination will increase the receipt of primary care services during or after SUD/OUD treatment.

Primary research question 6: Does the proportion of beneficiaries with SUD/OUD who receive primary care services increase over the demonstration period?

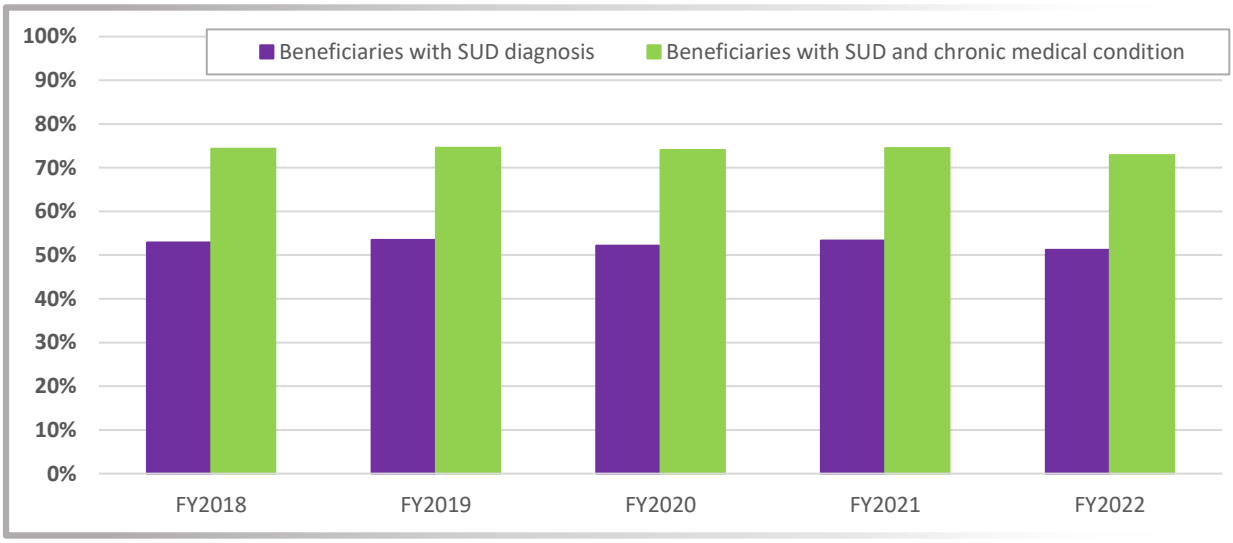
Subsidiary research question 6a: What are barriers and facilitators to receipt of primary care?

Data Source Used: Administrative claims & Beneficiary Phone Surveys

Results

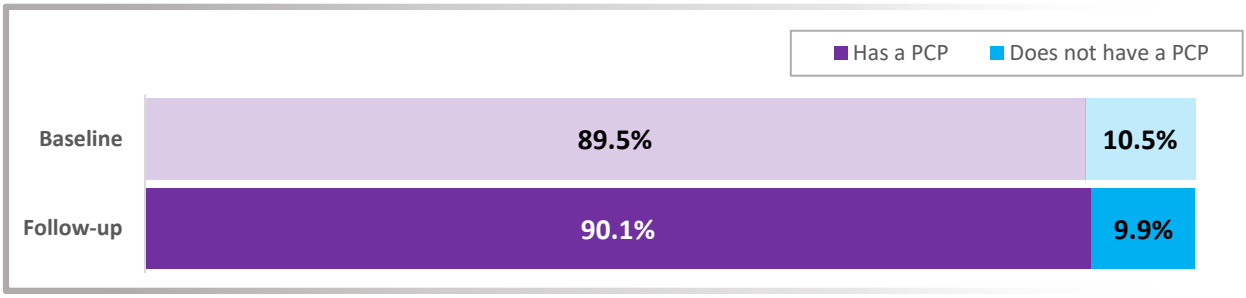
Receipt of primary care. Administrative data demonstrated a slight decline across the demonstration period in receipt of primary care, for all beneficiaries with SUD and for the subset with co-occurring chronic medical conditions (Figure 15). Notably, receipt of primary care was consistently higher for those with co-occurring chronic conditions compared to all beneficiaries with SUD.

Figure 15. Proportion of beneficiaries receiving primary care services



Beneficiary experiences. In Cohort 1 phone surveys, about 9 in 10 participants reported that they have a primary care provider (Figure 16). Among beneficiaries with no PCP at baseline, over half (56.0%) reported difficulties accessing primary care. Their most common complaint was an inability to find a provider in the area accepting new Medicaid patients; many noted that transportation limited their primary care options.

Figure 16. Beneficiary report of having a primary care provider



Among beneficiaries with a PCP, 16.4% (baseline) and 19.1% (follow-up) reported at least one area of difficulty getting primary care, most commonly long waits to get an appointment and transportation challenges. Less frequent were SUD-related problems, including judgmental attitudes about SUD, unwillingness to offer MAT, and dismissal from practice due to missed appointments or positive drug tests. In contrast, some Cohort 1 participants indicated their primary care provider offered physical health and SUD services, which they described as making it easier to receive the services they need.

