

Interim Evaluation 2024

Indiana's Section 1115 Substance Use
Disorder Demonstration – Final Draft

Prepared for
Indiana Family and Social Services Administration

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SECTION A: Executive Summary

Indiana was one of the first states to obtain approval from the Centers for Medicare and Medicaid Services (CMS) for its demonstration for the expansion of the delivery of substance use disorder (SUD) treatment services. Indiana aligned its demonstration goals with the milestones outlined by CMS for SUD demonstrations:

1. Access to critical levels of care for SUD treatment;
2. Use of evidence-based, SUD-specific patient placement criteria;
3. Use of nationally recognized SUD-specific program standards for residential treatment;
4. Sufficient provider capacity at critical levels of care;
5. Implementation of comprehensive treatment and prevention strategies to address opioid abuse; and
6. Improved care coordination and transitions between levels of care.

Indiana identified its primary goals for the SUD component of its 1115 demonstration in its SUD Implementation Plan which was approved February 1, 2018. As per the SUD demonstration renewal, the original SUD Implementation Plan is still in effect. As set forth in the Implementation Plan, Indiana aligned its goals for the SUD demonstration component with the milestones outlined by CMS as follows:

1. Increased rates of identification, initiation, and engagement in treatment;
2. Increased adherence to and retention in treatment;
3. Reductions in overdose deaths, particularly those due to opioids;
4. Reduced utilization of emergency departments and inpatient settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services;
5. Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate; and
6. Improved access to care for physical health conditions among beneficiaries.

Indiana's Implementation Plan describes the planned activities during the demonstration period organized by CMS milestone.

Population Impacted by the Demonstration

Medicaid beneficiaries with a SUD diagnosis have grown consistently during the eight-year period examined, from 48,860 in Q1-2016 to 155,251 as of Q4-2023. Over the course of the second demonstration period, the population of beneficiaries with SUD grew 20.8 percent (128,486 in Q1-2021 to 155,251 in Q4-2023).

Individuals with a newly initiated SUD diagnosis has been steadier over the eight years. In CY 2016, the average over the four quarters was 6,373 beneficiaries; in CY 2023, the average over the four quarters was 9,398. Over the course of the second demonstration period, the population of beneficiaries with newly initiated SUD grew 4.2 percent (9,016 in CY 2021 to 9,398 in CY 2023).

Overall, Medicaid members with a SUD diagnosis represented 6.5 percent of all enrollees by the end of the first SUD demonstration period in December 2020 and increased to 7.2 percent of all enrollees by the end of December 2023. Non-elderly adults represent more than half of total Medicaid enrollment, but more than 12.8 percent of non-elderly adults have a SUD diagnosis. Dual eligible, the criminally involved, and beneficiaries enrolled in the Medicaid Rehabilitation Option benefit are also over-represented within the total population with SUD compared to their proportional enrollment in Medicaid overall (i.e., each subpopulation has a higher percentage of its members with SUD). There has been modest change over the demonstration period of the percentage of the Medicaid population with SUD at the region level, but all regions did see an increase. Medicaid enrollees in the East Central, Southwest, and Southeast regions are over-represented in the percentage with SUD compared to the statewide average.

Evaluation Questions and Hypotheses

Burns & Associates, a Division of Health Management Associates (HMA-Burns), is serving as the Independent Evaluator for this demonstration. The HMA-Burns team constructed a logic model with the long-term outcome being a reduction in overdose deaths in Indiana because it is a measurable health outcome. Based on key actions taken by the State either at the start of the initial SUD demonstration or since the demonstration's initiation, eight short-term outcomes have been identified. The short-term outcomes all tie to eight hypotheses and eight research questions which are introduced in Section C. The HMA-Burns team identified 32 measures in the evaluation design plan that relate to the outcomes described in the logic model, the overall demonstration goals, and the research questions for this demonstration evaluation. The measures include those with national measure stewards, those specified by CMS, and evaluator-derived measures. To maintain consistency with the evaluation of the initial demonstration, HMA-Burns opted to continue reporting 23 measures from the Summative Evaluation to ensure continuity at the CMS Milestone level. In total, 55 measures were used to conduct this Interim Evaluation.

Methodology

HMA-Burns used five analytic methods to conduct its evaluation: (1) chi-square or t-test; (2) interrupted time series; (3) onsite reviews; (4) desk reviews; and (5) facilitated interviews. At least two analytic methods were used to answer each hypothesis. Modifications to the proposed analytic method appear in Section E.

Target Population

The target population is any Indiana Medicaid beneficiary with a diagnosis of SUD in the study period. HMA-Burns used the specifications developed by CMS in its SUD Monitoring Plan for identification of beneficiaries with SUD to flag individuals as an indicator of those most likely to have exposure to the changes in the demonstration (CMS Metric #3 and CMS Metric #4). This population comprises the demonstration population. HMA-Burns also developed sub-populations which were tracked and reported on in the Summative Evaluation of the initial demonstration period, and the Mid-Point Assessment of the current demonstration period. The same sub-populations are being reported on in the Interim Evaluation as well.

