NORC at the University of Chicago

INTERIM EVALUATION REPORT

July 2023
Revised December 2023

Minnesota Substance Use Disorder System Reform Section 1115(a) Demonstration Project Evaluation

Presented by:
NORC at the University of Chicago

Presented to:
Minnesota Department of Human Services
Behavioral Health Division

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Executive Summary

The following executive summary provides an overview of the Demonstration, the principal results, interpretations, and recommendations included in this interim evaluation report.

Demonstration Summary

Minnesota's Substance Use Disorder System Reform Section 1115(a) Demonstration (the Demonstration) was approved by the Centers for Medicare & Medicaid Services (CMS) on July 22, 2020, for a demonstration period of July 1, 2019 through June 30, 2024. The Demonstration supports a full continuum of care with a focus on ensuring that individuals are matched to an appropriate level of care, based on the requirements established by the American Society of Addiction Medicine (ASAM). In January 2021, Minnesota began officially training and providing technical assistance to substance use disorder (SUD) participating providers.

The Demonstration was designed to achieve progress toward standardized national milestones. These milestones in turn contribute to advancement in Minnesota's state-specific Demonstration goals. These goals are as follows:

1. Increased rates of identification, initiation, and engagement in treatment for SUD
2. Increased adherence to and retention in treatment
3. Fewer readmissions to the same or higher level of care (LOC) where the readmission is preventable or medically inappropriate
4. Improved access to care for physical health conditions among Medicaid beneficiaries
5. To reduce the number of opioid-related overdoses and deaths within the state of Minnesota
6. To allow patients to receive a wider array of evidence-based services that are focused on a holistic approach to treatment
7. Reduced utilization of emergency departments (EDs) and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services

There were several external factors that affected the implementation and impact of the Demonstration. The effects of the COVID-19 pandemic included reduced access to care and increased rates of SUD diagnoses and demands for services. Then, in 2021, the Minnesota legislature passed changes that impacted the Demonstration. These legislative changes, notably the requirement of all residential and withdrawal management (WM) providers to participate in the Demonstration was a shift from the original Demonstration design that was a voluntary program for a small group of providers.

NORC at the University of Chicago (NORC) is the Independent Evaluator of the demonstration. The Minnesota Department of Human Services (DHS) has contracted with NORC to conduct an

independent mixed-methods evaluation of the Demonstration. This interim evaluation report is part of the overall evaluation.

The target population of the Demonstration is all individuals enrolled in Minnesota Medicaid who receive any services for SUD. For most of the evaluation analyses, beneficiaries with an OUD or SUD must also satisfy criteria for specific enrollment periods. This approach is an intent-to-treat (ITT) design: the analysis includes all eligible Medicaid beneficiaries, regardless of what, if any treatment they received from enrolled providers. This design avoids volunteer bias that results from limiting evaluation participants to beneficiaries receiving care from participating providers.

This report evaluates the two-year period before the Demonstration—January 1, 2017, to December 31, 2018—and a two-year period during the Demonstration from January 1, 2020, to December 31, 2021. It also includes a qualitative assessment of Demonstration implementation through 2022, based on a survey of enrolled providers that was conducted in early 2023. Both quantitative and qualitative methods were used for this evaluation.

Principal Results

As of April 2023, 92 unique SUD/OUD providers, operating in 171 facilities or locations, were enrolled in the Demonstration.

In this report, results are reported for each goal:

Goal 1: Increased rates of identification, initiation, and engagement in treatment for SUD. There was an average absolute 1.1 percentage point increase in initiation of treatment within 14 days of diagnosis between baseline and initial Demonstration periods, with a small decline observed between CY2020 and CY2021. Timely treatment (the proportion of beneficiaries who initiated medication within two weeks) increased by 2.6 percent (1.0 percentage point). The average time to treatment in the baseline and Demonstration periods remained similar. In addition, providers reported that the Demonstration is effective in assessing patients and then directed them to an appropriate LOC.

Goal 2: Increased adherence to and retention in treatment. MN DHS has primarily focused on the implementation of a new process and system for utilization management (UM) through the Kepro UM program. Eighty-four percent of respondents reported that the Kepro UM was either fully or somewhat integrated into their workflows. Providers continued to underscore that Kepro UM is time-consuming and has high administrative costs. Most Demonstration providers reported that they can provide access for patients with Medicaid through referral to ASAM LOCs 1.0, 2.1, 3.1, 3.3, 3.5, and 3.7. Level 3.1—clinically managed low-intensity and population-specific services—providers reported limited bed availability and a lack of low-intensity treatment centers. Similarly, most providers can refer patients to Level 3.3—clinically managed high-intensity and population-specific services—but providers face challenges finding openings, noting “There is only one program in MN offering this level of care, very hard to get someone into that program.” Another noted, “There is only one [Level 3.3] program in Minnesota and it does not serve women.” When asked about staffing adequacy for delivering treatment

to Demonstration participants in the provider survey, 23 out of 25 respondents selected "Strongly Agree" or "Agree." Providers who felt that they did not have adequate staffing noted that additional administrative support and mental health professionals are needed to support the treatment of Demonstration participants.

Goal 3: Fewer readmissions to the same or higher level of care (LOC) where the readmission is preventable or medically inappropriate. Despite efforts to improve care coordination and transitions, the Demonstration observed an increase in readmission rate for beneficiaries with an SUD from 11.9 percent in the baseline period to 12.5 percent during the Demonstration period. The rate of readmission for beneficiaries with more than one stay also increased from 19.5 percent to 20.3 percent. However, the provider survey found that 72 percent of providers believe the Demonstration has been effective or very effective in assessing and referring patients to the appropriate levels of care. They also reported that they can provide referrals to residential and outpatient treatment and that they are referring more patients to MOUD treatment.

Goal 4: Improved access to care for physical health conditions among Medicaid beneficiaries. The proportion of beneficiaries with an SUD receiving ambulatory or preventative care decreased by 1.2 percentage points. In addition, there was an increase in the number of beneficiaries with an SUD who had an ambulatory preventive care visit.

Goal 5: To reduce the number of opioid-related overdoses and deaths within the state of Minnesota. Minnesota did not experience a reduction in drug overdose deaths during the Demonstration period, which is consistent with national trends and trends in other states.

Goal 6: To allow patients to receive a wider array of evidence-based services that are focused on a holistic approach to treatment. The proportion of beneficiaries with an OUD initiating medication for opioid use disorder (MOUD) increased by nearly 13 percent (5.8 percentage points) between the baseline and Demonstration periods.

Goal 7: Reduced utilization of emergency departments (EDs) and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services. We observed progress toward the state's target of follow-ups after ED visit for alcohol and other drug (AOD) use or dependence. We observed no change in ED utilization per 1,000 beneficiaries for SUD, but there was an increase in ED visits following treatment, and follow-up after ED visit for AOD use or dependence.

Interpretation

Given the challenges of the COVID-19 pandemic, the results of this evaluation are likely atypical for the anticipated change for some measures. Comparisons with other state trends are not possible due to the varying nature and timing of the intensity of the pandemic. These analyses only include data through 2021. In addition, the number of providers enrolled in the Demonstration has grown since the 2021 legislative mandate passed that required all residential and WM providers to enroll in the

Demonstration and meet provider standards requirements by January 1, 2024. In addition to the 2021 mandate, several factors support the hypothesis that the Summative Evaluation Report results may look different:

- Staffing. State staffing challenges, including a hiring freeze, staff shortages, and staff turnover during the pandemic.
- Beneficiaries. This report does not include the experiences and perception of the patients covered by the waiver and served by Demonstration providers.
- Enhanced rates. The requirement for residential (and outpatient providers) participation in the model, along with enhanced payment rates, may lead to increased access to services at these facilities for beneficiaries.
- Implementation of direct access. This change could expand beneficiary choice and enable quicker referrals to access SUD services and will improve care coordination.
- MOUD prescribing. The state expects an increase in the number of providers actively prescribing MOUD due to state-wide initiatives to expand eligibility for prescribing as well as removal of the requirement for a Drug Enforcement Administration (DEA) “X-waiver” to prescribe buprenorphine.

Recommendations of the Evaluation

Minnesota could consider the following actions:

- Collaborate with providers to examine what is needed to improve follow-up services, from the ED as well as any treatment services, such as improved infrastructure or more personnel.
- Continue examining how to obtain comprehensive information on the health workforce that serves Medicaid beneficiaries.
- Consider mechanisms to monitor and assess the quality of care provided through managed care. For example, some states have used financial incentives tied to one or more SUD care continuum performance measures to enforce quality of care.
- Maintain commitment to telehealth for SUD services.

In addition, data on the service delivery to managed care organization (MCO) enrollees who are treated by Demonstration providers who participate in MCO utilization review processes was not available for this evaluation. MN DHS may consider implementing a survey of organizations to capture other data that may inform MN DHS of treatment quality and adequacy.

General Background Information

Introduction

On May 31, 2016, the governor of Minnesota signed Minn. Stat. § 254B.15, directing the MN DHS commissioner to design a reform of Minnesota's SUD treatment system in order to ensure that a full continuum of care is available for individuals with SUDs.[i] In fulfilling this statute under the authority of Minnesota Statutes, section 256B.0759,[ii] the Minnesota Substance Use Disorder System Reform Section 1115(a) Demonstration Project (the Demonstration) from the MN DHS Behavioral Health Division was approved by the Centers for Medicare & Medicaid Services (CMS) on July 22, 2020. The Demonstration supports access to a full continuum of care, with a focus on ensuring that individuals are matched to an appropriate level of care (LOC). With Minnesota's American Society of Addiction Medicine (ASAM) LOC requirements published in October 2020 and the monitoring protocol approved on January 5, 2021, Minnesota officially began the rollout of training and technical assistance (TA) to participating providers on January 14, 2021.

The state of Minnesota has contracted with NORC to conduct an independent evaluation of the Demonstration. NORC is an objective, nonpartisan research institution that delivers reliable data and rigorous analysis to guide critical programmatic, business, and policy decisions. NORC is conducting an independent mixed-methods evaluation of the Demonstration for MN DHS, informed by NORC's experience in developing and implementing rigorous qualitative and quantitative data collection and analytic approaches. This interim evaluation report is part of the overall evaluation.

Demonstration Policy Goals

Minnesota is pursuing a multi-agency strategy to make SUD treatment more accessible and integrated with the larger health care system. The Demonstration is structured with respect to seven state-specific goals designed to achieve progress toward the following six standardized national milestones:

1. Access to critical level of care for SUDs
2. Use of evidence-based SUD-specific patient placement criteria
3. Use of nationally recognized, evidence-based, SUD program standards to set residential treatment provider qualifications
4. Sufficient provider capacity at each LOC, including medication-assisted treatment (MAT)[1]
5. Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD
6. Improved care coordination and transition between levels of care

[1] MAT is also referred to as medication for opioid use disorder (MOUD).

The state-specific goals are:

- Goal 1. Increased rates of identification, initiation, and engagement in treatment for SUD
- Goal 2. Increased adherence to and retention in treatment
- Goal 3. Fewer readmissions to the same or higher LOCs where the readmission is preventable or medically inappropriate
- Goal 4. Improved access to care for physical health conditions among Medicaid beneficiaries
- Goal 5. To reduce the number of opioid-related overdoses and deaths within the state of Minnesota
- Goal 6. To allow patients to receive a wider array of evidence-based services that are focused on a holistic approach to treatment
- Goal 7. Reduced utilization of EDs and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services

In 2019, the Minnesota legislature expanded the SUD treatment services covered under the state plan to include comprehensive assessment, treatment coordination, peer recovery and support services, and residential withdrawal management.[2] The state plan includes coverage of outpatient services (i.e., treatment coordination and peer support), counseling, withdrawal management, intensive levels of care in residential and inpatient settings, and MAT. In October 2019, CMS approved a state plan amendment to cover screening, brief intervention, and referral to treatment (SBIRT). MAT was previously provided in conjunction with outpatient and residential treatment services. The use of all U.S. Food & Drug Administration (FDA)–approved MAT medications for treating OUD is supported and encouraged by MN DHS and will be expanded under the Demonstration. In 2020, the state approved a 15 percent rate increase for the treatment portion of residential services and a 10 percent rate increase for outpatient services delivered through the Demonstration.[iii]

In addition to the rate increase, the adoption of the ASAM levels of care provides a framework for Minnesota's SUD continuum of care. Beginning in the early 1990s, the ASAM developed, validated, and refined a six-dimension model to assess the level and intensity of treatment needed for a given individual at a specific time.[iv] These dimensions include: 1) acute intoxication and potential for withdrawal; 2) biomedical conditions, complications, and past history; 3) emotional, behavioral, and cognitive conditions; 4) readiness to change; 5) relapse, continued use, or continued problems; and 6) recovery and living environment. Based on measures within each of these dimensions and in combination, applying the ASAM criteria results in a clinical recommendation for treatment services

[2] Support services include services to help people overcome personal and environmental obstacles to recovery, assist the newly recovering person into the recovery community, and serve as a personal guide and mentor toward the achievement of goals. See Minnesota Department of Human Services. (2019). Minnesota Substance Use Disorder Section 1115 Waiver Implementation Plan (DRAFT). Submitted to the Centers for Medicare & Medicaid Services on September 27, 2019.

ranging from early intervention (at the low end of the scale) to medically managed intensive inpatient services (at the high end).

Before the start of the Demonstration, Minnesota implemented evidence-based placement criteria that were based on the ASAM six-dimensions model. To meet the goal of fully aligning the Minnesota Medicaid SUD care system with the ASAM LOCs, Minnesota is using a mix of the Demonstration, pilot programs, licensing reforms, and other regulatory tools to establish a comprehensive continuum of care.[3]

In December 2023, Minnesota will submit a request to extend the Demonstration. The renewal application acknowledges the barriers faced in legislation and in moving to a standardized model (as developed by ASAM) of SUD delivery, and it provides plans for continuing to make progress on the existing milestones.

Demonstration Overview

The Demonstration tests new ways to strengthen the state's behavioral health care system by improving access to treatment for the ASAM critical levels of care.[v] The action items described in the implementation plan aim to strengthen the state's behavioral health care system by improving access to the ASAM levels of care through:

- Implementing new federal Medicaid funding opportunities for SUD services provided to patients in intensive residential settings (i.e., institutions for mental diseases [IMDs]) that have established referral arrangements with other SUD providers to create a continuum of care network
- Increasing the use of evidence-based placement assessment criteria and matching individual risk with the appropriate ASAM LOC to ensure that beneficiaries receive the treatment they need
- Establishing a network of providers interested in providing the comprehensive continuum of ASAM LOCs to individuals in need of SUD treatment

Providers who participate in the Demonstration are required to establish and maintain formal patient referral arrangements to ensure access to the ASAM critical levels of care defined by the state. Providers must implement at least three of the four evidence-backed practices identified by the Minnesota Management and Budget Agency as cost-effective. These include 12-step facilitation therapy, brief cognitive behavioral therapy, motivational interviewing to enhance treatment engagement, and contingency management.

Providers also have access to training and TA on the ASAM criteria and the program modifications needed to assure that service delivery models align with these standards. Payment rates for participating providers are increased to support their transition to the ASAM-based standards.

[3] For more details on the ASAM continuum of care, please see https://edocs.dhs.state.mn.us/lfserver/Public/DHS-7326-ENG.

Legislative Changes

In 2021, the Minnesota legislature passed additional changes that affected the Demonstration. Key among these was the mandatory participation of licensed residential SUD and withdrawal management (WM) providers. These changes included:[vi]

- Requiring mandatory enrollment for 245G-licensed residential SUD providers and licensed 245F WM providers by January 2024, including out-of-state SUD and WM providers receiving payment through the Minnesota Health Care Program (MHCP) for eligible recipients
- Enhancing the payment rate for outpatient treatment services, MAT, and adolescent treatment programs from 10 percent to 20 percent
- Enhancing the rate for residential treatment services from 15 percent to 25 percent
- Clarifying the base pay rate for medium-intensity residential program participation
- Requiring public posting of data and outcome measures
- Requiring MN DHS to seek federal approval for extension of the Demonstration
- Requiring MN DHS to convene an evaluation work group for the Demonstration

As originally designed, the Demonstration was a voluntary program for a smaller group of providers among the state's more than 400 SUD provider organizations. However, the 2021 legislative mandate for all residential and withdrawal management providers to participate was a shift from the initial limited participation of key segments of the SUD/OUD treatment continuum. SUD treatment providers enrolled in the Demonstration must ensure that certain requirements are implemented. MN DHS contracted with Kepro,[4] a utilization management vendor, using an integrated platform for quality oversight, care management, and assessment and eligibility. Kepro is conducting utilization reviews of the services delivered to monitor compliance with ASAM criteria.

To ensure the success of SUD system reform, the 2021 legislature implemented changes that resulted in a shift to the mandatory statewide program for all residential and WM providers. Withdrawal management programs, vs. detoxification programs, encourage people to consider treatment, provide a higher level of medical services to assist with more acute withdrawal symptoms, and contain additional program service requirements to encourage all patients to enter programs for ongoing recovery. IMDs (facilities enrolled and approved in the Demonstration) can now bill for WM provided at IMDs, which used to be paid for by the state Behavioral Health Fund (BHF). A licensed WM provider, regardless of IMD status, is also eligible to receive payment for WM services. Hospitals are exempt from WM licensing requirements and are therefore eligible vendors of WM services. Licensed WM providers must enroll in the Demonstration by January 1, 2024, regardless of IMD status.

[4] In late 2022, Kepro and CNSI (a provider of innovative healthcare technology products) merged and in June 2023 the combined company rebranded as Acentra Health. Since this report refers to activities that happened prior to the rebrand, the organization is referred to as Kepro. More information can be found here: https://acentra.com/about-us/.

In May 2023, the Minnesota legislature passed additional changes to state law. These changes included adding the following ASAM Levels of Care:

- Established ASAM LOCs 0.5, 1.0, 2.1, 2.5, 3.1, 3.3, 3.5
- Required all outpatient programs to enroll in Demonstration by January 1st, 2025
- Required all hospital-based residential programs must enroll in Demonstration by January 1st, 2025

In addition, a grant provision in the governor's 2024 Budget Recommendations for WM Start-up Funding provides funding for startup and capacity-building grants for WM services.

MN DHS has also begun a contract (as mandated in the 2021 legislation) for a SUD community of practice (CoP), to be implemented from December 2022 until June 30, 2025, to "improve treatment outcomes for individuals with substance use disorders and to reduce disparities by using evidence-based and best practices through peer-to-peer and person-to-provider sharing."[vii] The CoP will consist of behavioral health care providers from various disciplines and professional levels, consumers, family members, researchers, recovery peers, and advocates. The goals of the CoP include the identification of challenges to implementing ASAM criteria, including gaps in SUD treatment services, supportive services, and using culturally specific models to address barriers to care across diverse communities.