Summary of response to primary research question 6

Receipt of primary care services among beneficiaries with SUD declined through the demonstration period according to administrative data. Although the vast majority of Cohort 1 beneficiaries reported having a PCP, many reported difficulties getting appointments. Those with no PCP reported difficulty finding a local provider who will accept Medicaid. Additional years of data, including Cohort 2 beneficiary surveys, are needed to determine whether the demonstration improves the health and well-being of beneficiaries with SUD/OUD.

Hypothesis 7: Implementation of high-risk management strategies will result in decreased number of opioid fills among beneficiaries with OUD.

Primary research question 7: Does the average number of opioid fills among enrollees with OUD decreased over the demonstration period?

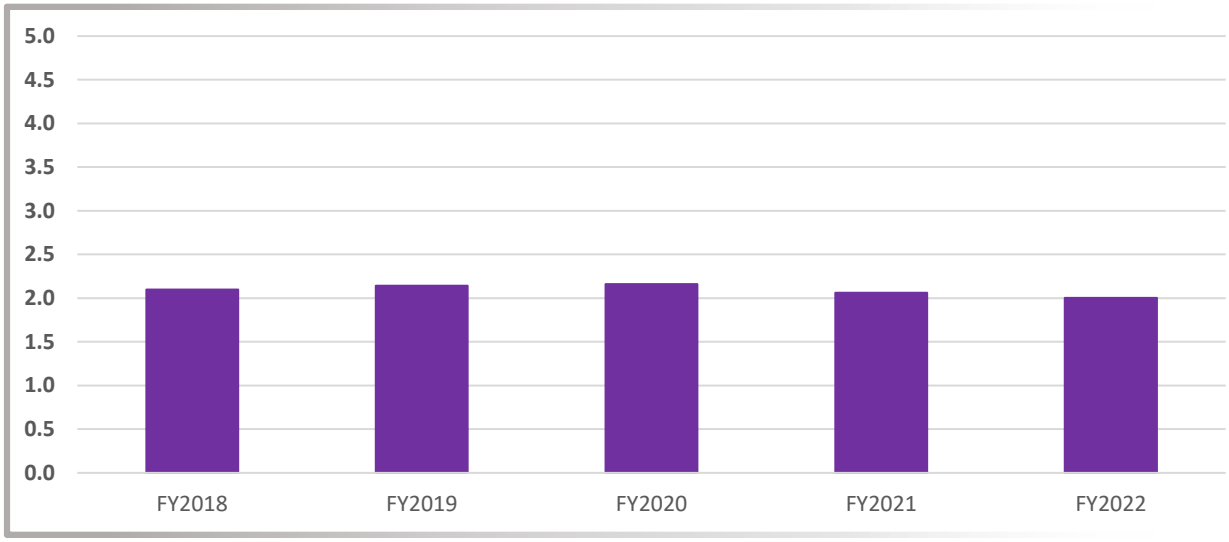
> ***Subsidiary research question 7a***: What are unique barriers and facilitators to effective high-risk management?

Data source used: Administrative claims and key informant interviews

Results

Average number of opioid prescriptions. Administrative data revealed an increase from FY2018 to FY2020, followed by a decline from FY2020 to FY2022, in the average number of opioid prescriptions, among beneficiaries with at least one filled opioid prescription (Figure 17)

Figure 17. Average number of opioid prescriptions, among beneficiaries with at least one filled opioid prescription



As shown in Appendix E Table H7-1, the total number of opioid prescriptions filled by Medicaid beneficiaries decreased substantially from FY2018 to FY2022, as did the number of beneficiaries with at least one filled opioid prescription.

Use of Michigan's PDMP. Strategies to decrease the number of opioid prescriptions include expanded use of the Michigan Automated Prescription System (MAPS), the state's prescription drug monitoring program (PDMP) for controlled substances. Michigan law requires a MAPS query be performed when an

opioid supply of ≥3 days is prescribed. According to LARA data, the number of health professionals registered in MAPS increased dramatically from 2018 to 2019 and has continued to climb (Table 12).

Table 12. Approved MAPS users by user type

	Number as of:					
MAPS User Type	**01//2018***	**01/2019***	**01/2020***	**01/2021**	**12/2022**	**05/2023**
Prescribers	18,858	43,215	48,456	49,743	48,685	49,260
Dispensers	7,011	8,170	8,920	8,930	9,041	9,127
Prescriber Delegates	4,175	17,168	20,157	22,279	26,061	26,711
Pharmacist Delegates	613	971	1,171	1,211	1,131	1,169
Total	**30,657**	**69,524**	**78,704**	**82,163**	**84,918**	**86,267**

** Includes active and inactive users*

Key informant interviews highlighted a key facilitator for the increased use of MAPS: integration into the EMR of many health systems across the state, which allows providers to access MAPS without having to log-in to a separate system. Providers in primary care and emergency department settings also noted the inclusion of MAPS training as part of state partnerships aimed at increasing provider engagement in medication assisted treatment (e.g., Michigan Opioid Collaborative, Michigan Opioid Partnership).