Rate increases for enrolled providers were established when the demonstration was enacted in 2019, with increases of 15 percent for residential and 10 percent for outpatient. They increased an additional 10 percent in 2021, for total increases of 25 percent for residential and 20 percent for outpatient by January 1, 2022. As of July 1, 2022, the Direct Access program was fully implemented. Under Direct Access, individuals can go directly to a provider they choose to receive a comprehensive assessment and access care immediately.[5] During the 2023 legislative session an increase in capitation payments to managed care and county-based purchasing plans for behavioral health services was approved. These capitation rate increases, effective January 1, 2024, must be used to increase payment rates to behavioral health service providers. Also approved during the 2023 legislative session was funding to strengthen workforce capacity. With this funding, the DHS Behavioral Health Division will be able to hire approximately 30 new full-time employees. Recommendations for supportive housing are also included in the governor's 2024 human services budget, discussed below in the Interactions with Other State Initiatives section.

[5] Minnesota Department of Human Services. Direct Access. https://mn.gov/dhs/partners-and-providers/news-initiatives-reports-workgroups/alcohol-drug-other-addictions/sudreform/

Impact of the COVID-19 Pandemic on Demonstration Implementation

In March 2020, Minnesota had just begun implementing its Demonstration when the COVID-19 pandemic emerged, and a public health emergency (PHE) was declared.[6] As the state described in its quarterly Medicaid Section 1115 SUD Demonstration Monitoring Reports, staff shortages, increase in COVID-19 cases, and other issues resulted in outpatient and residential facilities' reducing admissions or discontinuing service. The monitoring metrics and the data in this report reflect these impacts.

The state also experienced a twofold increase in SUD diagnoses and demands for services during the PHE; these increases in use and unmet treatment needs mirrored national trends during the same time.[viii,ix,x] Moreover, barriers to accessing treatment and an overall reduction in documented health care seeking were reported.[xi,xii] At the same time, changes to buprenorphine access rules at the state and federal levels and state legislation to expand telehealth might have increased access to services, although it is outside the scope of this report to determine the impact of these effects.

As in other states,[xiii] Minnesota also experienced resource and staffing shortages throughout the PHE.[xiv,xv] State staff reported during interviews conducted for the midpoint assessment (MPA) that, although there was some progress on billing system changes and some legislative progress on related initiatives, such as Direct Access, there was a slowdown in implementation as Minnesota IT (MNIT) Services did not have the capacity to support all the necessary systems changes. These resource shortages were in part due to reprioritization of resources related to the PHE, such as changes in timelines and deliverables, adjustments in scope, delays, and budgets.[xvi] MN DHS was able to overcome some of the resource shortages, as they implemented Direct Access for treatment and billing processes for SUD services.[7]

To support the SUD reform and Demonstration requirements, DHS has been filling vacancies for the following positions: Deputy assistant commissioner of behavioral health, director of SUD services, supervisor of SUD reform and redesign, 1115 Demonstration operations lead, and project manager positions to oversee contracts for paperwork reductions and systems improvement, and CoP. Funding for these positions was authorized as part of the 2023 legislation. DHS is also seeking to post openings for an ASAM policy lead and trainer, a quality assurance and continuing improvement (QAI) specialist to oversee UM and compliance, and a contracts coordinator to manage contracts required for implementation of SUD reform and redesign.

[6] The Centers for Disease Control and Prevention states that the World Health Organization declared COVID-19 a global pandemic on March 11, 2020.

[7] Direct Access refers to eligible members' ability to select the SUD provider from whom they want to receive services, including assessment and treatment.

Population Groups Impacted by the Demonstration

All persons with full Medicaid coverage are eligible for the services provided by the Demonstration. Some claims-based metrics were limited to persons with continuous enrollment as defined by MN DHS.[8] A further subset of claims-based measures is reported on the members of the beneficiary population who have an OUD. The target population largely consists of persons with an SUD and individuals 18 to 64 years of age. The Demonstration is statewide.

Demonstration Goals, Waiver Milestones, and Evaluation Questions

In **Exhibit 1**, we list the evaluation questions addressed in this report and describe how they align with the Demonstration goals and the six CMS-required milestones (listed below), along with the quantitative and qualitative data used in this report to assess progress toward the goals. In addition to the data analysis undertaken in this report, we incorporate findings and updates to information from the implementation plan developed by the MN DHS, as well as NORC's findings in the Baseline Provider Capacity Assessment and MPA.

CMS-Required Milestones

1. Access to critical levels of care for SUDs
2. Widespread use of evidence-based, SUD-specific patient placement criteria
3. Use of nationally recognized, evidence-based, SUD program standards to set residential treatment provider qualifications
4. Sufficient provider capacity at each LOC, including MAT
5. Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD
6. Improved care coordination and transitions between LOCs

Exhibit 1. Demonstration goals, evaluation questions, demonstration milestones, and measure or qualitative data

Minnesota Demonstration Goal	Demonstration Milestone						Measure or Qualitative Data in This Report
Goal 1. Increased rates of identification, initiation, and engagement in treatment for SUD	1	2	3	4	5	6	

[8] The major programs that are considered full coverage are: MA, NM, RM, IM, KK, LL, FF, JJ, BB, XX. Please see the following link for a description of each major program: https://www.dhs.state.mn.us/ID_008922#recipient.

Minnesota Demonstration Goal	Demonstration Milestone						Measure or Qualitative Data in This Report
Hypothesis: The Demonstration will increase the share of beneficiaries who are identified and treated for OUD/SUD in ways that are consistent with evidence-based care.	✓			✓			
1. To what extent did implementation of the 1115 SUD Demonstration result in increased screening and identification of members with SUD? 2. Did efforts to improve initiation and engagement facilitated by the 1115 SUD Demonstration result in Minnesota Medicaid beneficiaries with SUD, including OUD, receiving more treatment for SUD?							Quantitative, claims-based: • Percentage of beneficiaries with engagement in alcohol and other drug-dependence treatment • Percentage of beneficiaries with initiation in alcohol and other drug-dependence treatment • Time to treatment Quantitative, non-claims-based: • Number of enrolled at each level of care Qualitative: • MN Provider Survey
Goal 2. Increased adherence to and retention in treatment	1	2	3	4	5	6	
Hypothesis: The Demonstration will improve adherence to treatment plans.	✓	✓	✓			✓	
1. To what extent and how did implementation of the 1115 SUD Demonstration result in improvement in: a. Adherence to the plan of treatment? b. Retention of Minnesota beneficiaries with SUD in addiction recovery management? c. Duration of pharmacotherapy, including MAT for OUD, among Minnesota beneficiaries?							Quantitative, claims-based: • Follow-up after IMD stay, for persons with alcohol and other drug (AOD) use or dependence, persons with alcohol or other SUD and discharged from an IMD with a follow-up visit within 7 and 30 days of discharge • Follow-up after ED visit for AOD use or dependence • Percentage of patients with OUD initiated with MAT • Continuity of pharmacotherapy for OUD Qualitative: • MN Provider Survey
Goal 3. Fewer readmissions to the same or higher LOCs where the readmission is preventable or medically inappropriate	1	2	3	4	5	6	

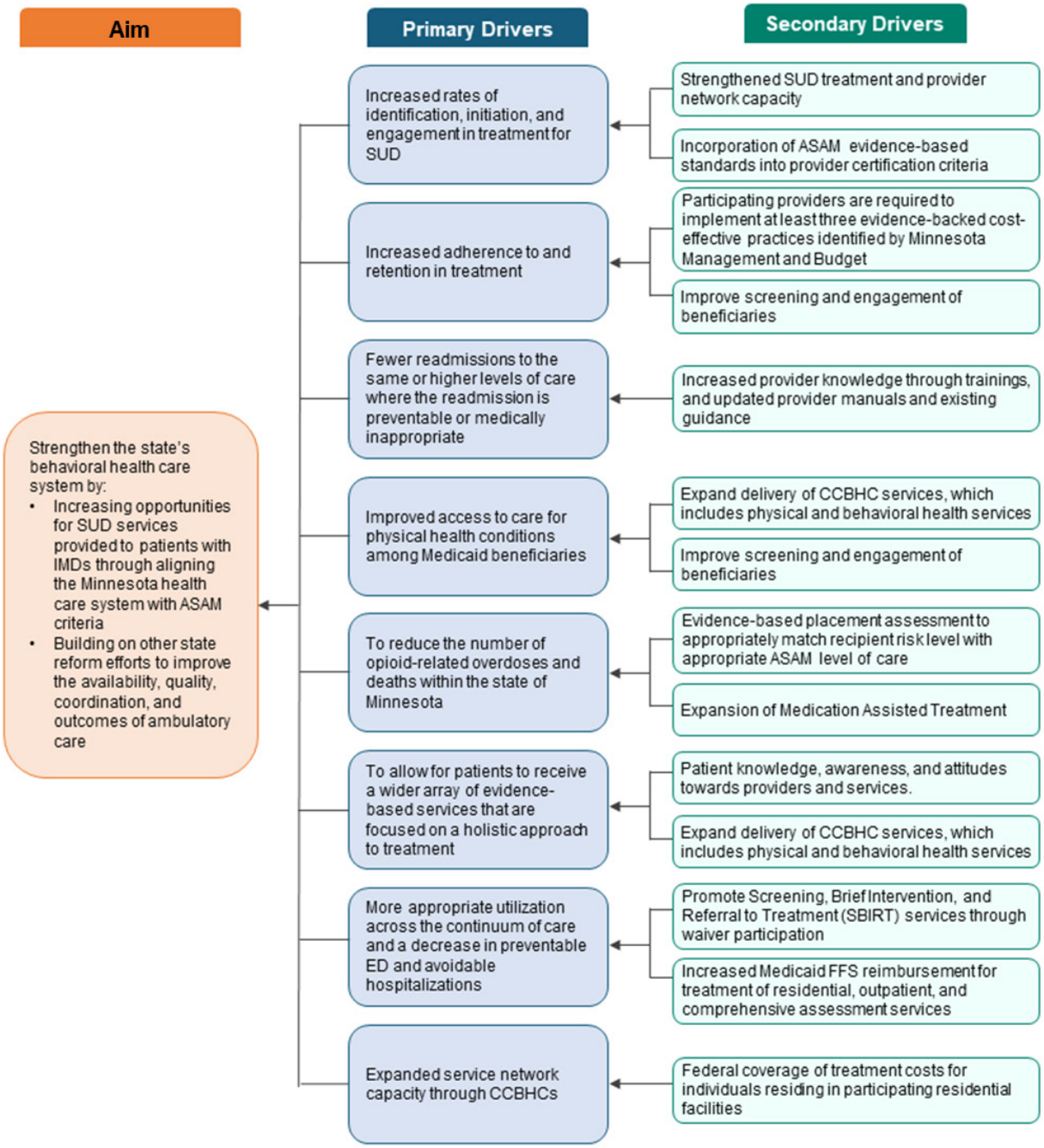
Minnesota Demonstration Goal	Demonstration Milestone						Measure or Qualitative Data in This Report
Hypothesis: The Demonstration will reduce readmissions to the same or higher LOC among beneficiaries with SUD.		✓	✓	✓			
1. Did the more comprehensive continuum of covered SUD services and care facilitated by the 1115 SUD Demonstration result in fewer readmissions to the same or higher LOC among beneficiaries with SUD?							Quantitative, claims-based: • All-cause readmissions during the measurement period among beneficiaries with SUD: The count of 30-day readmissions: ≥1 acute readmission for any diagnosis within 30 days of the index discharge date for beneficiaries with an SUD
Goal 4. Improved access to care for physical health conditions among Medicaid beneficiaries	1	2	3	4	5	6	
Hypothesis: The Demonstration will increase use of preventive health services.	✓			✓			
1. Did beneficiaries increase use of preventive health services after implementation of the 1115 Demonstration? 2. Do SUD services providers believe that access to care for physical health conditions has improved since implementation of the 1115 SUD Demonstration?							Quantitative, claims-based: • Percentage of beneficiaries with an SUD receiving ambulatory or preventive care
Goal 5. To reduce the number of opioid-related overdoses and deaths within the state of Minnesota	1	2	3	4	5	6	
Hypothesis: The demonstration will decrease the mortality rate among Minnesota beneficiaries with SUD/OUD.		✓	✓		✓		
1. Did the mortality rate among Minnesota beneficiaries with SUD/OUD decrease after implementation of the 1115 Demonstration? 2. Did overdose-related mortality rates among Minnesota beneficiaries with SUD/OUD decrease after implementation of the 1115 SUD Demonstration?							Quantitative, MN cause of death data linked to Medicaid enrollment data: • OUD mortality rate
Goal 6. To allow patients to receive a wider array of evidence-based services that are focused on a holistic approach to treatment	1	2	3	4	5	6	
Hypothesis: The Demonstration will increase the share of beneficiaries who are treated for OUD/SUD in ways that are consistent with evidence-based care.	✓			✓			

Minnesota Demonstration Goal	Demonstration Milestone						Measure or Qualitative Data in This Report
1. What are the challenges to implementing ASAM's critical levels of care? 2. To what extent and how did implementation of the 1115 SUD Demonstration result in the incorporation of evidence-based standards into SUD treatments? 3. To what extent did the 1115 SUD Demonstration enable providers to deliver the comprehensive continuum of services and care for SUD and OUD?							Qualitative: MN Provider Survey
Goal 7. Reduced utilization of EDs and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services	1	2	3	4	5	6	
Hypothesis. The Demonstration will reduce the utilization of EDs, avoidable hospitalizations, hospitalizations for ambulatory-care-sensitive conditions, and intensive inpatient services.				✓	✓		
1. Did implementation of the 1115 SUD Demonstration result in the following, among Medicaid beneficiaries with SUD, after receipt of treatment services: a. Improved use of preventive care? b. Reduced ED utilization? c. Fewer avoidable hospitalizations? d. Fewer hospitalizations for ambulatory-care-sensitive conditions? e. Fewer avoidable hospitalizations during and after receipt of addiction recovery management services?							Quantitative, claims-based: • ED visits following discharge from treatment • Follow-up after ED visit for alcohol and other drug misuse or dependence • ED utilization per 1,000 beneficiaries for SUD

Demonstration Driver Diagram

Exhibit 2 illustrates the primary and secondary drivers for the Demonstration's aim of strengthening the state's behavioral health system by increasing opportunities for SUD services provided to patients at IMDs through aligning the Minnesota health care system with ASAM criteria and building on other state reform efforts to improve the availability, quality, coordination, and outcomes of ambulatory care.

Exhibit 2. Demonstration driver diagram[9]



[9] Certified Community Behavioral Health Clinic (CCBHC) an integrated clinic and service delivery model that uses a cost-based reimbursement structure. Source: https://mn.gov/dhs/partners-and-providers/policies-procedures/behavioral-health/ccbhc/

Methodology

Evaluation Design

The evaluation approach is guided by the goals of the Demonstration. **Exhibit 3** presents our overall evaluation approach to addressing the research questions, including data sources and analytic methods. The claims-based measures for this interim evaluation report align with the CMS monitoring protocol. For the Summative Evaluation Report, we will include additional metrics and use quarterly data (where applicable) to establish quarterly and annual trends in an interrupted time-series design. For reasons related to the timing of the Demonstration implementation, this report does not include all metrics.

The 1115 Demonstration period covers July 1, 2019, through June 30, 2024. This report examines the two-year period before the Demonstration—January 1, 2017, to December 31, 2018—and a two-year period during the Demonstration from January 1, 2020, to December 31, 2021. It also includes a qualitative assessment of Demonstration implementation through 2022 based on a survey of enrolled providers that was conducted in early 2023. Data are structured on a calendar year. The interim evaluation period excludes a 12-month ramp-up period of calendar year (CY) 2019, during which changes to the provider manual regarding ASAM LOCs were disseminated, provider trainings initiated, and service coverage changes newly implemented. Apart from the ramp-up period, there are no further restrictions on the time period assessed for the Demonstration phase due to the COVID-19 pandemic.

Evaluation Measures and Sources

To increase the use of nationally recognized SUD-specific program standards under the third milestone, MN DHS took a variety of actions related to the goals to increase adherence to and retention in treatment, fewer readmissions to the same or higher LOCs where the readmission is preventable or medically inappropriate, and reduce the number of opioid-related overdoses and deaths in the state. Data from a recent provider survey are also presented below to provide context for provider experience under the Demonstration. Providers reported about their ability to refer to other LOCs and any organizational changes they undertook as part of their participation in the Demonstration.

Exhibit 3 provides a description of the data sources used for the interim evaluation report.

Exhibit 3. Data sources used in the interim evaluation report

Data Sources	Description
Claims-based measures	MN DHS provided NORC with files for 11 measures from the Minnesota Medicaid system.

Data Sources	Description
Provider survey	NORC completed an online survey of all enrolled provider organizations on the implementation of the Demonstration.
MN DHS Minnesota Substance Use Disorder System Reform Demonstration CMS Monitoring Reports Part B	The state provided NORC with CMS Part B Monitoring Reports for Demonstration Year 1/Quarter 2 through Demonstration Year 4/Quarter 2 that included narrative descriptions of the progress toward each milestone and Demonstration implementation.
OUD mortality data	MN DHS provided NORC with data from state death certificates that included cause of death, linked to the beneficiary enrollment files.
Implementation plan	NORC assessed progress toward completing the actions identified in the implementation plan.
Midpoint assessment	NORC's prior findings in the midpoint assessment are used to inform qualitative progress on goals and identify areas for opportunity for improvement and integration with other state initiatives.
Baseline provider capacity assessment (PCA)	NORC reviewed the baseline PCA to identify progress toward areas of improvement indicated in the baseline PCA.
State documents	MN DHS provided NORC with written responses to questions identified by the NORC evaluation team, the state's request for proposals for a contractor to support the state in the development of the SUD community of practice, the state's request for proposals for a contractor to minimize regulatory paperwork and improve systems for SUD programs.
Kepro utilization management report	MN DHS provided NORC with a document summarizing findings from Kepro's quality and utilization management report.
Supporting literature	We reviewed existing peer-reviewed and grey literature[10] to contextualize the impacts from COVID and to understand Medicaid policy options that MN DHS may want to consider in support of progress toward Demonstration goals.

Analytic Methods

Claims-Based Measures

Target group. The target population of the Demonstration is all individuals enrolled in Medicaid who receive any services for SUD. For most analyses, beneficiaries with an OUD or SUD (a qualifying claim that uses an OUD/SUD diagnosis code as the primary diagnosis) must also satisfy criteria for specific

[10] Grey literature is information that falls outside the mainstream of published journal and monograph literature, not controlled by commercial publishers, and includes sources such as reports, conference abstracts or papers, and governmental or private sector research. Source: https://www.nihlibrary.nih.gov/services/systematic-review-service/literature-search-databases-and-gray-literature

enrollment periods (e.g., continuous enrollment). This approach is an intent-to-treat (ITT) design: the analysis includes all eligible Medicaid beneficiaries, regardless of what, if any, treatment they received from enrolled providers. This ITT design avoids the volunteer bias from limiting the evaluation to only beneficiaries who received care from participating providers. Currently only residential providers are required to participate and must enroll by 2024. We examined all metrics at the beneficiary level and conducted event-level analyses for a subset of measures.

Comparison group. The use of an ITT design and the lack of an available out-of-state or within-state control group precludes a comparison group. All providers are eligible for participation in the Demonstration, and all Medicaid beneficiaries with an SUD/OUD are eligible for services (although some outcome measures require full benefits and specific enrollment duration for inclusion in analyses). Both of these factors limit the construction of a comparison group. Providers who do not participate may be different in unobserved ways from those who do participate with respect to factors that are not captured in claims data (such as case mix at facilities, geographic distances, staff mix and credentials across the referral network, and telehealth capabilities). At the same time, the state anticipates a "spillover" effect of establishing ASAM criteria statewide: Providers in the state are expected to engage with ASAM guidelines, although nonparticipating providers will not be required to demonstrate adherence to ASAM criteria. Nonparticipating providers may adopt the ASAM framework, as this approach becomes part of the culture of care in the state, and the evaluation would have no way of knowing if this is occurring. Furthermore, beneficiary placement is expected to be made on the basis of ASAM LOC guidelines. It may be that more severe cases are assigned to providers with a greater treatment capacity. For example, patients' SUD severity may influence which IMD they are referred to, and the capacity to manage severe patients may be associated with participation in the Demonstration. Comparisons to patients with private coverage are not appropriate due to differences in social risk factors and other unmeasurable barriers to health that Medicaid patients may have that are not typically present in a commercially insured population. We compare outcomes for beneficiaries in the baseline and demonstration periods.

Quantitative Methods

We computed descriptive statistics for the target population in the baseline and Demonstration periods. We used serial cross-sectional and pre-post analysis to test hypotheses concerning the research questions related to program reach and impact.

Descriptive summary statistics. Summary statistics are reported to characterize the baseline period and Demonstration period populations with respect to demographic characteristics, number of months of coverage, dual-eligibility status, distribution of the populations among the prevention regions (PRs), and the presence of OUD and chronic conditions.

Multivariable regression analysis. We used a serial cross-sectional and pre-post design, implemented in generalized linear multivariable regression models with the appropriate distribution model (logistic models for binary outcomes and linear regression for event-level analyses), and report

adjusted outcomes, testing for significant differences (at α = .05) between each year and between the baseline and Demonstration periods. Adjusted regression models controlled for differences in duration of coverage, demographics (age, race/ethnicity, sex), dual eligibility with Medicare, and five of the most prevalent chronic conditions (asthma, depression or anxiety, liver disease, arthritis, and diabetes), and the distribution of the beneficiaries among the seven MN DHS PRs.[11] For outcomes not specifically assessed on beneficiaries with an OUD diagnosis, we also adjusted for a diagnosis in the past 12 months. We clustered standard errors at the beneficiary level to account for repeated observations of the same beneficiaries in the data over time. We report outcomes observed during the two-year baseline period before the Demonstration implementation date, using calendar years January 1, 2017, to December 31, 2018, and a post-period January 1, 2020, through December 31, 2021.This excludes 2019 as ramp-up period. Results are presented in tables and graphs.

Unadjusted overdose deaths analysis. As part of Goal 5, we reported the unadjusted number and rate of deaths per 1,000 Medicaid beneficiaries and rate per beneficiaries with OUD for the latter. This is consistent with CMS metrics 26 and 27 for drug overdose deaths. MN DHS provided these counts, using data from the National Vital Statistics System Mortality Multiple Cause-of-Death Files, linked to Medicaid beneficiary enrollment data to report on overall death rates. Overdose deaths are those from the International Classification of Diseases-10 (ICD-10) codes for underlying cause of death: X40-X44 (unintentional drug poisonings), X60-X64 (suicidal drug poisonings), X85 (homicidal drug poisoning), and Y10-Y14 (drug poisoning of undetermined intent). OUD deaths are those resulting from T40.1 (heroin), T40.2 (natural and semisynthetic opioids), T40.3 (methadone), and T40.4 (synthetic opioids other than methadone).

Qualitative Methods

To strengthen NORC's understanding of perspectives on implementation of the Demonstration and its outcomes, we conducted two qualitative data collection activities. First, NORC conducted a voluntary survey aimed to reach all enrolled Demonstration providers. Second, NORC completed a document review of the baseline, midpoint, and quarterly monitoring Part B reports for Demonstration years three and four. These documents informed NORC's survey data collection and analysis. The survey was conducted using the Qualtrics online survey platform and consisted of 19 closed and open-ended questions. Twenty-five providers responded to the survey, which was conducted from January 24, 2023, to March 17, 2023. The reported provider survey data reflect the implementation experiences of those providers. The 25 respondents represent all ASAM critical LOCs and 97 facility locations that bill for 45 different national provider identifiers. There was only one respondent providing Level 3.3, clinically managed high-intensity and population-specific services. Many respondents represent providers and facilities in the Minneapolis-Saint Paul region, but there were also respondents from central and southern regions of the state.

[11] See the MN DHS Prevention Regional Coordinators website for the counties in each region: https://rpcmn.org/index.php.

For the Summative Evaluation Report, NORC will conduct primary data collection through a series of in-depth interviews with beneficiaries and other key Demonstration participants, including consumer advocates, providers, managed care plans, and state Medicaid staff members. The beneficiary interviews will aim to understand recent experiences in accessing SUD-related care, barriers, and facilitators to obtaining SUD treatment, and ways in which health insurance can better support access to care. These will be done at the end of the fourth Demonstration year (reflecting the delay in implementation of the Demonstration), as this will allow a better understanding of the changes that have occurred during the Demonstration period.

Methodological Limitations

Data availability. The study period for this interim report was limited to a two-year period post-demonstration to accommodate claims data availability and to align with CMS reporting requirements. Further data were aggregated to the annual level to facilitate alignment with metric calculation and to limit the burden to the MN DHS.

Analytic Approach: The analyses of claims-based measures in this report include a trend analysis for the change over the four-year period, and for the pre-post demonstration periods. Due to anticipated difficulties with the interpretation of quarterly fluctuations in light of the recent COVID-19 public health emergency, we've used annual data rather than quarterly data in this report. One limitation of this approach is that we cannot assess how trends in outcomes differed between pre- and post-demonstration time periods, since these trends require at least three data points. The Summative Evaluation Report will use a quarterly data analysis and interrupted-time series to enable a deeper understanding of the trends before and during the Demonstration.

Measures. Because of the limitations in time and advance preparation, and the difficulty in determining progress with the Demonstration during the COVID-19 pandemic, the scope of the interim evaluation report is a more limited set of measures and analyses. **Exhibit 4** provides an overview of claims-based measures included in the Evaluation Design but excluded for this report, an explanation for why each measure is excluded, and whether each measure will be included in the Summative Evaluation Report. The table is organized by goal and hypothesis. In addition to the measures listed in the table below, we will explore alternative data sources and measures to further clarify and supplement findings in each goal. The Summative Evaluation Report will include additional metrics as more providers become approved for each level of ASAM care. Apart from examining trends in medication for OUD in urban and rural areas, we do not report results for any subgroups, noting cautious interpretation of all results in this report due to the impact of the COVID-19 pandemic. We did not conduct subgroup analyses for children and adults, since the number and proportion of children with results for each measure was small; in 2021 the population under 18 ranged from 0 to 3.5% across the quantitative metrics. We plan to reassess the feasibility and relevance of subgroup analyses by child and adult status in the Summative Evaluation Report.

Cost Analysis. Although the waiver goals do not encompass hypotheses about the directionality of per-beneficiary spending during the demonstration period, we also plan to perform an exploratory analysis of the effects of the Demonstration on healthcare costs. Pending data quality and availability, NORC will include an analysis of the list of spending measures identified in the Evaluation Design in the Summative Evaluation Report, including:

- Total PMPM spending for beneficiaries with an SUD
- Total Federal cost
- Spending on SUD services for beneficiaries with an SUD
- Spending on non-SUD services for beneficiaries with an SUD
- Spending on SUD services for beneficiaries with an SUD who received services in an IMD
- Spending on non-SUD services for beneficiaries with an SUD who received services in an IMD

Effects of COVID. Although it is not within the scope of this report to evaluate the potential impact of the pandemic on the number of providers and their capacities, the availability of services, and beneficiaries' care-seeking behaviors, we qualify our findings from review of the existing literature on the pandemic's impact on the health care system.

Qualitative data. As noted above, our provider survey aimed to collect data from all enrolled Demonstration providers, but participation was voluntary. We conducted extensive follow-up by email and phone with all providers who did not complete the survey. Nonetheless, the survey findings may reflect selection bias on the part of providers who were motivated or had the capacity to participate in the survey. Although participating providers represented providers across the state who deliver all ASAM LOCs, the results may not include the experiences and viewpoints of all of the provider organizations in the Demonstration, especially those of smaller SUD/OUD providers that operate with limited administrative staff.

Exhibit 4. Summary of claims-based measures included in the Evaluation Design but excluded from this report

Minnesota Demonstration Goal	Hypothesis	Measure	Limitation and Reason for Exclusion from Report	Will the Measure be Included in Summative Evaluation Report?
Goal 1. Increased rates of identification, initiation, and engagement in treatment for SUD	*The Demonstration will increase the share of beneficiaries who are identified and treated for OUD/SUD in ways that are consistent with evidence-based care.*	Percentage of eligible providers offering screening services with SBIRT for SUD and/or OUD and/or referral to treatment	**Data Quality:** Providers do not consistently bill for SBIRT	Yes
Goal 2. Increased adherence to and retention in treatment	*The Demonstration will improve adherence to treatment plans.*	Percent of beneficiaries with SUD admitted to a residential or inpatient facility completing treatment	**Data Availability:** Data is not available in DAANES due to pandemic-related constraints	We will assess availability and quality of claims data
Goal 3. Fewer readmissions to the same or higher LOCs where the readmission is preventable or medically inappropriate	*The Demonstration will reduce readmissions to the same or higher LOC among beneficiaries with SUD.*	Percentage of beneficiaries with an SUD diagnosis who were hospitalized for any diagnosis.	**Overlap with Other Measures:** Report includes two alternative measures that overlap with this measure, percentage of beneficiaries with SUD admitted to the emergency department, and percentage readmitted after discharge for any diagnosis. These two indicators capture similar aspects of quality and care coordination	No

Minnesota Demonstration Goal	Hypothesis	Measure	Limitation and Reason for Exclusion from Report	Will the Measure be Included in Summative Evaluation Report?
Goal 6. To allow patients to receive a wider array of evidence-based services that are focused on a holistic approach to treatment	*The Demonstration will increase the share of beneficiaries who are treated for OUD/SUD in ways that are consistent with evidence-based care.*	Percentage of beneficiaries with an SUD accessing support services following discharge from an inpatient facility or residential treatment center	**Data Quality and Availability:** These measures were not included due to data availability and quality constraints in DAANES. The data does not represent all facilities and since reporting requirements change over time the denominator of providers is inconsistent. Finally, satisfaction or services measures are reported-out by clinicians and there is minimal variation in the responses, and therefore they are excluded out of concern for potential reporting bias.	No
		Use of peer supportive services among beneficiaries admitted to treatment		No
		Continuity of use peer-support services among beneficiaries admitted to treatment		No
		Percent of beneficiaries admitted for SUD treatment who were satisfied with services		No

Results

The results presented in this report are derived from Medicaid claims and enrollment data and presented by Demonstration goal. Data from interviews conducted during the MPA and a recent provider survey are also presented below to provide context for provider experience under the Demonstration.

Goal 1: Increased rates of identification, initiation, and engagement in treatment for SUD

To ensure and increase access to critical LOCs for OUD and other SUDs, MN DHS implemented a variety of actions related to the goal of increasing the proportion of patients in SUD treatment. We hypothesized that these actions will increase the share of beneficiaries who are who are identified and treated for OUD/SUD in ways that are consistent with evidence-based care. For example, providers reported that the patient assessment process under the Demonstration was effective in directing patients to the appropriate level of treatment. In the MPA, providers reported having knowledge of and experience with the ASAM standards because they were closely aligned with the Minnesota matrix for determining placement. However, providers also noted that there were still challenges in applying ASAM criteria during assessment, as not all LOCs were available in the Demonstration. Both the MPA and the state's Quarterly Monitoring Reports noted that providers are performing SBIRT but may need more training on billing. The state provides information for providers regarding billing in the MHCP Provider Manual, and providers can contact the MHCP Provider Resource Center with questions.

During 2021, the state also experienced billing issues concerning WM and has noted that the lack of enhanced rates for WM services in the Demonstration may prevent facilities from transitioning to WM services over detoxification, which can still be paid for through the state's Behavioral Health Fund. MN DHS indicated the onboarding of the ASAM Training Lead will support and expand training in early intervention, now in state law (0.5 Early Intervention) and the Minnesota Health Care Programs (MHCP) Provider Resource Center can provide ongoing training/guidance on all billing requirements.

Summary of Claims-Based Measures

Between the baseline and initial Demonstration periods, initiation of treatment within 14 days of diagnosis and engagement in treatment within 34 days of diagnosis increased, representing progress in the desired directionality (**Exhibit 5**). For the measure on beneficiary engagement in AOD dependence treatment, we do not observe progress toward the state's target. All findings were statistically significant.

Exhibit 5. Summary of claims-based measures for Goal 1

Measures Examined	State's Target	Directionality	Progress (Yes/No)
Percentage of beneficiaries initiated into AOD dependence treatment	Increase	Increase	Yes
Proportion of beneficiaries with treatment initiated in <2 weeks (initiation of AOD treatment)	Increase	Increase	Yes
Percentage of beneficiaries with engagement in AOD dependence treatment	Increase	Decrease	No

Initiation and engagement of alcohol and other drug dependence treatment

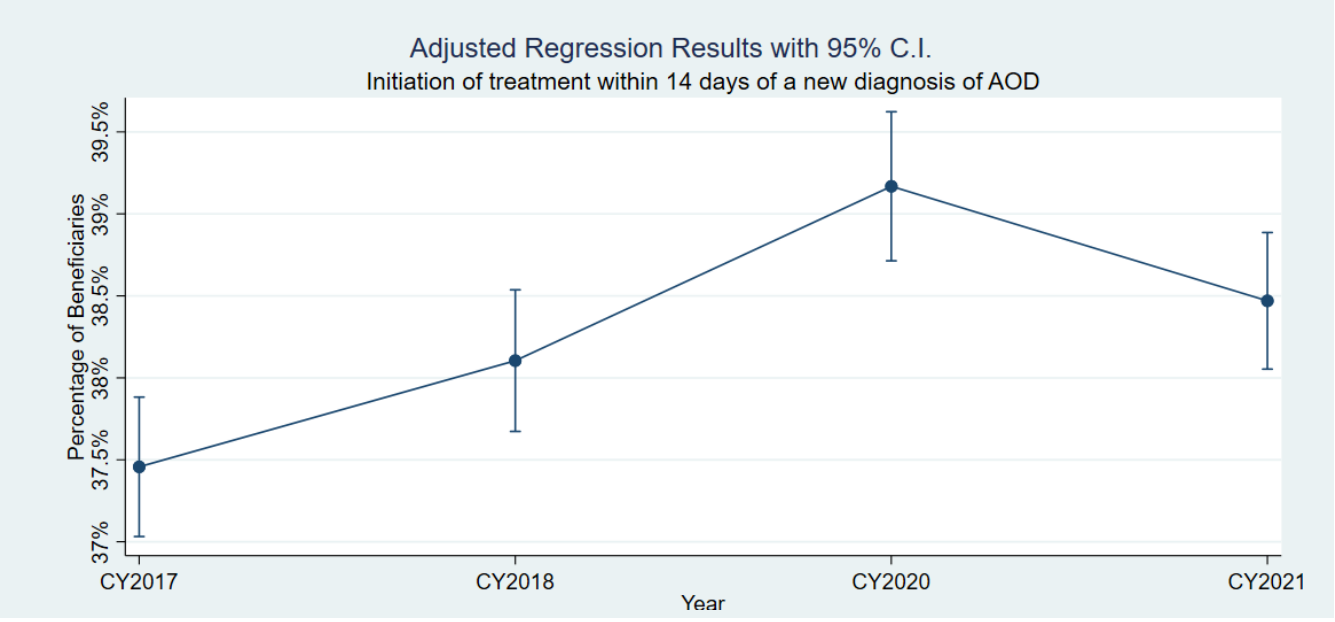
There was an absolute 1.1 percentage point increase in initiation of treatment within 14 days of diagnosis (**Exhibit 6**) between the baseline and initial Demonstration periods. However, a small decline was observed between CY2020 and CY2021 (a change of -0.6 percent). The overall number of beneficiaries with a new diagnosis of SUD increased between 2017 and 2021, from 49,600 to 52,430.

Exhibit 6. Proportion of beneficiaries with a new diagnosis of AOD who initiated treatment within 14 days, CY2017-CY2021

Hypothesis: The demonstration will increase the proportion of beneficiaries with a new diagnosis of AOD who initiate[12] treatment within 14 days of diagnosis.

Measure: Percentage of beneficiaries who initiate treatment in AOD dependence treatment

Measure steward: Medicaid Adult Core Set



[12] Treatment initiation is defined as ≥1 SUD-related treatment visit within 14 days of identification. Engagement is defined as receiving an additional two SUD-related treatment visits within 34 days after the initiation visit.

Study Period	No. Beneficiaries Who Initiated Treatment	Total No. Beneficiaries w. New Diagnosis of SUD	Rate	Change from Prior Year
CY2017	18,579	49,600	37.4%	-
CY2018	18,373	48,218	38.1%	0.6%*
CY2020	17,118	43,703	39.1%	1.0%*
CY2021	20,170	52,430	38.4%	-0.6%*

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Overall	37.8%	38.8%	1.1%*	2.6%

*Indicates significant difference at p<.05 between time periods. This measure was assessed on beneficiaries with a diagnosis of AOD in the relevant year and with continuous eligibility and full coverage, following 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics, v. 5.

Timely treatment (the proportion of beneficiaries who initiated medication within two weeks) increased by 2.6 percent, or 1.0 percentage point (**Exhibit 7**). The average time to treatment remained similar in the baseline and Demonstration periods (2.3 days vs. 2.2 days).

Exhibit 7. Time to treatment for beneficiaries with an AOD use or dependence, CY2017-CY2021

Measure: Number of days between diagnosis and treatment reported as the average time to treatment, conditional on any treatment		
Study Period	**Average Time to Treatment (Days)**	**Change from Prior Year (Days)**
CY2017	2.3	-
CY2018	2.3	0.0
CY2020	2.2	-0.1*
CY2021	2.3	+0.1*

Overall Change from 2017-2018 to 2020-2021				
Overall	**2017-2018**	**2020-2021**	**Absolute Change**	**Relative Change**
Proportion of beneficiaries with OUD and treatment within 2 weeks	37.8%	38.9%	1.0%*	2.8%
Average number of days	2.3	2.2	-0.1*	-4.4%

*Indicates significant difference at p<.05 between time periods.

Note: This measure was assessed on beneficiaries with a diagnosis of OUD in the relevant year and with continuous eligibility and full coverage, following 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics, v. 5.