Key informant interviews also pointed to potential gaps in use of MAPS. Several SUD counselors felt MAPS information would be useful for their role in assessing and treating clients. They noted that MAT prescribers often are not co-located with counselors and/or are onsite for a limited number of hours per week, which limits the usefulness of delegate access. In addition, counselors felt it would be helpful to get MAPS information for some clients who are not receiving MAT.

Summary of response to primary research question 7

Data demonstrate a decrease in both the average and total number of opioid fills among Medicaid beneficiaries. Participation in the state's PDMP is high among prescribers and pharmacists. Opportunities exist to expand PDMP use to include other health professionals involved in providing SUD treatment services.

F.4. Health and Health Care Outcomes

Hypothesis 8: Implementation of the demonstration will improve the health and well-being of beneficiaries with SUD/OUD.

Primary research question 8: Do beneficiaries with SUD/OUD report improved health and well-being over the demonstration period?

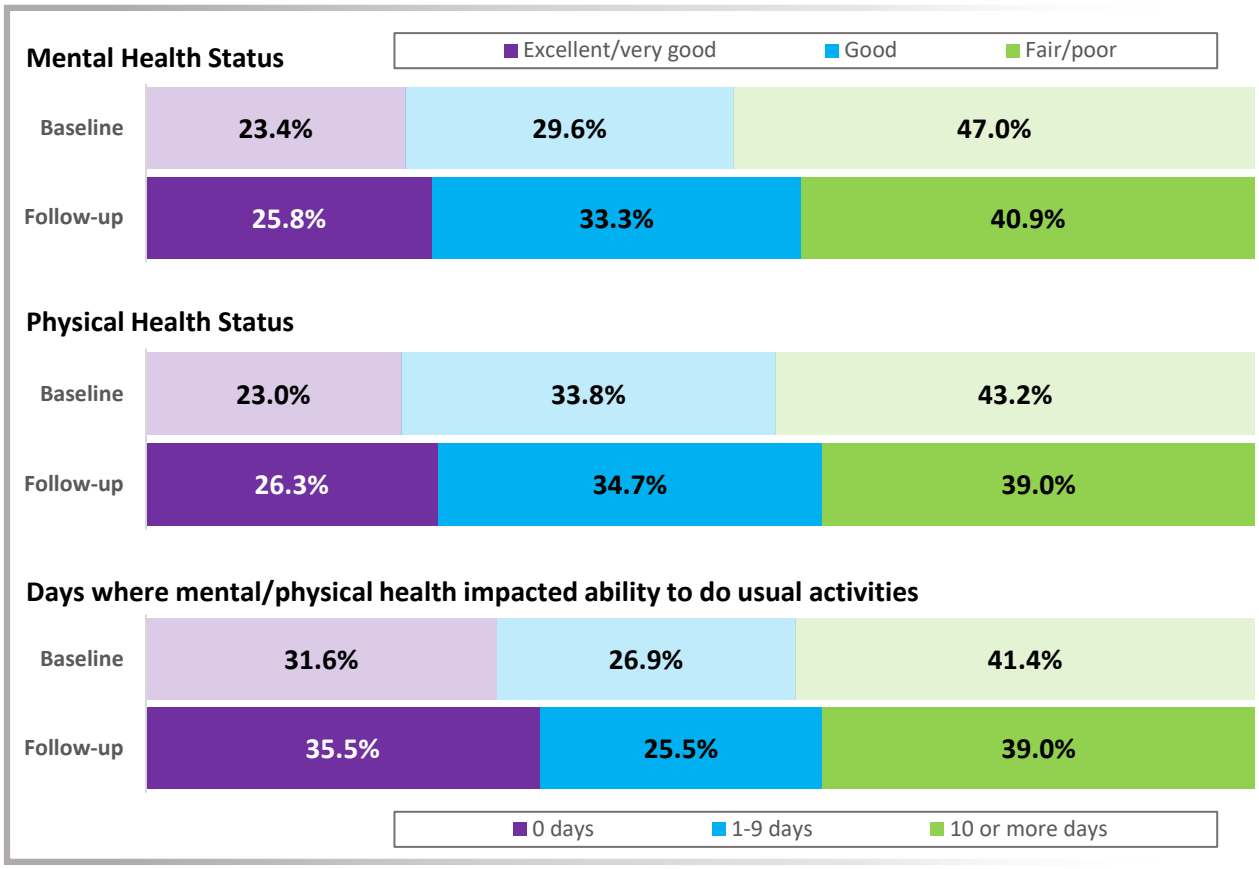
Subsidiary research question 8a: What are continued barriers to improved health and well-being?