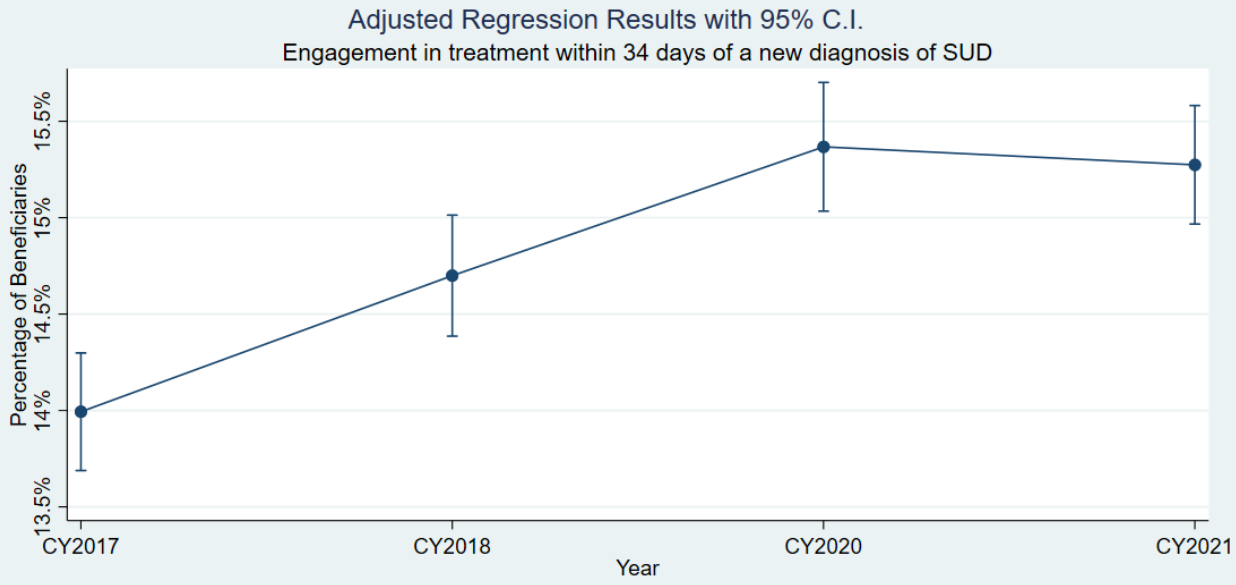
There was a relative increase of 6.8 percent in the proportion of beneficiaries with a new SUD diagnosis who engaged in treatment within 34 days of diagnosis between the baseline and Demonstration periods (**Exhibit 8**). During the baseline period, timely treatment engagement increased by 0.8 percentage points between CY2017 (13.9 percent) and CY2018 (14.7 percent). Treatment engagement increased slightly during Demonstration CY2020 (15.4 percent) and dipped slightly in Demonstration CY2021 (15.3 percent).

Exhibit 8. Proportion of beneficiaries with a new diagnosis of SUD who engaged in treatment within 34 days, CY2017-CY2021

Hypothesis: The Demonstration will increase the proportion of beneficiaries with a new SUD diagnosis who engage in treatment within 34 days of diagnosis.

Measure: Percentage of beneficiaries with engagement in AOD dependence treatment

Measure steward: Medicaid Adult Core Set



Study Period	No. Beneficiaries Who Engaged in Treatment	Total No. Beneficiaries w. New Diagnosis of SUD	Rate	Change from Prior Year
CY2017	6,941	49,600	13.9%	-
CY2018	7,088	48,218	14.7%	+0.8%*
CY2020	6,716	43,703	15.4%	+0.7%*
CY2021	8,008	52,430	15.3%	-0.1%

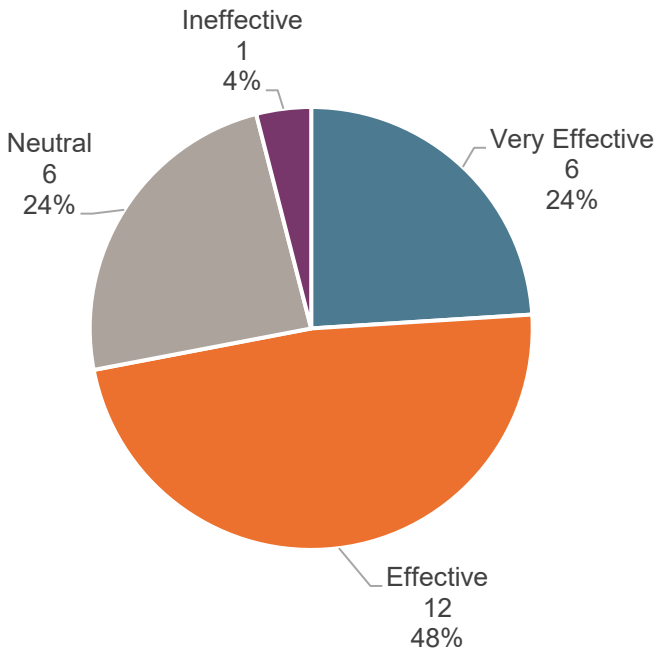
Overall Change from 2017-2018 to 2020-2021				
Overall	**2017-2018**	**2020-2021**	**Absolute Change**	**Relative Change**
Impact	14.3%	15.3%	1.0%*	6.8%

*Indicates significant difference at p<.05 between time periods. This measure was assessed on beneficiaries with a diagnosis of OUD in the relevant year and with continuous eligibility and full coverage, following 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics, v. 5.

Provider Experience with Patient Assessment Process

Providers reported on the survey that the Demonstration is effective in assessing patients and then directing them to the appropriate LOC. When asked how effective the patient assessment process was, 20 out of 25 providers said it was "Very effective" or "Effective" (**Exhibit 9**). Moreover, one provider noted that although patients seeking residential services are not often looking for a referral to an outpatient LOC, they are able to transition patients through their referral network when appropriate. The Demonstration's effectiveness in directing patients to the appropriate LOC and type of treatment will also be discussed below as part of Goals 3 and 6.

Exhibit 9. Provider rating of Year 2 MN 1115(a) SUD Demonstration effectiveness

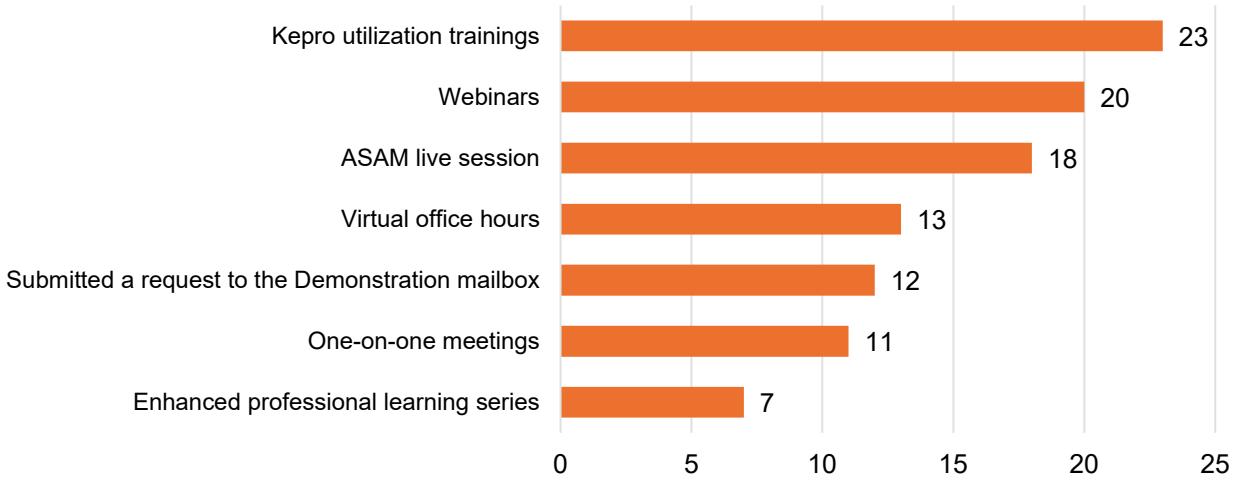


Provider Training and Technical Assistance

MN DHS trainings and ongoing technical assistance prepared enrolled providers to implement system reforms designed to increase rates of identification, initiation, and engagement in treatment for SUD.

Providers responding to the survey reported high levels of participation in the state's training and TA sessions. The current findings, presented in **Exhibit 10**, are consistent with the 2021 provider focus group results detailed in the MPA. All except one respondent had attended a Kepro UM training, and almost all had attended a state webinar on the Demonstration and/or an ASAM live session. In addition, eight providers (33 percent) commented that they had no additional training needs at this time. For example, one stated, "I believe that we have had enough support as we have transitioned through the process." Another noted that the state's training and TA have improved, "I think that DHS has done a much better job of providing assistance/support to providers entering into the 1115." One provider commented that they would like to see the state offer another enhanced professional learning series, which was a more in-depth training offered during the first year of the Demonstration. Minnesota is aware of these training needs, and in the last quarter of 2022 Minnesota contracted with the University of Nevada for additional enhanced professional learning series and completed the training of the first cohort of providers to be ASAM trainers who can enhance the use of ASAM throughout the state, using a peer support model.[13] Fewer providers reported that they have taken advantage of the TA offerings, with approximately half of respondents attending virtual office hours or submitting a request through email. Despite more limited participation, the state views this as an important strategy for ongoing engagement with enrolled providers.

Exhibit 10. Enrolled provider participation in training and TA by type



However, other providers reported that the training and TA do not meet their needs, echoing the conclusion from the MPA that some providers did not find all the original trainings clear or tailored to their needs. Similarly, the state was aware of the need to ensure that training was available with mandatory provider participation. Some providers reported that the ASAM training was too focused on clinical documentation and was too much of a time commitment. They suggested that the state provide trainings for more staff members or different levels of staff, such as the licensed alcohol and drug

[13] Minnesota Substance Use Disorder System Reform Medicaid Section 1115 SUD Demonstrations Monitoring Report – Part B Version 4.0, Demonstration Year 4, Quarter 2.

counselors (LADCs). For Kepro UM training, one provider suggested that MN DHS develop additional resources: "I believe having some 'cheat sheets,' if you will, would be helpful. For example, I have helped numerous other treatment centers write down a step-by-step sheet on how to submit paperwork into Kepro." Another provider identified the need for WM training as a need for enrolled providers: "Opportunity exists for WM providers to increase care and collaboration with additional staff and training; this includes additional trainings for best practices with MOUD for all levels of care, including referrals, appropriate placement, and eligibility/coverage from MCOs for MOUD patients…. Would like to see a CE [continuing education] event to increase awareness and effectiveness in the field."

Goal 2: Increased adherence to and retention in treatment

This second goal reflects the overall outcome of systemic changes under the Demonstration, including actions by MN DHS to encourage improved care coordination and transitions between LOCs, access to critical LOCs for SUD, use of evidence-based placement criteria and program standards, and sufficient provider capacity at each LOC. We hypothesize these efforts will improve adherence to treatment plans. To evaluate progress toward this goal quantitatively, we analyzed data to assess several measures, including follow-up after IMD staffs or ED visits for AOD use or dependence, discharge from an IMD with a follow-up visit within 7 and 30 days of discharge, percent of OUD patients' initiative with MOUD, and continuity of pharmacotherapy. Data from a recent provider survey are also presented below to provide context for provider experience under the Demonstration.

Additionally, an ongoing effort of the state is to continue support of and the expanded functionality and use of the Minnesota Prescription Monitoring Program (MNPMP), with the goal of supporting expanded access to MOUD. At the time of the IER, plans to further develop the system had been suspended, but descriptive data on utilization indicated that there had been an increase in utilization during the first year of the Demonstration.

Summary of Claims-Based Measures

For two of three claims-based measures associated with Goal 2 (**Exhibit 11**), we do not observe progress toward the state's targets. This may be partially due to significant disruptions in utilization patterns due to the PHE. There was a decrease in follow-up after IMD stay, for beneficiaries with AOD use or dependence diagnosis.

Exhibit 11. Summary of claims-based measures for Goal 2

Measures Examined	State's Target	Directionality	Progress (Yes/No)
Follow-up after IMD stay, for persons with AOD use or dependence diagnosis	Increase	Decrease	No

Measures Examined	State's Target	Directionality	Progress (Yes/No)
Continuity of pharmacotherapy for OUD	Increase	Decrease	No
Percentage of OUD patients initiated with medication for OUD (MOUD)	Increase	Increase	Yes

Follow-up after IMD stay

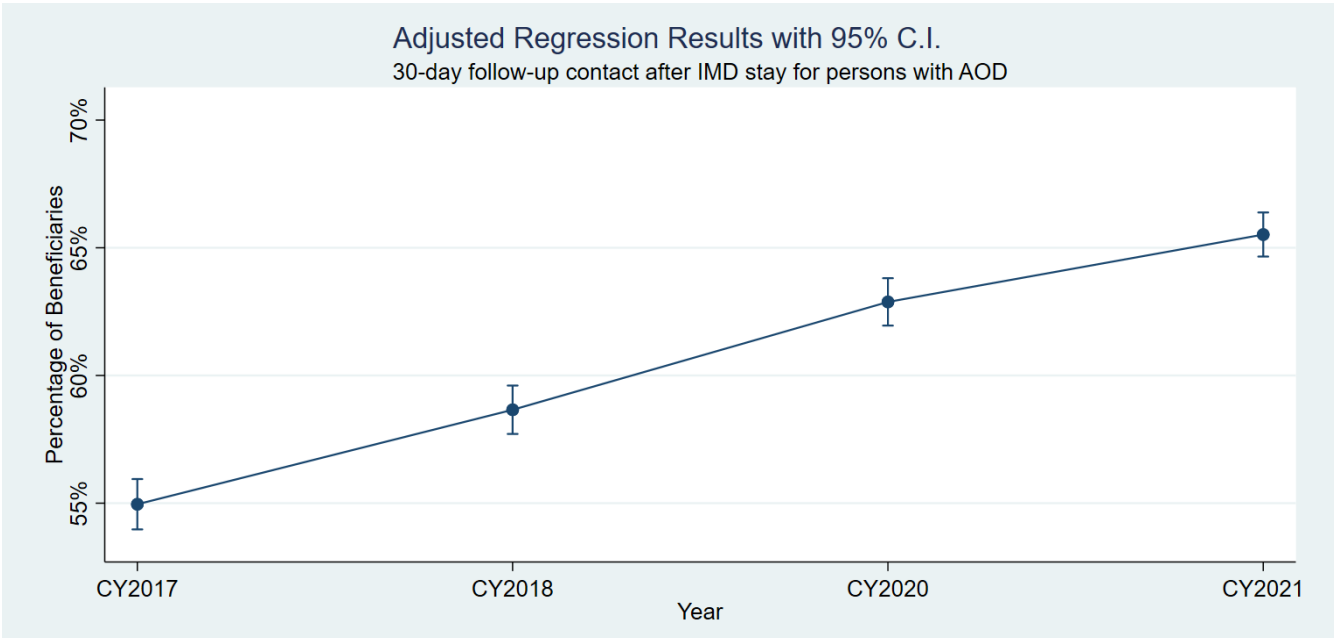
There was in increase in 30-day follow-up contacts for beneficiaries with alcohol or other SUDs and an IMD stay (**Exhibit 12**) during the Demonstration period. Since CY2017, more than half of IMD stays had a follow-up visit within 30 days. IMD stays with a follow-up visit within 30 days increased year over year. During the Demonstration period, 63.7 percent of stays had a follow-up visit within 30 days. This represents a 7.8 percent increase from the baseline period (55.9 percent). Beneficiaries with a follow-up visit within 30 days also increased by 7.4 percent from the baseline to the Demonstration period.

Exhibit 12. Follow-up contacts for beneficiaries with alcohol or other SUD and an IMD stay, CY2017-CY2021

Hypothesis: MN DHS will increase 30-day follow-up contacts for beneficiaries with alcohol or other SUD and an IMD stay.

Measure: 30-day follow-up contact after IMD stay for persons with AOD use or dependence

Measure steward: HEDIS measure/NCQA. This is a modification of metric 17(1), modified to the subpopulation of patients with an AOD use disorder or and IMD discharge rather than ED.



Study Period	Total Follow-up Contacts in 30 Days	Total IMD Stays	% Stays w. Follow-up Visit within 30 Days	Absolute Change from Prior Year	No. Benefic. w. Alcohol or Other SUD and Discharged from an IMD	% Benefic. w. Follow-up Visit within 30 Days	Absolute Change from Prior Year
CY2017	6,404	11,825	54.2%	-	10,691	55.0%	-
CY2018	7,100	12,326	57.6%	+3.4%*	11,052	58.7%	+3.7%*
CY2020	8,126	13,111	62.0%	+4.4%*	11,025	62.9%	+4.2%*
CY2021	10,355	15,893	65.2%	+3.2%*	12,189	65.5%	+2.6%*

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Rate (percent of stays with a follow-up visit within 30 days)	55.9%	63.7%	+7.8%	+17.4%*
Percent of beneficiaries with a follow-up visit within 30 days	56.9%	64.3%	+7.4%	+16.8%*

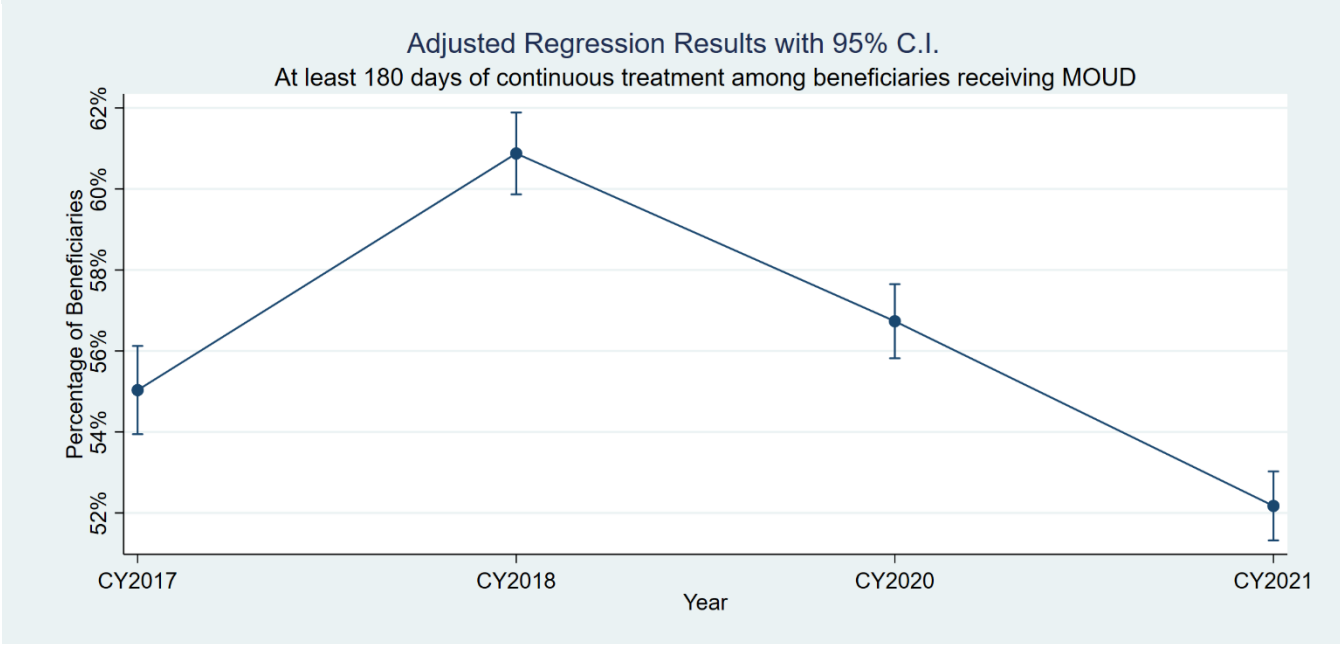
Notes: Transfers between IMDs that occur within 1 day can be counted as 1 stay. This is a modification of metric 17(1), modified to the subpopulation of patients with an AOD use disorder or an IMD discharge rather than ED.
*Indicates significant difference at p<.05 between time periods. Only follow-up per 30-day period is counted.