Data sources used: Beneficiary phone surveys and state reports

Results

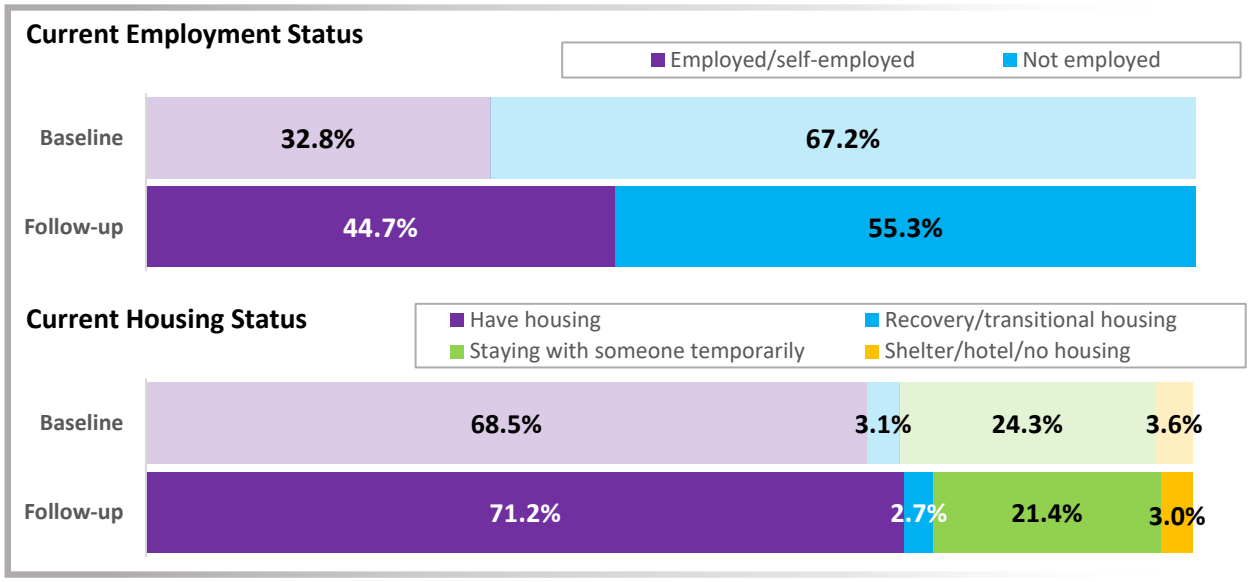
Beneficiary reports of well-being. Cohort 1 phone survey results suggested some improvement in well-being (Figure 18). At the follow-up survey, more beneficiaries reported excellent/very good mental and physical health and 0 days in the past 30 where poor health impacted their ability to do their usual activities, compared to the baseline survey.

Figure 18. Beneficiary report of mental and physical health status



Cohort 1 results also pointed to improved material well-being (Figure 19) between baseline and follow-up surveys.

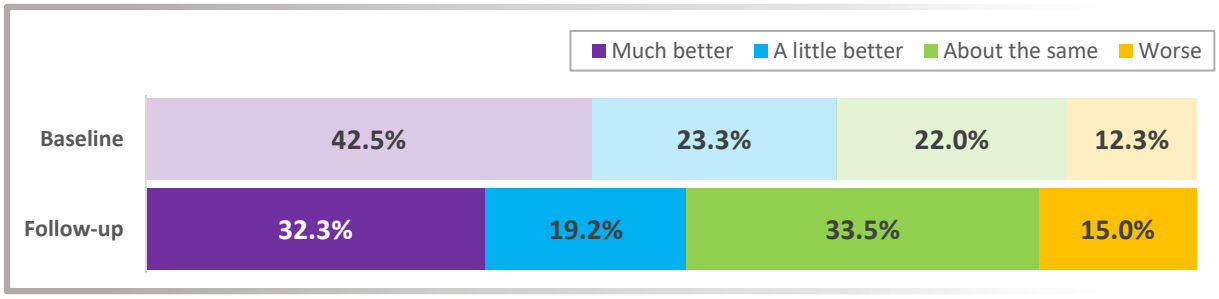
Figure 19. Beneficiary report of material well-being



Over half of beneficiaries (58.5%) reported that their health interferes with their ability to work, the type of work they can do, or the number of hours they can work. Other barriers to employment were transportation (32.6%), caregiving responsibilities (20.3%), prior conviction/legal action (19.1%), and lack of jobs in the area (18.0%).