Continuity of pharmacotherapy for opioid use disorder

There was a decrease in the proportion of beneficiaries receiving pharmacotherapy continuously for OUD for at least 180 days (**Exhibit 13**). During the baseline period, there was an increase between CY2017 (55.0 percent) and CY2018 (60.9 percent). However, the proportion of beneficiaries with a new SUD diagnosis who engaged in treatment within 34 days of diagnosis also decreased during the Demonstration period.

Exhibit 13. Proportion of beneficiaries receiving pharmacotherapy for OUD for ≥180 days of continuous treatment, CY2017-CY2021

Hypothesis: The demonstration will improve continuity of pharmacotherapy for opioid use disorder.
Measure: Continuity of pharmacotherapy for OUD
Measure steward: National Quality Forum



Study Period	No. Beneficiaries Receiving Pharmacotherapy for OUD Who Have ≥180 Days of Continuous Treatment	Total No. Beneficiaries Receiving MOUD	Rate	Change from Prior Year
CY2017	4,417	8,026	55.0%	-
CY2018	5,433	8,924	60.9%	+5.8%*
CY2020	6,176	10,885	56.7%	-4.1%*
CY2021	6,615	12,678	52.2%	-4.6%*

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Overall	58.1%	54.3%	-3.8%*	-6.5%

Percentage of OUD patients initiated with MAT

Exhibit 14 summarizes the results for the proportion of beneficiaries with an OUD who were prescribed MOUD. The proportion of beneficiaries initiating medication increased by nearly 13 percent between the baseline and Demonstration periods (5.8 percentage points). The largest increase, from 46.6 percent to 51.7 percent, was observed between CY2018 and CY2020. NORC used claims data to assess the unique prescribers of MOUD in the baseline PCA. The Summative Evaluation Report will include a reexamination of unique prescribers of MOUD, updating the baseline PCA. We anticipate an increase in the number of providers who are actively prescribing MOUD due to state-wide initiatives to

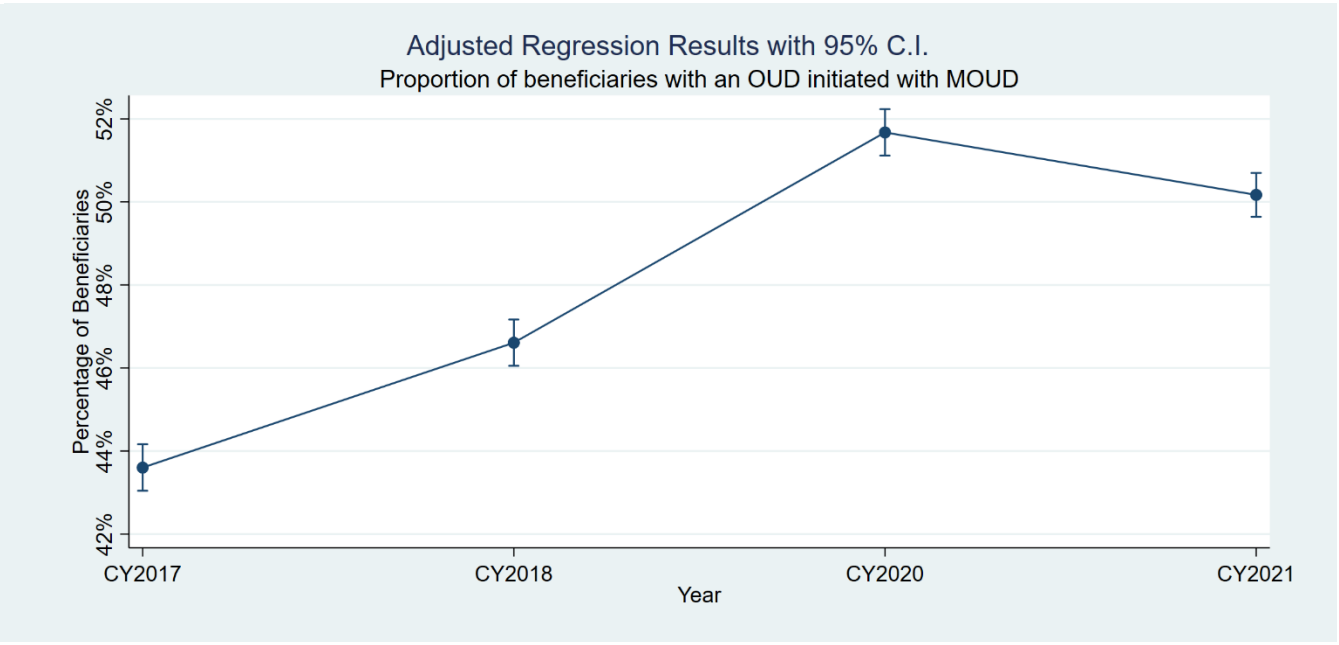
expand eligibility for prescribing as well as to the national removal of the requirement for a Drug Enforcement Administration (DEA) "X-waiver" to prescribe buprenorphine.

Exhibit 14. Proportion of beneficiaries with OUD initiated with MOUD, CY2017-CY2021

Hypothesis: The demonstration will increase the proportion of beneficiaries with an OUD initiated with a MOUD.

Measure: Percentage of OUD patients initiated with MAT or MOUD

Measure steward: MN DHS constructed, following Healthcare Effectiveness Data and Information Set (HEDIS) value set for medication treatment for opioid misuse or dependence medications (which include buprenorphine, naltrexone, and methadone)



Study Period	Number of Beneficiaries with an OUD Who Were Prescribed MOUD	Total Number of Beneficiaries with an OUD	Percent	Change from Prior Year
CY2017	11,813	27,094	43.6%	-
CY2018	12,644	27,128	46.6%	+3.0%*
CY2020	13,499	26,125	51.7%	+5.1%*
CY2021	14,671	29,244	50.2%	-1.5%*

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change[14]	Relative Change[15]
Overall	45.1%	50.9%	+5.8%*	+12.9%

*Indicates significant difference at p<.05 between time periods.

As shown in **Exhibit 15,** there was a slightly larger relative increase in the proportion of beneficiaries in rural areas who were prescribed an MOUD; the trend was not significantly different than in urban areas.

Exhibit 15. Proportion of beneficiaries with OUD initiated with a MOUD by urban/rural status,* CY2017-CY2021

Study Period	No. Beneficiaries with an OUD Who Were Prescribed MOUD		Total No. Beneficiaries with an OUD		Percent		Absolute Difference in Each Year
	Urban	*Rural*	*Urban*	*Rural*	*Urban*	*Rural*	*Urban vs. rural*
CY2017	9,030	2,901	19,470	7,624	46.4	38.0	8.4
CY2018	9,754	3,014	19,765	7,363	49.4	40.9	8.5
CY2020	10,333	3,034	19,369	6,756	53.3	44.9	8.4
CY2021	11,309	2,941	21,762	7,482	52.0	43.5	8.5

Notes: Data from the Federal Office of Rural Health Policy (FORHP) were used to code ZIP Codes to urban and rural areas.

Overall Change from 2017-2018 to 2020-2021				
Overall	2017-2018	2020-2021	Absolute Change	Relative Change
Urban areas	46.6	52.4	+5.8	+12.3
Rural areas	41.0	46.7	+5.8	+14.1

Notes: Data from the Federal Office of Rural Health Policy (FORHP) were used to code ZIP Codes to urban and rural areas.

Provider-Reported Changes in Treatment and Service Capacity

There is also qualitative evidence that the Demonstration's reforms are resulting in an increase in the proportion of patients in OUD and SUD treatment and adherence to and retention in treatment.

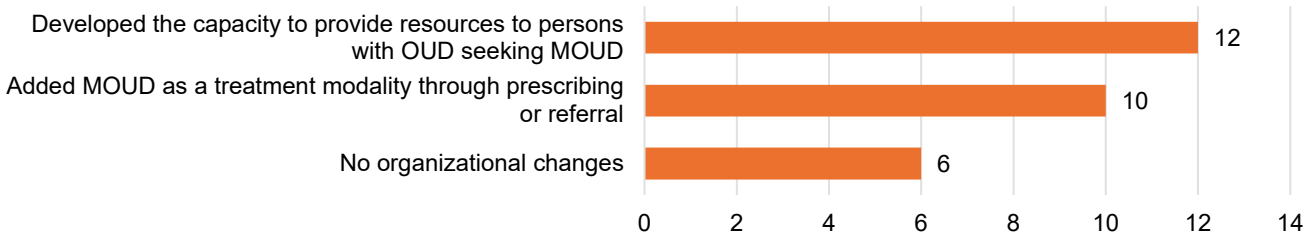
In the recent provider survey, 62 percent (n = 15) of survey respondents reported that they did not have to change the delivery of treatment services for the Demonstration, whereas the remaining 38 percent

[14] Calculated as the baseline period value subtracted from the Demonstration period value.

[15] Calculated as Demonstration period value minus baseline period value, divided by baseline period value.

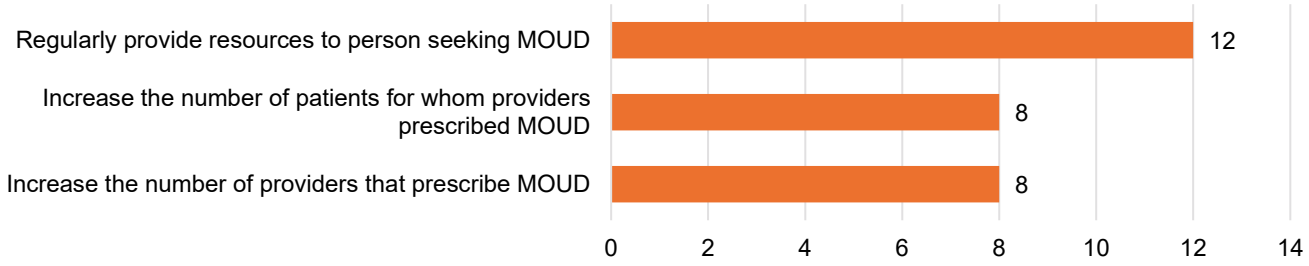
(n = 10) reported making changes (**Exhibit 16**). Importantly, providers that made changes highlighted client uptake because of the ability to serve a new service population, increased access to buprenorphine plus naloxone (Suboxone®) and WM providers, and the ability to prescribe MOUD directly from their providers and partnerships. One provider shared, "This was not a population we served before the waiver implementation. Our experience has been very positive."

Exhibit 16. MOUD treatment changes reported by providers since Demonstration implementation



According to the survey, 28 percent (seven) of providers have increased the number of patients receiving MOUD prescriptions, a specific goal of the Demonstration. Twenty-four and 20 organizations reported offering MOUD referral and MOUD treatment, respectively (**Exhibit 17**). Among the 24 MOUD-referring organizations, two-thirds provided referrals to fewer than 100 patients. Among the 20 respondents that provided MOUD, two organizations served more than 250 individuals, and 75 percent prescribed MOUD to fewer than 100 patients. Three organizations reported that they do not prescribe MOUD, whereas only one organization reported providing MOUD only through prescription. Some survey respondents described challenges with providing MOUD treatment or referral to clients, including lack of client interest, limited MOUD-prescribing providers, inadequate mental health services to complement medication use, and insufficient organizational capacity (**Exhibit 18**).

Exhibit 17. Changes in service capacity reported by providers since Demonstration implementation

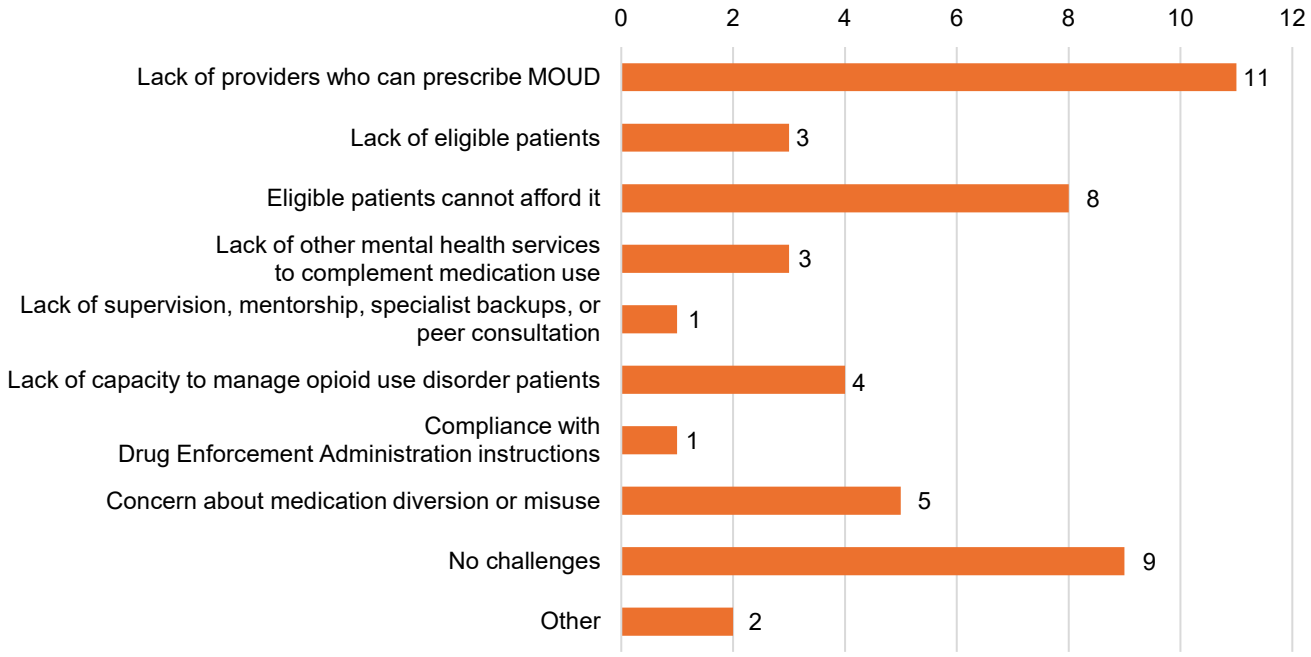


Provider Challenges in Providing MOUD to Patients under Demonstration

Under the Demonstration, pharmacies and prescribers who dispense from their offices submit prescription data to the MNPMP for all Schedules II, III, IV controlled substances; butalbital; and gabapentin dispensed in or into Minnesota. Approximately 85 percent of respondents reported that

provider use of the MNPMP stayed the same since Demonstration implementation, whereas 15 percent reported increases in MNPMP use.

Exhibit 18. Self-reported provider challenges in providing MOUD to Demonstration patients*



*Providers could select ≥1 response for this question, so the total does not add up to 25.

MN DHS has taken steps to further align state regulations with the Demonstration and to expand provider participation. At the same time, Minnesota continues to develop and implement training and TA as more providers are enrolled in the Demonstration.

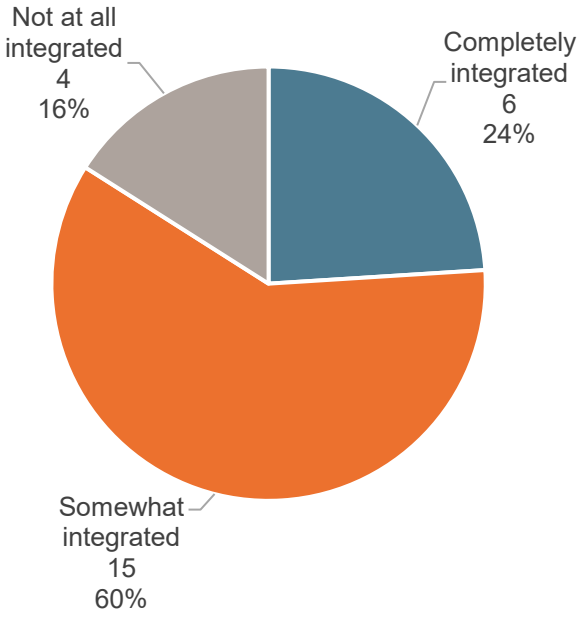
Use of Evidence-Based SUD-Specific Placement Criteria

To facilitate the use of evidence-based, SUD-specific placement criteria and meet the goals under Milestone 2, MN DHS has been primarily focused on the implementation of a new process and system for UM through the Kepro UM program that monitors and guides the application of ASAM standards when determining the appropriate LOC. The goals under this milestone include increased adherence to and retention in treatment, as well as fewer readmissions to the same or higher LOCs where the readmission is preventable or medically inappropriate and reduced number of opioid-related overdoses and deaths in the state. This is a significant ongoing operational change under the Demonstration. Data from a recent provider survey are presented below to provide context for provider experience concerning the Kepro UM program.

At the time of the MPA, MN DHS had recently contracted with Kepro, implemented the process for UM, and begun training the enrolled providers on data collection and reporting. As noted above, training on UM as well as on the ASAM standards is ongoing for newly enrolled providers.

Since the initial reporting of the challenges providers faced in fulfilling the documentation and reporting requirements for the UM program, MN DHS has changed the Kepro UM requirements to cover only 10 percent of outpatient cases and 15 percent of residential cases.[16] On the survey, 84 percent of providers reported that the Kepro UM was either fully or somewhat integrated into their workflow processes (**Exhibit 19**). They continued to underscore that Kepro UM is time-consuming and has high administrative costs. In addition, some providers reported poor communication regarding changes concerning regulations and their interpretation for utilization review. In addition, Kepro requests the same information as insurers, requiring that the data be entered twice. One provider noted, "It has created more work, therefore more staff, in a very challenging hiring environment." Nonetheless, approximately 42 percent of surveyed providers found the UM requirement changes to be helpful, and fewer providers, 33 percent, reported that they were either not very helpful or not at all helpful.

Exhibit 19. Integration of Kepro UM into enrolled provider workflow



One Demonstration provider commented, "KEPRO is not streamlined or seen as a helpful resource—inconsistency with regulations and interpretations, things changing without communication."

[16] Minnesota Substance use Disorder System Reform Medicaid Section 1115 SUD Demonstrations Monitoring Report – Part B Version 4.0, Demonstration Year 3, Quarter 4.

Goal 3: Fewer readmissions to the same or higher level of care (LOC) where the readmission is preventable or medically inappropriate

The state hypothesized that the Demonstration would reduce readmissions to the same or higher LOC among beneficiaries with SUD. To evaluate progress toward this goal quantitatively, we analyzed data to assess all-cause acute care readmissions (defined as the percentage of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days).

Summary of Claims-Based Measures

For the measure associated with Goal 3 (**Exhibit 20**), we do not observe progress toward the state's targets.