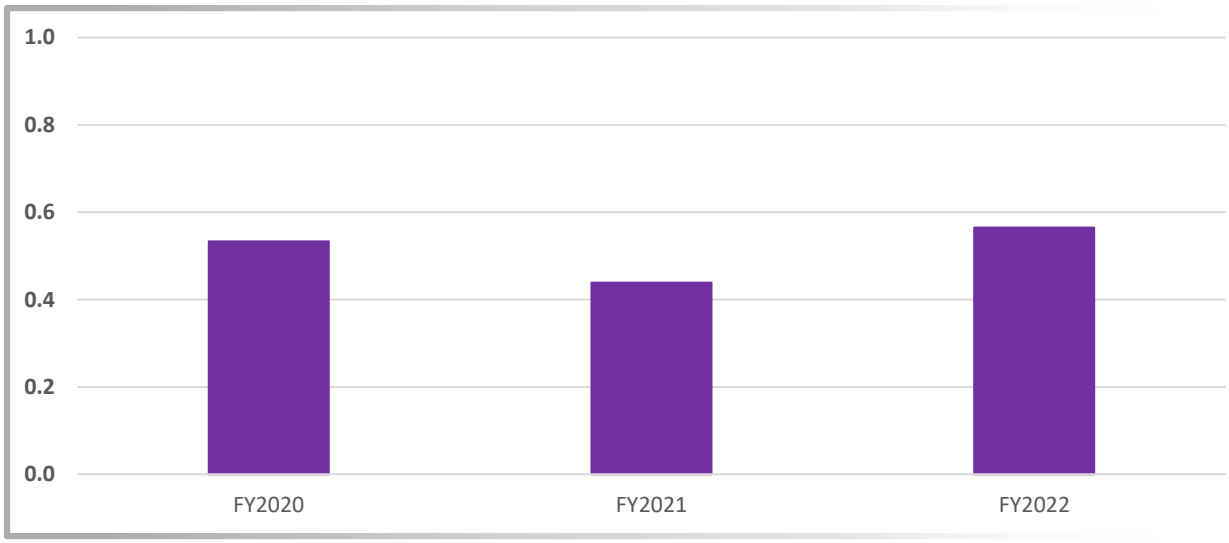
In baseline surveys, two-thirds of Cohort 1 beneficiaries reported their ability to accomplish the things they want to do was better than than 6 months ago (Figure 20). In follow-up surveys 6 months later, slightly over half reported it was better.

Figure 20. Beneficiary rating of ability to accomplish things they want to do



Overdose death rate. The overdose death rate reflects the number of overdose deaths to Medicaid beneficiaries out of all beneficiaries. As shown in Figure 21, the overdose death rate dropped from FY2020 to FY2021, then increased for FY2022.

Figure 21. Overdose death rate among Medicaid beneficiaries



Summary of response to primary research question 8

Some beneficiaries report improved health status and material well-being from their baseline to follow-up phone surveys. The overdose death rate among Medicaid beneficiaries has fluctuated during the demonstration period. Additional years of data, including Cohort 2 beneficiary surveys, are needed to determine whether the demonstration improves the health and well-being of beneficiaries with SUD/OUD.

Hypothesis 9: Implementation of the demonstration will decrease utilization of crisis care among beneficiaries with SUD/OUD.

Primary research question 9*:* Do rates of crisis care for SUD/ODU decrease over the demonstration period?

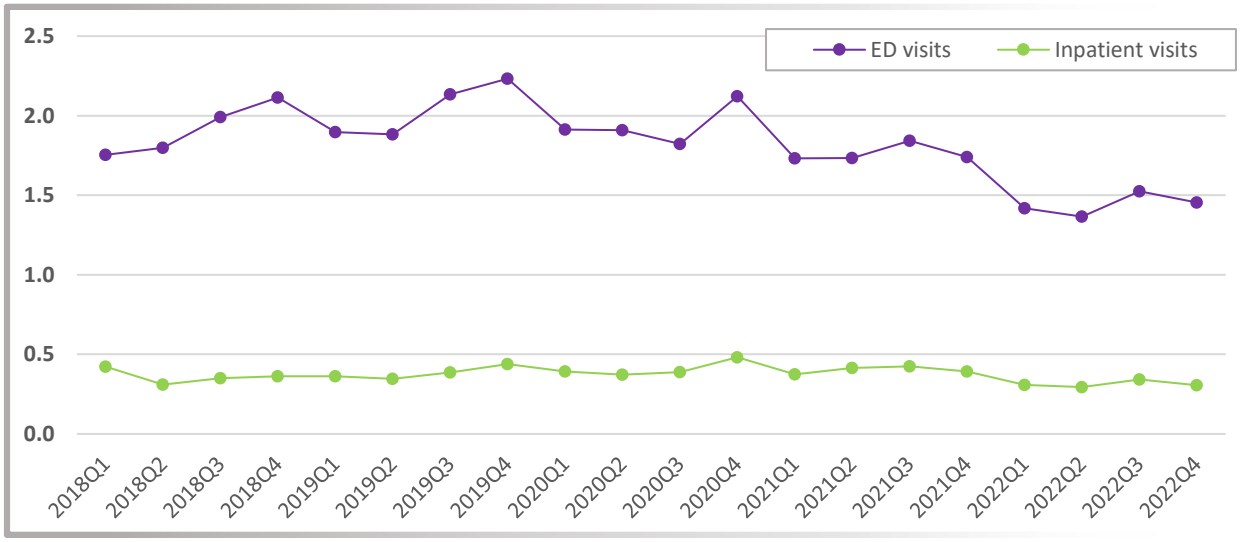
> ***Subsidiary research question 9a***: Are there differences by PIHP region in utilization of crisis care for SUD/OUD?

Data sources used: Administrative claims

Results

Crisis care for SUD. Administrative data indicate a decrease in ED visits for SUD in FY2022, while the trend for SUD inpatient visits is not so clear (Figure 22).

Figure 22. ED visits and inpatient stays with primary SUD diagnosis (rate per 1000 member-months)

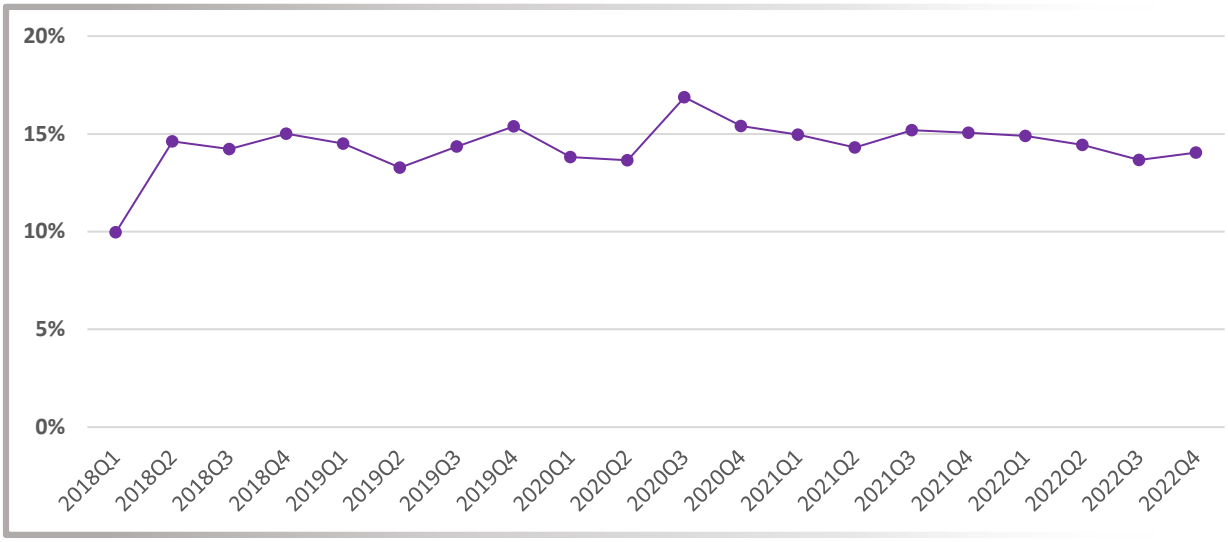


Stratified analyses demonstrated consistently higher rates for beneficiaries 50-64 years (Appendix E Figures H9-1 and H9-2), males (Appendix E Figures H9-3 and H9-4), and those who received PIHP services in the prior year (Appendix E Figures H9-7and H9-8), with similar patterns for both ED visits and inpatient SUD stays.

Multivariate analyses confirmed that the adjusted rate of ED visits and inpatient stays for SUD was higher for males, beneficiaries 50-64 years (vs 18-49 years), and lower for Black and Hispanic (vs White) beneficiaries (Appendix E Table H9-1).

Readmission for SUD within 30 days of an SUD inpatient stay. As shown in Figure 23 on the following page, SUD readmissions reached a peak in FY2020 and then declined to prior levels.

Figure 23. SUD readmission within 30 days of SUD inpatient stay



Multivariate analyses revealed that the adjusted rate ratio for SUD readmissions was higher among beneficiaries who received services in the PIHP system and lower among Black and Hispanic (vs White) beneficiaries, those over 65 years (vs 18-49 years), and those with AUD or other SUD diagnoses (vs OUD) (Appendix E Table H9-2).

Summary of response to primary research question 9

Rates of ED visits and inpatient stays for SUD appeared to be on a downward trend starting in FY2022, while SUD readmissions remain relatively unchanged. Additional years of data are needed to determine if the demonstration decreases utilization of crisis care among beneficiaries with SUD/OUD.

F.5. Costs of the Demonstration

Hypothesis 10: Implementation of Michigan's Behavioral Health Demonstration Waiver will be sustainable for the Medicaid program with regard to costs.

Primary research question 10: Does the average total cost for beneficiaries with SUD/OUD change over the demonstration period?

> ***Subsidiary research question 10a***: Does average total cost differ by PIHP region or beneficiary characteristics?

Data sources used: State cost reports, administrative claims

Results

Total spending in the public SUD system. State cost reports outline SUD spending for the PIHP system of SUD care. Spending amounts by service category are shown in Table 13. The total amount of SUD spending decreased from FY2018 to FY2021, then increased substantially in FY2022.