Exhibit 20. Summary of claims-based measures for Goal 3

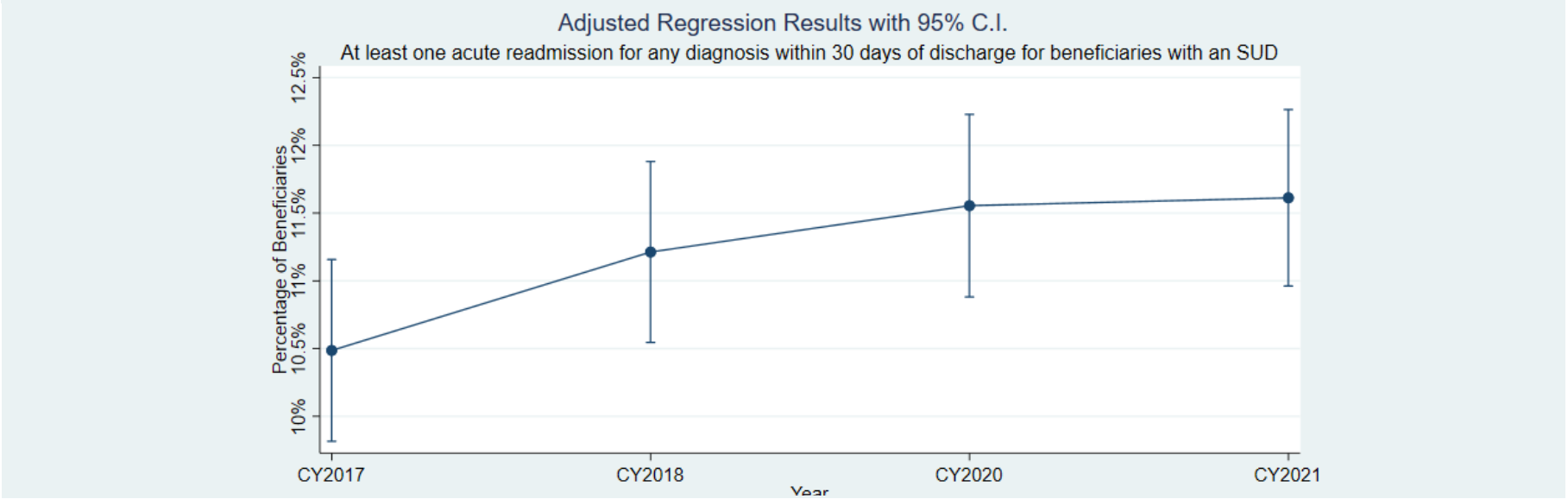
Measures Examined	State's Target	Directionality	Progress (Yes/No)
All-cause readmissions during the measurement period among beneficiaries with SUD	Decrease	Increase	No

All-cause hospitalization within 30 days of discharge from an inpatient or residential treatment facility among patients with an SUD

The state made several efforts to improve care coordination and transitions between levels of care, such as linking beneficiaries with OUD and SUD to community-based services and support. However, despite these efforts, the Demonstration still observed an increase in readmissions among beneficiaries with an SUD (**Exhibit 21**). The readmission rate increased from 11.9 percent during the baseline period to 12.5 percent during the Demonstration period. CY2017 had the lowest rate of readmissions, whereas CY2021 had the highest. The proportion of beneficiaries with any readmission increased by 0.7 percentage points from the baseline period to the Demonstration period. The rate of readmission for beneficiaries with more than one stay also increased from 19.5 percent to 20.3 percent.

Exhibit 21. All-cause readmissions among beneficiaries with an SUD, CY2017-CY2021

Hypothesis: The demonstration will decrease readmissions.
Measure: All-cause readmissions during the measurement period among beneficiaries with SUD: ≥1 acute readmission for any diagnosis within 30 days of the index discharge date for beneficiaries with an SUD
Measure steward: HEDIS measure/NCQA. This is a modification of CMS Metric 25, based on the calendar year.



Study Period	Total Hospital Stays	Total Readmissions	% Index Stays w. a Readmission	Absolute Change from Prior Year	No. Benefic. w. Index Event	% Benefic. w. Any Readmission	Absolute Change from Prior Year	No. Benefic. w. >1 Stay	Average % Stays w. Readmissions for Benefic. w. >1 Stay	Absolute Change from Prior Year	Average No. Readmissions for Those w. >1 Stay
CY2017	11,119	1,241	11.2%	-	7,998	10.5%	-	1,906	19.4%	-	0.61
CY2018	12,146	1,517	12.5%	+1.3%*	8,481	11.2%	+0.7	2,145	19.6%	+0.2	0.69
CY2020	11,914	1,448	12.2%	-0.3%	8,338	11.6%	+0.3	2,078	20.2%	+0.6	0.68
CY2021	13,256	1,705	12.9%	+0.7%	9,117	11.6%	0.1	2,348	20.3%	+0.1	0.70

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Readmission rate (percent of index stays with a readmission)	11.9%	12.5%	+0.6*	+5.4
Proportion of beneficiaries with any readmission	10.9%	11.6%	+0.7*	+6.4
Rate of readmission for beneficiaries with ≥1 stay	19.5%	20.3%	+0.8	+4.1

*At p<.05
Note: Includes inpatient hospital stay

Goal 4: Improved access to care for physical health conditions among Medicaid beneficiaries

The state hypothesized that the Demonstration would increase use of preventive health services among Medicaid beneficiaries. To evaluate progress towards this goal quantitatively, we analyzed data to assess the percentage of beneficiaries with an SUD who received ambulatory or preventative care.

Summary of Claims-Based Measures

For the one measure associated with Goal 4, we do not observe progress toward the state's targets. This may be partially due to significant disruptions in utilization patterns due to the PHE.

Exhibit 22. Summary of claims-based measures for Goal 4

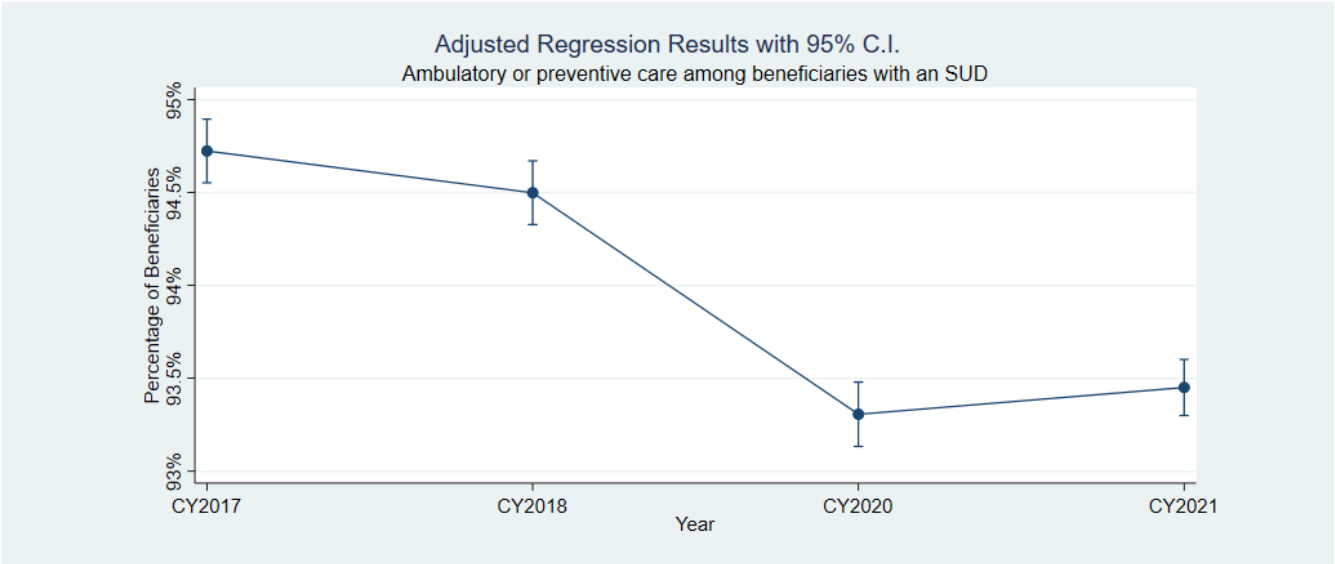
Measures Examined	State's Target	Directionality	Progress (Yes/No)
Percentage of beneficiaries with an SUD receiving ambulatory or preventative care	Decrease	Increase	No

Percentage of beneficiaries with an SUD receiving ambulatory or preventive care

There was an overall decrease in the proportion of beneficiaries with an SUD receiving ambulatory or preventive care between the baseline and Demonstration periods, from 94.6 percent to 93.4 percent, representing a 1.2 percentage point change (**Exhibit 23**). There was an increase in the number of beneficiaries with an SUD who had an ambulatory preventive care visit.

Exhibit 23. Proportion of beneficiaries with an SUD who had an ambulatory visit for prevention services, CY2017-CY2021

Hypothesis: The demonstration will improve access to preventive services for beneficiaries with an SUD.
Measure: Percentage of beneficiaries with an SUD receiving ambulatory or preventive care
Measure steward: HEDIS measure/National Committee for Quality Assurance (NCQA)



Study Period	No. Beneficiaries w. SUD Who Had Ambulatory Preventive Care Visit	No. Beneficiaries with SUD	Rate	Change from Prior Year
CY2017	61,887	65,334	94.7%	-
CY2018	62,816	66,472	94.5%	-0.2%
CY2020	66,485	71,255	93.3%	-1.2%*
CY2021	78,425	83,921	93.5%	+0.1%

*Indicates significant difference at p<.05 between time periods. This measure was assessed on beneficiaries with a diagnosis of OUD in the relevant year and with continuous eligibility and full coverage, following 1115 Substance Use Disorder Demonstrations: Technical Specifications for Monitoring Metrics, v. 5.

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Percent of beneficiaries with SUD who had an ambulatory care visit	94.6%	93.4%	-1.2%*	-1.3%

*Indicates significant difference at p<.05 between time periods. This measure was assessed on beneficiaries with a diagnosis of OUD in the relevant year and with continuous eligibility and full coverage, following 1115 Substance Use Disorder Demonstration: Technical Specifications for Monitoring Metrics, v. 5.

Goal 5: To reduce the number of opioid-related overdoses and deaths within the state of Minnesota

The state hypothesized the Demonstration would decrease the mortality rate among Minnesota beneficiaries with SUD/OUD. To evaluate progress toward this goal quantitatively, we analyzed data to assess several measures, including rates of all-drug and opioid overdose mortality among all state residents, among state Medicaid beneficiaries and among state Medicaid beneficiaries with a diagnosis of OUD.

Summary of Claims-Based Measures

Between the baseline and initial Demonstration periods, overdose mortality rates increased.

This finding is consistent with national trends and trends in other states, Minnesota did not experience a reduction in drug overdose deaths during the Demonstration period (**Exhibit 25a-c**).[xvii,xviii] A Centers for Disease Control and Prevention (CDC) study that used data abstracted from death certificates and medical examiner/coroner (ME/C) reports in 47 states and the District of Columbia reported that the rise in overdose deaths was driven mainly by two factors: 1) the physical and mental impacts of the pandemic, including isolation and loss of social support, job loss, and housing instability and 2) a reduction in the capacity and opportunities for intervention to prevent fatal outcomes. There was a 30 percent increase from 2019 to 2020 in drug overdose deaths nationwide.[xix]

Exhibit 24. Summary of claims-based measures for Goal 5

Measures Examined	State's Target	Directionality	Progress (Yes/No)
Drug overdose mortality: all Medicaid beneficiaries (count and rate)	Decrease	Increase	No
Opioid overdose mortality: all Medicaid beneficiaries (count and rate)	Decrease	Increase	No
Drug overdose mortality: beneficiaries with OUD (count and rate)	Decrease	Increase	No
Opioid overdose mortality: beneficiaries with OUD (count and rate)	Decrease	Increase	No

All-cause drug overdose mortality rate

Between baseline and initial Demonstration periods, all-drug and opioid overdose mortality rates increased among Medicaid beneficiaries (see **Exhibit 25a**). The rate of all-drug overdose mortality increased from 0.30 to 0.57 per 1,000 beneficiaries from 2017 to 2021. The rate of opioid overdose deaths increased from 0.17 to 0.41 per 1,000 beneficiaries in the same period. There was a significant increase in the average all-drug and opioid overdose death rate, pre-and post-demonstration, from 0.279 to 0.503 and 0.159 to 0.351 per 1,000 beneficiaries (at $p<.05$) for all drug and opioid death rates, respectively. Regression results indicate that over the four-year period, while the mortality rate increased significantly (at $p<.05$), the rate has not increased linearly (i.e., the rate of change has been variable).

Exhibit 25a. All Drug Overdose Mortality, All Medicaid Beneficiaries

Years	MN Medicaid Population				
	Eligible Population	Drug Overdose Deaths	Rate per 1,000 Beneficiaries	Opioid Overdose Deaths	Rate per 1,000 Beneficiaries
2017	1,430,265	422	0.295	241	0.169
2018	1,427,024	344	0.241	211	0.148
2020	1,382,911	604	0.436	393	0.285
2021	1,464,794	835	0.570	611	0.418

Notes: All beneficiaries with full benefits enrolled in Medicaid for at least one month during the calendar year or the 30 days prior to the beginning of the measurement period, consistent with metrics 26 and 27 in the CMS Medicaid Section 1115 Substance Use Disorder Demonstrations, Technical Specifications for Monitoring Metrics v. 5. Opioid deaths use the following ICD-10 codes: T40.1 (heroin); T40.2 (natural and semisynthetic opioids; T40.3 (methadone); and T40.4 (synthetic opioids other than methadone). The rate is (number of overdose deaths / number of beneficiaries) * 1,000. Data are for the calendar year (not Demonstration year). Source: Minnesota Department of Health.

The rate of all-drug overdose mortality among Medicaid beneficiaries with a diagnosis of OUD similarly increased, rising from 5.332 to 9.438 per 1,000 beneficiaries from 2017 to 2021. The rate of opioid overdose deaths among Medicaid beneficiaries with OUD also increased from 3.601 to 7.897 per 1,000 beneficiaries during the same period. There was a significant difference increase in the average all-drug and opioid overdose death rate, pre-and post-demonstration, from 4.933 to 8.123 and from 3.478 to 6.655 per 1,000 beneficiaries (at $p<.05$) for all drug and opioid death rates, respectively. Over the four-year period, all-drug and opioid overdose rates among beneficiaries with OUD increased significantly, but the rate of increase have not been linear. Linear regression results show an increase four-year period show a significant increase (at $p<.05$) in the mortality rate, at 18.4% and 29.4%, for all-drug and opioid overdose rates, respectively.

Exhibit 25b. All Drug and Opioid Overdose Mortality, Medicaid Beneficiaries with OUD

Years	Medicaid Population with OUD				
	Eligible Population	Drug Overdose Deaths	Rate per 1,000 Beneficiaries	Opioid Overdose Deaths	Rate per 1,000 Beneficiaries
2017	35,823	191	5.332	129	3.601
2018	36,166	159	4.396	118	3.263
2020	34,177	233	6.817	185	5.413
2021	36,342	343	9.438	287	7.897

Notes: All beneficiaries with full benefits enrolled in Medicaid for at least one month during the calendar year or the 30 days prior to the beginning of the measurement period and an opioid used disorder diagnosis, consistent with metrics 26 and 27 in the CMS Medicaid Section 1115 Substance Use Disorder Demonstrations, Technical Specifications for Monitoring Metrics v. 5. Opioid overdose deaths use the following ICD-10 codes: T40.1 (heroin); T40.2 (natural and semisynthetic opioids; T40.3 (methadone); and T40.4 (synthetic opioids other than methadone). The rate is (number of overdose deaths / number of beneficiaries) * 1,000. Data are for the calendar year (not Demonstration year). Source: Minnesota Department of Health

Opioid overdose mortality rate

Statewide rates of all-drug overdose mortality per 100k population rose from 0.13 to 0.22 from 2017 to 2021, and statewide rates of opioid overdose mortality per 100k population similarly increased from 6.1 to 17.9 during the same time period.

Exhibit 25c. All-drug and Opioid Overdose Mortality, Statewide and National

Years	MN Statewide+		National^	
	Drug Overdose Death Rate/1000 Population	Opioid Overdose Death Rate/1000 Population	Drug Overdose Death Rate/1000 Population	Any Opioid Overdose Death Rate/1000 Population
2017	0.133	6.1	21.7	0.149
2018	0.115	7.8	20.7	0.146
2020	0.176	12.5	28.3	0.214
2021	0.224	17.9	34.4	0.281

+MN drug overdose death rate: https://www.cdc.gov/nchs/data/databriefs/db356_tables-508.pdf#page=2.
MN Opioid Overdose rates are from:
https://wonder.cdc.gov/controller/datarequest/D157;jsessionid=0BF98996E474E6F13B671628719D#Options

^National data on all drug overdose rates are from https://www.cdc.gov/nchs/products/databriefs/db457.htm. Accessed April 1, 2023. National data on opioid overdose for 2017-2020. Centers for Disease Control and Prevention. Overdose death rates involving opioids, by type, United States, 1999-2020. Available at: https://www.cdc.gov/drugoverdose/data/OD-death-data.html.

Goal 6: To allow patients to receive a wider array of evidence-based services that are focused on a holistic approach to treatment

The state hypothesized that the Demonstration would increase the share of beneficiaries who are treated for OUD/SUD in ways that are consistent with evidence-based care. The initial evaluation design proposed evaluating progress toward this goal—in part—by incorporating measures of utilization of peer support services and experience of care from Drug and Alcohol Abuse Normative Evaluation System (DAANES) data collected by the state as part of reporting to the Substance Abuse and Mental Health Services Administration (SAMHSA). However, the measures were ultimately not used due to

data availability and quality constraints in DAANES.[17] Further detail on these measures and plans to address these domains in the Summative Evaluation Report can be found in **Exhibit 26**.

The state will also measure progress towards this goal qualitatively, by collecting and analyzing primary data from interviews with beneficiaries and other stakeholders as part of the planned Summative Evaluation Report. As reported in the MPA, we have gathered and presented data from the provider survey describing provider challenges and feedback on the transition to new evidence-based approach, including challenges in applying ASAM criteria during assessment and accessing the necessary information from ASAM trainings. To facilitate the use of evidence-based services, MN DHS has been focused on the implementation of a new process and system for UM through Kepro UM program that monitors and guidance the application of ASAM standards when determining the appropriate LOC. Data from a recent provider survey are also presented below to provide context for provider experience under the Demonstration. Providers reported about their ability to refer to other LOCs and any organizational changes they undertook as part of their participation in the Demonstration.

As noted in the MPA, a broad group of action items help to achieve implementation of residential treatment provider qualifications that meet the ASAM criteria standards or other nationally recognized, evidence-based SUD-specific program standards. Moreover, this goal was affected by the 2021 Minnesota Laws 2021, First Special Session, Chapter 7, Article 11, Sections 18-23, which required that residential treatment programs licensed by MN DHS in accordance with Minnesota Statutes, section 245G.21 and that receive payment through MHCP enroll as a Demonstration provider and meet provider standards requirements by January 1, 2024.

Enabling Providers to Deliver Comprehensive SUD care.

After two full years of implementation, most provider survey respondents found the Demonstration “Effective” or “Very Effective” in several important ways. Fifty-four percent (13) reported effectiveness in promoting patient-centered care for OUD treatment in the state, and approximately 67 percent (16) of respondents reported effectiveness in facilitating transitions to different ASAM LOCs for OUD treatment. As described above, some providers have been able to increase capacity and build referral networks as part of the Demonstration. One provider reported, “I have been a proponent of this waiver since its inception. It is good to see more providers in the state adapt the ASAM criteria, and I believe it also benefits the clients who need our treatment services.” Others noted that an expanded continuum of care, including MOUD, and rate increases, specifically for counselors, were improving the delivery of SUD services.