Table 13. Statewide SUD expenditures by service category

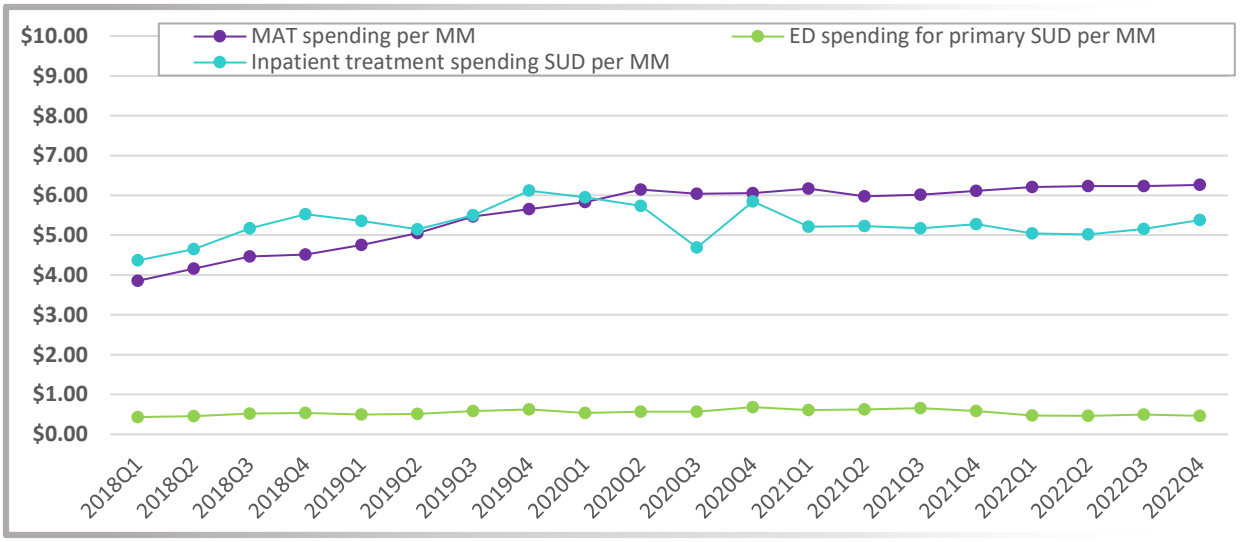
Service Category	FY2018	FY2019	FY2020	FY2021	FY2022
Access Management System	$6,396,749	$5,480,817	$3,227,033	$2,628,133	$4,908,454
Case Management	$4,812,032	$4,682,839	$5,252,899	$3,810,511	$5,569,313
Detox	$15,438,187	$13,670,450	$16,979,153	$14,684,165	$22,320,671
Early Intervention	$3,962,628	$2,865,935	$3,858,398	$3,345,788	$9,693,785
General Administration	$10,430,670	$11,960,203	$13,092,784	$12,316,785	$9,510,350
Methadone	$30,416,559	$32,235,455	$35,843,357	$28,869,057	$32,915,572
Outpatient*	$57,883,414	$57,502,533	$57,571,448	$58,091,139	$59,514,718
Other Services	$18,123,182	$8,691,850	-#	$1,465,882	$1,427,013
Prevention	$25,823,868	$32,305,076	$14,488,752	$12,922,588	$27,862,763
Recovery & Support	$21,078,425	$20,958,721	$20,516,216	$17,872,352	$25,807,779
Residential	$68,479,360	$45,514,678	$60,475,051	$52,023,464	$63,964,489
Total	$262,845,073	$235,868,556	$231,305,093	$208,029,864	$263,494,906

** Outpatient services category includes spending on intensive outpatient services.*

 # State cost reports did not include Other Services expenditures in the template for FY2020.

Total spending for SUD services. As shown in Figure 24, average quarterly spending per member-month for medication assisted treatment (MAT) increased since the start of the demonstration period. Residential/inpatient costs increased during COVID and then returned to pre-demonstration levels. Average spending for ED visits with a primary SUD diagnosis did not change substantially across the demonstration period.

Figure 24. SUD spending per member-month



Multivariate analysis indicated that adjusted spending for SUD residential/inpatient care was higher among males, beneficiaries 50-64 years (vs 18-49 years), and those receiving PIHP services, and lower among Black and Hispanic (vs White) beneficiaries (Appendix E Table H10-1). Adjusted SUD ED spending showed similar patterns.

Proportion of PIHP spending by service category. The proportion of spending by each PIHP for each SUD service category is provided in Attachment G. Within PIHPs, the top three service categories were most often outpatient, residential, and methadone. For an individual PIHP, the proportions within a service category often varied considerably. Some inconsistencies in proportion of spending may reflect impacts of COVID PHE during FY2020 and FY2021.

Across PIHPs, proportions within a service category also often varied widely. For example, the proportion of spending on residential services was consistently near or over 30% for a few PIHPs compared to others where spending was less than 20%. This variation likely reflects differences in SUD provider availability across PIHPs.