However, among providers, some also felt the Demonstration was not effective at accomplishing these goals and detailed the challenges with the Demonstration’s administrative changes. One explained, “It seems like the cart was put before the horse and DHS did not take into account that during a worldwide

[17] DAANES data does not represent all facilities and since reporting requirements change over time the denominator of providers is inconsistent. Satisfaction or services measures are reported-out by clinicians, and therefore the state elected not to include them out of concern for potential reporting bias.

pandemic, increase in overdose deaths and an already slim workforce the impact that adding another system, checkbox or thing to do- would have not only has a financial impact but an emotional impact on our team." Another noted, "It provided more checkboxes and not actual interventions to create quality care. Referral agreements may harm the referral process by potentially limiting who people think they can refer to." Other providers reported more positive experiences, such as one who wrote, "The professional team at MN SUD Demonstration Waiver have been accessible, responsive, and helpful throughout this transition."

Referrals to ASAM Levels of Care. As part of the Demonstration, all providers, both residential and outpatient, electing to participate must furnish verification of formal referral arrangements to ensure access to each of the ASAM LOCs. In addition, changes to MCO contracts may affect access to care and coordination for MCO enrollees and provider billing for these services. We surveyed providers about their organizations' ability to provide access for patients with Medicaid to all ASAM LOCs through referrals. Most reported that they can provide access for patients with Medicaid through referral to ASAM LOCs 1.0, 2.1, 3.1, 3.3, 3.5, and 3.7. **Exhibit 27** summarizes the results for each LOC.

Exhibit 27. Minnesota providers' self-reported ability to provide referrals at each ASAM LOC

Level	All or Most of the Time	Some	Never
1.0 Outpatient	88%	8%	4%
2.1 Intensive outpatient	92%	0%	8%
3.1 Clinically managed low-intensity residential treatment	76%	12%	12%
3.3 Clinically managed high-intensity and population-specific services	80%	12%	8%
3.5 Clinically managed residential services	96%	0%	4%
3.7 Medically managed withdrawal management	68%	20%	12%

Although most providers can provide access to Level 3.1 (clinically managed low-intensity and population-specific services) most of the time, those that are unable to do so cited limited bed availability and lack of low-intensity treatment centers. Similarly, most providers can refer patients to Level 3.3 (clinically managed high-intensity and population-specific services), but providers face challenges in finding openings at that level of care. One provider said, "There is only one program in MN offering this level of care, very hard to get someone into that program." Another noted, "There is only one program in Minnesota, and it does not serve women."

Providers reported the greatest challenge in accessing medically managed WM for their patients, with 32 percent of respondents reporting that they can access it never or only some of the time, and only 68

percent reporting that they can access it all or most of the time (**Exhibit 27**). In particular, providers commented that there are few programs—often not located nearby—and that there are no programs for adolescents. Most of the providers who responded "Never" reported that they do not offer this LOC. MN DHS has also been working to address the current gap in the state's statutes for LOC 3.7 by reaching out to ASAM and gathering internal information on the issues with the requirement that a physical exam be completed within 24 hours of admission.[18] However, when asked about organizational changes in the treatment of patients with OUD, some providers reported an increase in access and services. They noted that they are providing enhanced medical services such as MOUD and referring more patients to MOUD treatment and other providers noted that they can accept more clients due to MOUD offerings as well as increased screening and psychoeducation—i.e., a combination of cognitive-behavioral therapy, group therapy, and education about the disease[19]—for OUD.

Provider Capacity

To ensure sufficient provider capacity at critical levels of care, Minnesota identified the need to conduct a provider capacity assessment that evaluated capacity at all LOCs and availability of MOUD, thereby establishing a baseline to measure progress during the Demonstration. In addition, the state required all enrolled providers to agree to Demonstration reporting requirements that also supported measurement of Demonstration outcomes. Data from a recent provider survey are presented below to provide context for provider experience under the Demonstration.

In the MPA, the state demonstrated progress by assessing provider capacity at the organizational level and on MAT/MOUD, but individual practitioner data were not available to assess capacity at a more detailed level. Moreover, the MPA focus groups with state staff members and providers identified workforce shortages as a problem that was further aggravated by the PHE.

The current provider survey suggests that some workforce shortages and pressures have abated since the MPA was written. When asked about staffing adequacy for delivering treatment to Demonstration participants, 23 out of 25 respondents selected "Strongly Agree" or "Agree" (**Exhibit 28**). Providers who did not feel they had adequate staffing noted that additional administrative support and mental health professionals are needed to support the treatment of Demonstration participants. However**,** other respondents noted improvements, such as they had been able to increase salaries because of the increased reimbursement rates and the ability of LADCs to spend more one-on-one time with clients. They also noted plans to add more MOUD providers and interest in adding a prescribing provider to their practice. When asked about organizational stability and sustainability, for example, one provider shared, "We have seen more clients, and it has been easier to accept clients at a faster rate." Another

[18] Minnesota Substance Use Disorder System Reform Medicaid Section 1115 SUD Demonstrations Monitoring Report – Part B Version 4.0, Demonstration Year 4, Quarter 2.

[19] Sarkhel S, Singh OP, Arora M. Clinical practice guidelines for psychoeducation in psychiatric disorders general principles of psychoeducation. *Indian J Psychiatry*. 2020 Jan;62:S319-S323. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7001357/.

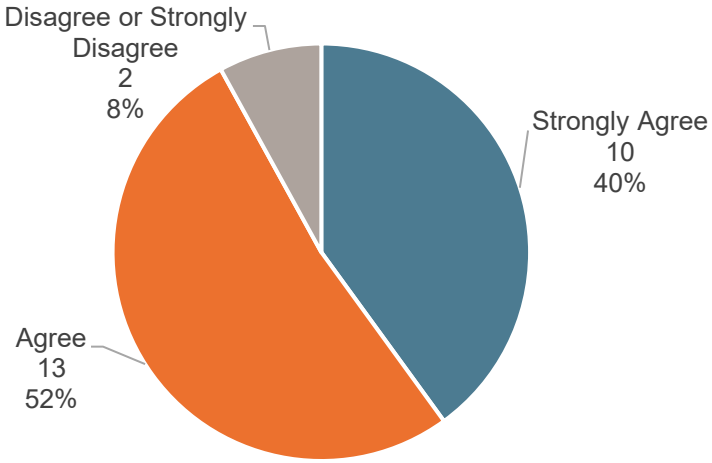
provider noted, “Thus far, the waiver has improved our ability to provide care to our clients. Our organization continues to be stable and sustainable. We do not plan to make additional changes.”

One Demonstration provider said, “The increased [waiver] rate has helped a little to sustain as counselor wages have increased greatly and [there has not been a] rate increase in general from DHS for a while.” In contrast, some respondents shared ongoing staffing challenges since the Demonstration began that also had been identified in the MPA, such as retaining LADCs. One provider commented, “The waiver demonstration has increased our workload without rate increases due to being a Withdrawal Management program and the only level of care excluded from the rate adjustments.” Some providers suggested rate increases to promote organizational sustainability. One wrote, “If all the payment issues are fixed, it will have a positive impact on our sustainability.”

Providers reported staffing challenges both related to the Demonstration requirements and outside the Demonstration (i.e., general workforce shortages). For example, one provider noted that there have always been shortages of LADCs and mental health providers, “Due to staff shortages, we have struggled to provide the required amount of mental health practitioners based on the [number] of LADCs we have.”

NORC is still unable to confirm the change in provider capacity at the individual practitioner level (apart from determining unique prescribers of MOUD), as state data limitations do not allow for counting individual practitioners. In the Summative Evaluation Report, we will update the count of enrolled providers at each level but will not be able to enumerate the total number of individual-level full-time-equivalents at each level.

Exhibit 28. Self-reported provider administrative and clinical staffing capacity

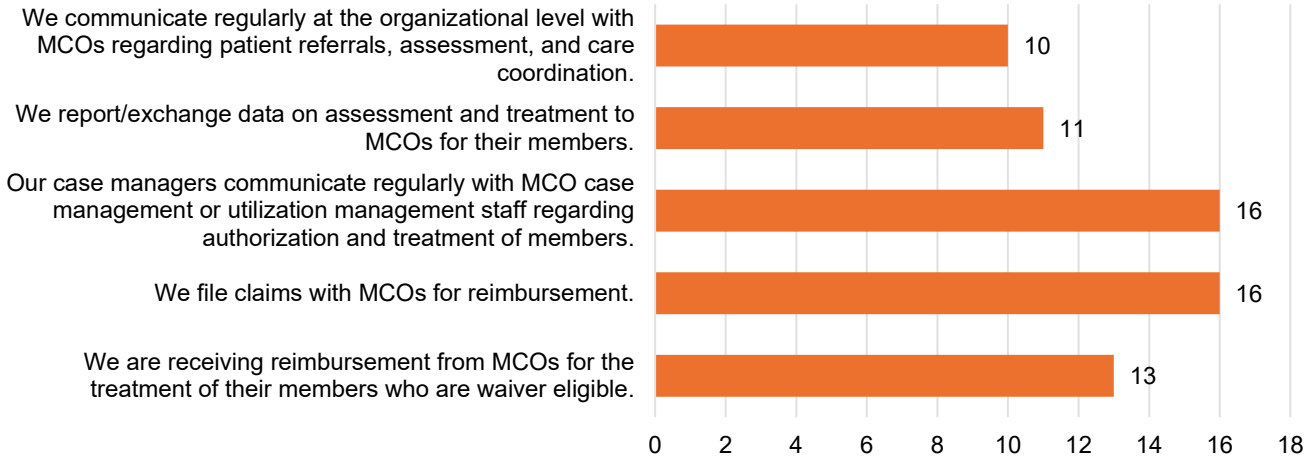


Working with Managed Care Organizations

In Minnesota, most Medicaid patients are enrolled in managed care organizations (MCOs) that cover and coordinate physical, mental, and behavioral healthcare. By working with MCOs, enrolled SUD providers facilitate access to and coordination of behavioral healthcare with other services, e.g.,

primary care. The MPA collected data when enrolled providers had just begun to bill and work with the MCOs serving Minnesota's Medicaid population. As a result, enrolled providers reported limited coordination and challenges in coordinating with the eight different MCO organizations. At the same time, state staff members responsible for contracting and oversight were actively engaged in aligning the Demonstration with the managed care program. The provider survey documents measurable progress in coordinating the care of enrollees who are treated by Demonstration providers. As shown in **Exhibit 29**, almost two-thirds of providers are coordinating care for patients and billing MCOs for these services. However, 52 percent (13) of providers also reported that they do not communicate as regularly at the organizational level with MCOs regarding patient referrals, assessment, and care coordination compared to the communications happening at the clinic or provider level. In addition, only 64 percent (16) of the providers are receiving reimbursement. One provider indicated that they are having to respond to MCO denials and participate in appeals, which may be a possible explanation for the lack of reimbursement after claims have been filed. The potential effects, if any, on quality of care for enrollees is not clear. According to MN DHS, they have limited information about MCO processes for monitoring quality of care and rely on maltreatment investigations and licensing visits to monitor quality of care. As noted, the Summative Evaluation Report will incorporate interviews with enrollees in an effort to understand their experience of care. Although MCOs maintain a separate utilization review process from the Demonstration, efforts by MN DHS to align the two processes are ongoing. Specifically, Kepro has introduced InterQual medical review software that can be adopted by MCOs and integrated with their information technology and would standardize UM across the different populations.20 Finally, fewer providers reported exchanging data on assessment and treatment with MCOs, although they are communicating about treatment plans.

Exhibit 29. Self-reported provider activities for coordinating MCO member care*



*Providers could select more than one response for this question, so the total does not add up to 25.

[20] Change Healthcare Partners (2002) The ASAM Criteria Powered by InterQual [PowerPoint slides] Change Healthcare LLC.

Goal 7: Reduced utilization of emergency departments (EDs) and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services

The state hypothesized that the Demonstration would reduce the utilization of EDs, avoidable hospitalizations, hospitalizations for ambulatory-care-sensitive conditions, and intensive inpatient services. To evaluate progress toward this goal quantitatively, we analyzed data to assess several measures, including all-cause acute care readmissions (defined as the percentage of acute inpatient stays during the measurement year that were followed by an unplanned acute readmission for any diagnosis within 30 days), ED utilization, and ED visits following discharge, among others.

Summary of Claims-Based Measures

For two of three measures associated with Goal 7 (**Exhibit 30**), we do not observe progress toward the state's targets. Follow-ups after ED visit for AOD use or dependence increased, representing change in the desired direction. We observed no change in ED utilization per 1,000 beneficiaries for SUD. There was an increase in readmissions and ED visits following discharge from treatment.

Exhibit 30. Summary of claims-based measures for Goal 7

Measures Examined	State's Target	Directionality	Progress (Yes/No)
ED utilization per 1,000 beneficiaries for SUD	Decrease	No change	No
ED visits following discharge from treatment	Decrease	Increase	No
Follow-up after ED visits for AOD use or dependence diagnosis	Increase	Increase	Yes

ED utilization per 1,000 beneficiaries for SUD

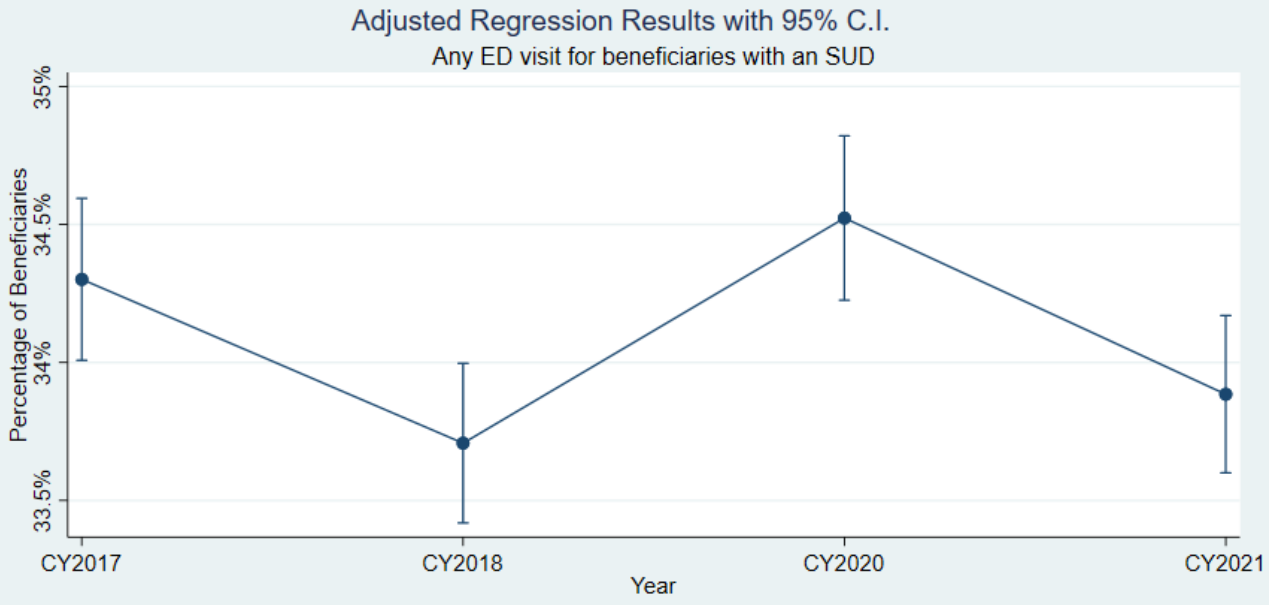
The proportion of beneficiaries with an SUD who had any ED visit (**Exhibit 31**) did not significantly change (0.2 percent point increase) during the Demonstration period. During the baseline period, there were 681.3 ED visits per 1,000 beneficiaries with an SUD compared to 691.2 ED visits per 1,000 beneficiaries with an SUD during the Demonstration period. During the Demonstration period, the rate per 1,000 beneficiaries decreased from 705.8 (CY2020) to 677.4 (CY2021). Approximately one-third of beneficiaries with an SUD diagnosis had any ED visit during the baseline and Demonstration periods. Beneficiaries with more than one visit had an average of 3.8 ED visits both before and during the Demonstration period.

Exhibit 31. ED utilization among beneficiaries with an SUD, CY2017-CY2021

Hypothesis: The demonstration will decrease ED utilization for beneficiaries with an SUD.

Measure: ED utilization per 1,000 beneficiaries for SUD, proportion of beneficiaries with any ED visit, and mean number of visits for those with more than one visit

Measure steward: CMS metric 23



Study Period	No. ED Visits	Total Benefic. w. an SUD	Rate/1,000 Beneficiaries	Absolute Change from Prior Year	% of Any ED Visit	Change from Prior Year	% of Benefic. w. ≥1 Visit^	Mean # ED Visits (for >1 Visit	Absolute Change from Prior Year
CY2017	67,998	98,862	687.8	-	34.3%	-	12.2%	3.9	-
CY2018	67,453	99,941	674.9	-12.9	33.7%	-0.6%	12.1%	3.8	-0.1
CY2020	66,810	94,660	705.8	+30.9*	34.5%	+0.8%	12.7%	3.8	0.0
CY2021	69,759	102,977	677.4	-28.4*	33.9%	-0.6%	12.2%	3.8	0.0

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Total ED visits per 1,000 beneficiaries with an SUD	681.3	691.2	9.9	0.01
Proportion of beneficiaries with any ED visit	34.0%	34.2%	0.2%	0.6%

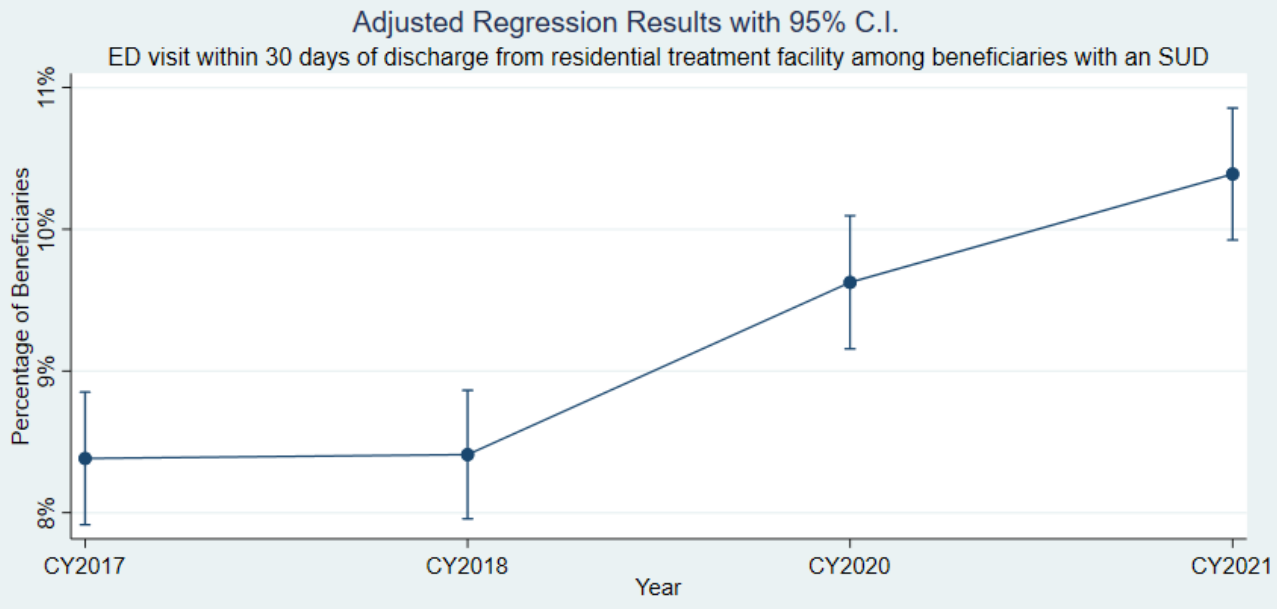
*Indicates significant difference at p<.05 between time periods.
Notes: Includes ED visits that result in an inpatient stay.

ED visits following discharge from treatment

The percentage of beneficiaries with any ED visit after discharge from a residential treatment facility (for beneficiaries with an SUD) increased 1.6 percent during the Demonstration period (**Exhibit 32**). The rate of treatment stays with an ED visit also increased (4.1 percent) between the baseline and Demonstration periods. CY2018 had the lowest rate of ED visits (10.4 percent), whereas CY2021 had the highest rate of ED visits (15.3 percent) following a residential stay.

Exhibit 32. ED utilization within 30 days of discharge from a residential treatment facility among beneficiaries with an SUD, CY2017-CY2021

Hypothesis: The demonstration will decrease ED utilization following treatment for beneficiaries with an SUD.
Measure: Rate of ED visits within 30 days of discharge from a residential treatment facility and proportion of beneficiaries with any SUD
Measure steward: This is a modification of CMS metric 23, to measure ED visits 30 days following discharge from a residential treatment facility.



Study Period	No. ED Visits within 30 Days of Discharge from Residential Treatment Facility	Total Discharges from Residential Treatment Facility	Rate of ED Visits (% of Index Stays w. ED Visit)	Change from Prior Year	Total Benefic. w. Treatment	% of Benefic. w. ED Visit Following Discharge	Change from Prior Year
CY2017	1,733	16,319	10.6%	-	13,792	8.4%	-
CY2018	1,767	16,927	10.4%	-0.2%	14,317	8.4%	0.0%
CY2020	2,588	18,612	13.9%	3.5%*	14,196	9.6%	1.2%*
CY2021	3,333	21,820	15.3%	1.4%*	15,348	10.4%	0.8%*

Notes: If a transfer to another facility (either treatment or hospital) occurs within one day, then the discharge date would be from the new facility. If the time elapsed is >1 day (the person is newly admitted to a residential treatment facility), then the clock for the 30 days starts for the new facility.
*Indicates significant difference at p<.05 between time periods.

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Percent of treatment stays with an ED visit	10.5%	14.6%	4.1%*	39.0%
Percent of beneficiaries with ED visit following discharge from treatment	8.4%	10.0%	1.6%*	19.0%

*Indicates significant difference at p<.05 between time periods.

Follow-up after ED visit for AOD use or dependence diagnosis

There was a 2.7 percentage point decrease in the percent of ED visits for alcohol or other substance use with a follow-up contact from the baseline period (29.7 percent) to the Demonstration period (27.0 percent) (**Exhibit 33**). Follow-up visits were the highest in CY2018 (31.0 percent) and the lowest in CY2020 (26.7 percent). Similarly, there was also 2.8 percentage point decrease in beneficiaries with a follow-up contact within 30 days of discharge.

Exhibit 33. Follow-up contacts for beneficiaries with alcohol or other substance use disorder and an ED visit, CY2017-CY2021

Hypothesis: MN DHS will increase follow-up contacts for beneficiaries with an ED visit for alcohol or other substance use.
Measure: Follow-up after ED visit for alcohol and other drug abuse or dependence (30-day) (any follow-up and average per-beneficary rate) for beneficiaries with SUD
Measure steward: NCQA; NQF #2605; CMS Medicaid Adult Core Measure metric 17(1)
Adjusted Regression Results

Study Period	Total Follow-up Contact in 30 Days	Total ED Visits for AOD	% ED Visits w. Follow-up Contact	Absolute Change from Prior Year	No. Benefic. w. AOD Discharged from an ED	% Benefic. w. Follow-up Contact within 30 Days of Discharge	Absolute Change from Prior Year
CY2017	3,279	11,548	28.4%	-	9,407	29.9	-
CY2018	3,683	11,879	31.0%	+2.6%*	9,203	32.9	+2.9*
CY2020	2,660	9962	26.7%	-4.3%*	7,986	28.4	-4.5*
CY2021	2,962	10,859	27.3%	+0.6%*	8,795	28.9	+0.5

Overall Change from 2017-2018 to 2020-2021				
	2017-2018	2020-2021	Absolute Change	Relative Change
Percent of ED visits with a follow-up contact	29.7	27.0	-2.7*	-9.1
Percent of beneficiaries with a follow-up contact within 30 days of discharge	31.4	28.6	-2.8*	-8.9

Notes: ED visits for beneficiaries ≥18 of age with a principal diagnosis of AOD abuse or dependence who had a follow-up visit for AOD abuse or dependence.

* Indicates significant difference at p<.05 between time periods.

Conclusions

The findings in this interim evaluation report document that the state has made mixed progress toward the Demonstration's goals, hypotheses, and milestones. The state continues to address the contextual and operational challenges of implementing a Demonstration during a PHE and to fully align its state policies, regulations, and statutes with the ASAM criteria.

MN DHS is focused on several changes that support progress toward the seven goals and six milestones. First was the adoption the ASAM levels of care and ensuring that enrolled providers could provide or refer patients for all LOCs and assist in transitions of care during treatment. Second was establishing a system of UM to monitor access to appropriate treatment. Third was expanding access to MOUD by increasing both prescribing and referrals. The results of the provider survey indicate that providers believe that there has been significant progress in implementing these changes. As a result, respondents report that the Demonstration is achieving its goals of identification and initiation of treatment, getting patients to the appropriate LOC, and facilitating transitions to different LOCs (engagement). Most providers also report that they are able to refer their patients to all LOCs. The majority of providers also reported that they felt the Demonstration facilitated transitions to ASAM LOCs for OUD treatment and promoted patient-centered care. As reported in the MPA, there was a tension between providers and the new UM requirements. Providers in the current survey also reported this tension. All except one provider had received training on Kepro data reporting and submission, and most providers reported that UM is integrated into their workflow and that they have adequate staff capacity. Nonetheless, implementation has posed an administrative burden, and the state has responded by introducing legislation to support paperwork reduction, and MN DHS has made specific policy changes to adjust UM requirements and reduce burden.

Although most of the providers responding to our survey in early 2023 reported that the Demonstration had been effective in meeting its goals, our analysis of the quantitative data through 2021 shows a more complicated picture of the implementation. Some of the key findings concerning utilization, access, and overdose deaths include:

- Utilization of services
  - There was **a very small decline in the proportion of beneficiaries with an SUD with ambulatory care visits**. This mirrors the nationwide trend during the pandemic of the reduction in the use of outpatient ambulatory services.[xx,xxi]
  - The rate of ED visits per 1,000 beneficiaries stayed approximately the same, and the proportion of beneficiaries with at least one ED visit during the year remained approximately 34 percent. This measure is all-cause ED visits, which may include visits related to COVID-19. The ED can also be a critical point of entry into care, and evidence indicates that MOUD can be initiated following an ED visit.[xxii] The proportion of beneficiaries discharged from residential treatment who visited an ED increased in both number and percent. The number of ED visits per beneficiary (among those with more than one stay) did not change, suggesting that it is difficult

to reduce ED use for this population. This measure is for all-cause ED use and may include COVID-19-related ED use.

  - **All-cause readmission rates stayed approximately the same for beneficiaries with an SUD**. Both the number of index stays and beneficiaries with any readmission increased slightly during the Demonstration. The number of beneficiaries with a readmission increased by 0.7 percent, from 10.9 percent to 11.6 percent, while the number of stays with readmission increased 0.6 percent during the Demonstration (11.9 percent to 12.5 percent). However, this includes all beneficiaries with an SUD who were admitted to the hospital regardless of the reason for the readmission, which may include COVID-19-related issues. The rate of readmissions among beneficiaries with more than one stay did not increase (remaining at approximately 20 percent of stays) despite the pandemic, suggesting that readmissions did not increase among those who experienced frequent admissions.

- Access to medication
  - The proportion of **beneficiaries with OUD who initiated a MOUD increased by nearly 13 percent** (5.8 percentage points). During the pandemic, the state undertook measures to sustain and expand access to MOUD, such as enabling telehealth services for prescriptions. Increased use of MOUD rose at similar rates in both urban and rural areas. There was a growth in the absolute number of beneficiaries receiving MOUD between the baseline and Demonstration periods (from 4,417 to 6,615). Despite an initial increase from 2017 to 2018, the proportion of beneficiaries with continuous 180-day prescription **fills for MOUD declined 3.8 percentage points** between the baseline and Demonstration years.
- Access to services
  - The proportion of **beneficiaries who engaged in treatment within 34 days of diagnosis increased 6.8 percentage points between the baseline and Demonstration years. Timely treatment engagement increased by 0.8 percentage points between CY2017 (13.9 percent) and CY2018 (14.7** percent**) and continued to** increase during **Demonstration CY2020 (15.4 percent) before dipping slightly in Demonstration CY2021 (15.3 percent).** The total number of beneficiaries who engaged increased between CY2017 and CY2020 (from 6,941 to 8,008).
  - The proportion of **beneficiaries who initiated treatment within two weeks increased by 1.1 percentage points** (5.7 percent), and the average time to treatment remained similar in the baseline and Demonstration periods (2.3 days vs. 2.2 days).
  - There was an **increase in follow-up contacts after an IMD stay**, in both number and percent. The number of beneficiaries with AOD discharged from an IMD also increased from 10,691 in CY2017 to 12,189 in CY2021, and the percentage of beneficiaries with a follow-up within 30 days increased from 55.9 percent to 63.7 percent between the baseline and Demonstration periods, which is a relative change of 17.4 percent.
  - The **percent of beneficiaries with a follow-up contact within 30 days of discharge from an ED was lower** in the Demonstration period, declining from 31.4 percent to 28.6 percent. The

lower follow-up rate following an ED visit compared to the 30-day follow-up rate after an IMD stay may reflect the pandemic-related workforce shortages of care coordination personnel and an increased number of ED visits overall.

- Overdose deaths
  - **Overdose deaths have increased** during the Demonstration period. This increase could be partly attributable to the growing prevalence of more lethal fentanyl in the circulating illicit drug supply.[xxiii]

Lessons Learned, Interpretations, and Policy Implications

Drawing conclusions regarding the impact of the Demonstration based on these results is not recommended. In light of the challenges of the COVID-19 pandemic, these results are likely atypical for the anticipated change for some measures, and comparisons with other states' trends are not possible due to the varying nature and timing of the intensity of the pandemic. In addition, these analyses only include data through 2021. In 2021, a legislative mandate passed that required all residential and WM providers to enroll in the Demonstration and meet provider standards requirements by January 1, 2024. Since that time, the number of these types of providers participating in the Demonstration has grown, and this will likely impact utilization and access across the state. In the Summative Evaluation Report, we will be able to better understand trends in the baseline and Demonstration periods using the quarterly data. In addition to the 2021 mandate, there are several factors that support the hypothesis that the results in the Summative Evaluation Report may look different:

- **Staffing.** During the pandemic, the state faced several significant barriers, including a hiring freeze, staff shortages, and staff turnover. Lower rates of ED visits and follow-up services likely reflect the shift in provider priorities to responding to COVID-19-related health care services and the availability of services.
- **Beneficiaries.** This report presents the experiences and perceptions of enrolled providers and documents the steps taken by the state to further develop the staff, systems, and processes needed to implement the Demonstration. It does not, however, include the experiences and perceptions of the patients covered by the waiver and served by the Demonstration providers.
- **Enhanced rates.** The requirement for residential (as well as outpatient providers) along with the enhanced payment rates may lead to higher access to services for Medicaid beneficiaries at these facilities.[xxiv]
- **Implementation of Direct Access.** This development expands beneficiary choice and enables quicker referrals to access SUD services and will improve care coordination across LOCs and provider agencies. This could lead to higher rates of treatment initiation and engagement and reduce ED use.
- **MOUD prescribing.** The state anticipates an increase in the number of providers who are actively prescribing MOUD due to state-wide initiatives to expand eligibility for prescribing, as well as the removal of the requirement for a DEA "X-waiver" to prescribe buprenorphine. The Summative Evaluation Report will include a reexamination of unique prescribers of MOUD, updating the baseline PCA. The state applied for and was granted the COVID-19-modified take-home schedule for opioid treatment program (OTP)–dispensed methadone in March 2020 and implemented it as a variance under Minnesota licensing authority. With the termination of the PHE, Minnesota has issued a concurrence with the Substance Abuse and Mental Health Services Administration (SAMHSA) to continue those allowances until May 11, 2024.

Interactions with Other State Initiatives

Telehealth. The COVID-19 emergency waiver opened up all treatment services to telehealth, including audio-only services, to accommodate clients in remote locations. That waiver has ended, but the Behavioral Health Department received another waiver that allows outpatient services to be delivered via telehealth until June 2023. The continued support and use of telehealth may also contribute to improved entry into treatment, as well as the use of treatment and recovery services. A report by the MN DHS that assessed the use of telehealth among Medicaid beneficiaries before and during the pandemic (with analyses through December 2020) found that behavioral health services were used at a higher rate (30 percent vs. 19 percent for nonbehavioral health care) and that there was a larger increase in behavioral health care delivered only through telehealth vs. nonbehavioral health (17 percent vs. 3 percent) both before and after the PHE.[xxv]

Housing. To date, in Minnesota, some housing services have been provided through the Behavioral Health Fund. Beneficiaries with very high risk for relapse (ASAM Level 4 and Dimensions 5 or 6) can receive residential room and board, while those who are at high risk and non-compliant (Level 4, Dimension 4) may receive outpatient room and board. The state currently provides housing stabilization services to individuals with disabilities (including SUD) through its 1915(i) state plan amendment.[xxvi] Several states have successfully incorporated supportive housing services for individuals with SUD into their Section 1115 Demonstrations, including California, Hawaii, New Mexico, Oregon, Virginia, and Washington;[xxvii] these programs offer enhanced services in addition to case management.

Care Coordination. The state is exploring utilization of a cloud-based service such as the Omnibus Care Plan (OCP), a care coordination platform created by SAMHSA that facilitates the service coordination for recipients who are being served by multiple providers and provider networks. Service coordination between different providers and provider networks will be one of the most critical components of the Integrated Behavioral Health project, Continuum of Care/SUD reform project, 1115 SUD Waiver project, and the Housing Stabilization Services project. OCP would provide a cloud-based service coordination tool for any provider to use with other providers, the state, counties, and service recipients. The state has been undertaking an extensive redesign of case management and care coordination services in Medicaid writ large, and SUD-related needs will be considered in the design.

Prescription Drug Monitoring Program Improvements. Under the direction the Board of Pharmacy, the state is planning to enhance MNPMP functionality and interoperability, including by linking it to systems in which prescribers will be able to view electronic health records and easily link them with the MNPMP (currently, staff have to leave the electronic health record, go to the MNPMP, and return to the electronic health record). MDH applied for and received CDC Overdose Data to Action funding, a key strategy that supports the improvement of MNPMP functionality, interoperability, and provider utilization.[xxviii] Minnesota is currently connected to the interstate sharing hub PMP Inter-Connect and is presently sharing access with the Military Health System, the District of Columbia, and 40 states who wish to share access or who have authority to share access according to their laws. The MN DHS Behavioral Health Division will actively collaborate with and support the efforts of the BOP in expanding

interstate data sharing agreements. In addition, MN BOP will explore the potential use of additional funding through CMS or SAMHSA to potentially expand interstate data sharing possibilities, as other states have done.

Opioid Prescribing Improvement Program (OPIP). To enhance the identification of long-term opioid use directly correlated to clinician prescribing patterns, Minnesota will continue to refine the prescriber reports. Providers whose prescribing rate is above the threshold for any of the five measures will be required to participate in the quality improvement program if they also prescribed above a certain volume of opioid analgesic prescriptions to Minnesota Medicaid and MinnesotaCare enrollees in the measurement year. DHS will work to expand prescriber enrollment and will continue to refine reporting and quality improvement processes.

Minnesota e-Health Initiative. This public collaboration is focused on accelerating the adoption and use of e-health. The Advisory Committee represents the spectrum of Minnesota's health community, including providers, payers, public health, researchers, vendors, consumer, and more. The e-Health Initiative will continue to encourage and support efforts to implement e-prescribing of controlled substances (EPCS) by providing input on e-Health Strategies for Preventing and Responding to Drug Overdose and Substance Misuse and address ongoing priority topics such as implementation of SCRIPT standards, use of diagnosis code on prescriptions, advancing medication management therapy, and improving the medication reconciliation process.

Recommendations

Recommendations provided below reflect the findings above and the research on initiatives and tools developed and implemented in other states.

Recommendations

Based on the results of this interim evaluation, Minnesota could consider the following actions:

- **Collaborating with providers** to examine what is needed to improve follow-up services, from the ED as well as any treatment services, such as improved infrastructure, more personnel, or improved health information technology to document transitions and care management services. The state could also consider incentives and penalties to focus on improving follow-up and reducing ED use.
- **Continue examining how to obtain comprehensive information on the health workforce that serves the Medicaid population.** This will enable an assessment of what percent of licensed health care workers do not serve Medicaid beneficiaries and inform efforts to increase provider participation in the program—thereby facilitating access to care and widening the referral network. This information will also help MN DHS understand how to increase recruitment and retention of providers in rural and underserved areas.
- **Consider mechanisms to monitor and assess the quality of care provided through managed care.** For example, some states (at least 17 as of 2022) have used financial incentives tied to one or more SUD care continuum performance measures to help ensure quality of care.[xxix] Similarly, Minnesota could leverage its existing requirements for MCOs regarding their participation in state-mandated performance improvement projects (PIPs) to implement a PIP focused specifically on the SUD care continuum, as was recently done in Pennsylvania.[xxx]
- **Maintain commitment to telehealth for SUD services.** A strong infrastructure for telehealth can have a role in Demonstration success by ensuring that the substance use treatment and recovery services can be multimodal and meet beneficiaries' needs.

In addition to the suggestions related to the collection of individual provider data in the PCA and MPA, there were additional measures regarding service delivery of providers participating in the Demonstration that the state can continue to look toward. For example, pending availability of codes in claims data, assessments could be classified into screenings that occurred before a diagnosis of a disorder and are thus considered early intervention, vs. follow-up assessments after a diagnosis. Similarly, we lack data on the service delivery to MCO enrollees who are treated by Demonstration providers who participate in MCO utilization review processes. MN DHS may also consider implementing a survey of organizations to capture other data that may inform MN DHS of treatment quality and adequacy.

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