Summary of response to primary research question 10

After years of decreased SUD spending, the FY2022 state cost report showed a substantial increase in total statewide spending for SUD. Across PIHPs, spending by service category varies, which may reflect SUD provider availability. Through FY2022, average spending per member-month increased for MAT but remained relatively flat for ED and inpatient services related to SUD, with some variation by PIHP region. Additional years of data are needed to understand how SUD treatment costs change over the demonstration period.

G. Conclusions

Data available for this Interim Evaluation Report demonstrate that in several key areas the Michigan's 1115 behavioral health demonstration appears to be making progress toward achieving its goals and objectives. These include increasing the proportion of beneficiaries assessed using evidence-based standards; expanding the availability of MAT; and decreasing the number of opioid prescriptions. However, the effectiveness of the state's goal and objectives cannot be evaluated at this point, for two key reasons. First, the disruption in services and inflated Medicaid enrollment related to the COVID public health emergency make it difficult to detect trends in administrative measures. Second, implementation of some demonstration activities was delayed, such that the available data do not represent post-implementation outcomes.

We recommend that the state consider the following actions to enhance the likelihood of showing the effectiveness of the waiver by the end of the demonstration period:

- Take a more active role working with PIHPs to facilitate more consistent implementation of the ASAM Continuum:
    - Establish and disseminate guidance around areas of confusion (e.g., sharing completed assessments, when/how to do updated assessments, how to generate reports)
    - Identify best practice tools and share across all PIHPs (e.g., comprehensive assessment tools that meet certification requirements)
    - Identify and disseminate guidance on alternative placement when recommended levels of care are not available, or when additional service models are available
    - Coordinate guidance and technical assistance for the analysis of concordance between treatment placement and ASAM Continuum recommendations
    - Ensure adequate vendor support for technical issues (e.g., EMR integration)
- Continue conducting detailed assessments and enforcement of PIHP network adequacy at each level of care.
- Improve the usability of eConsent, Open Beds and CC360 to support transitions of care across settings.

- Establish and disseminate guidance around use of MAPS for counselors and other non-prescriber SUD providers.
- Ensure that public-facing staff and webpages offer comprehensive information about SUD services (through the PIHP *and* physical health systems of care).

H. Interpretations, Policy Implications, and Interactions with Other State Initiatives

The state's 1115 Behavioral Health Waiver Demonstration is closely intertwined with an array of other initiatives to improve the availability and delivery of SUD services. These include the Opioid Task Force, Michigan Overdose Data to Action, Michigan Opioid Partnership, Michigan Opioid Collaborative, and justice system initiatives.

Recent Medicaid policy changes to expand SUD treatment services through the physical health benefit, particularly in the primary care setting, have created interactions with demonstration project. Many of the demonstration strategies are targeted at the PIHP system of care; however, coordination and information sharing across the physical health and PIHP systems is essential to ensuring that beneficiaries with SUD have access to the types of services they need. This level of coordination will require cooperation between MDHHS officials responsible for physical and mental health services, with contracted managed care entities (Medicaid Health Plans and PIHPs), and with providers and staff.

To a considerable extent, the demonstration relies on Medicaid coverage for adults through the Healthy Michigan Plan; most adult beneficiaries receiving SUD treatment are enrolled in HMP. When the COVID PHE ends, some beneficiaries with SUD will lose this coverage; in Cohort 2 beneficiary phone surveys, beneficiaries are raising this concern. It will be important to collect information on health insurance coverage, access to and utilization of SUD treatment services, and financial well-being after Medicaid enrollment ends.

I. Lessons Learned and Recommendations

In conducting this evaluation, we learned that access to the appropriate level of SUD treatment is based on both accurate assessment and available resources. The demonstration project has effectively implemented evidence-based assessment in the PIHP system of care. However, SUD treatment options are not equally available across all areas of the state. This presents a challenge when evaluating whether treatment placement is consistent with the evidence-based assessment. For other states interested in implementing a standardized assessment tool, we recommend incorporating network adequacy into training and technical assistance.

We learned that SUD providers are eager for tools to facilitate access to and coordination of care. Michigan's PIHP system of care presents a challenge for developing and deploying tools that will be compatible across the variety of EMRs and administrative systems. Moreover, health IT vendors accustomed to developing projects for large health systems may not appreciate the technical constraints of SUD providers and their client populations.

Regarding beneficiary phone surveys, we learned that we need to offer numerous opportunities for participation. While scheduled appointments were completed for some beneficiaries in our target population, missed appointments were more common. We implemented several strategies to increase

the number and ease of opportunities for participation, such as adding quick response (QR) codes to flyers, obtaining permission to text, and having interviewers available through the day and evening for call-ins. We continue to utilize these strategies with our Cohort 2 beneficiary phone surveys.

J. Attachments

A. Approved Evaluation Design for 1115 Behavioral Health Waiver
B. Monitoring Metrics Table and Specifications
C. Key Informant Interview Guides
D. Beneficiary Survey Instruments
E. Administrative Data Appendix
F. Response Analysis for Cohort 1 Beneficiary Surveys
G. PIHP Spending from State Cost Reports

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