- **Managed Care Model (Model):** Includes the target population enrolled in one of the managed care programs
- **Opioid Use Disorder (OUD):** It is likely that beneficiaries with OUD, compared to those with other types of SUD, may have different health outcomes and access a different mix of services. Therefore, it is possible that the demonstration impacts these populations differently. HMA-Burns will identify OUD beneficiaries (using the CMS-defined specification) to examine these individuals as a separate sub-population.
- **Dual eligible:** Includes the target population who meet criteria for being dually-eligible for both the Medicare and Medicaid programs.
- **Pregnant:** Includes the target population who meet the criteria for having a pregnancy.
- **Criminally Involved:** Includes the target population who meet the criteria for being criminally involved. HMA-Burns used Indiana Department of Correction data to match against the demonstration population to identify whether or not a person was incarcerated at any time in the calendar year.
- **Medicaid Rehabilitation Option (MRO):** Includes the target population who meet criteria for being eligible to receive MRO services in the calendar year
- **Region:** The eight regions that have customarily been used by the Family and Social Services Administration (FSSA) match each of Indiana's 92 counties to a region in the state. Individuals in the demonstration were matched to a home county and then a region based on their zip code on a base date in the calendar years included in the study.

Evaluation Period

Metrics for the demonstration population and sub-populations are computed for a pre- and post-demonstration period. The demonstration period is defined as January 1, 2021 to December 31, 2025, with this Interim Evaluation covering the period January 1, 2021 to December 31, 2023.

For measures which are computed on a monthly basis, statistical testing using Interrupted Time Series (ITS) was applied. HMA-Burns will consider four different time periods when conducting ITS. Each time period will contain 25 observations (months).

- Time Period #1: Pre-Demonstration. This is the period just prior to the approval of Indiana's first SUD demonstration, from January 2016 through January 2018.
- Time Period #2: Demonstration 1 period. This is the first 25 months of Indiana's initial SUD demonstration, from February 2018 through February 2020. Indiana's initial SUD demonstration ended in December 2020. The first 25 months of the demonstration are included in the analysis instead of the last 25 months of the demonstration because the last nine months of Indiana's truncated 35-month demonstration period were during the onset of the public health emergency (PHE).
- Time Period #3: Demonstration 2 initial period. This is the 25-month period from December 2021 through December 2023. Time Period #3 will be compared to either Time Period #1 or Time Period #2 when ITS testing is conducted for reporting in the Interim Evaluation.
- Time Period #4: Demonstration 2 later period. This is the 25-month period from December 2023 through December 2025. Time Period #4 will be compared to either Time Period #1 or Time Period #2 when ITS testing is conducted for reporting in the Summative Evaluation.

The determination of whether Time Periods #3 and #4 are tested against either Time Period #1 or Time Period #2 are based on the results that HMA-Burns found in its Summative Evaluation of Indiana's first SUD demonstration.

- If it was found in the Summative Evaluation of the first demonstration period when ITS was run that there was not a statistically significant finding for a given measure, then HMA-Burns will run ITS on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #1.
- If it was found in the Summative Evaluation of the first demonstration period when ITS was run that there was a statistically significant finding for a given measure, then HMA-Burns will run ITS on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #2. Since it was already established in the first demonstration evaluation that statistically significant improvement was found, for the second demonstration evaluation HMA-Burns would assess if improvement continued and if the pace of this improvement was statistically significant compared to the findings from the first demonstration period.

For measures which are computed on an annual basis, statistical testing using chi-square or t-test will be applied. HMA- Burns will consider four different time periods when conducting the chi-square or t-test.

- Time Period #1: Pre-Demonstration. This will include the average results for Calendar Years 2016 and 2017.
- Time Period #2: Demonstration 1 period. This will include the average results for Calendar Years 2018 and 2019.
- Time Period #3: Demonstration 2 initial period. This will include the average results for Calendar Years 2022 and 2023.
- Time Period #4: Demonstration 2 later period. This will include the average results for Calendar Years 2024 and 2025.

Similar to the approach that will be used for monthly measures, the determination of whether Time Periods #3 and #4 are tested against either Time Period #1 or Time Period #2 are based on the results that HMA-Burns found in its Summative Evaluation of Indiana's first SUD demonstration.

- If it was found in the Summative Evaluation of the first demonstration period when chi-square or t-test was run that there was not a statistically significant finding for a given measure, then HMA-Burns will run chi-square or t-test on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #1.
- If it was found in the Summative Evaluation of the first demonstration period when chi-square or t-test was run that there was a statistically significant finding for a given measure, then HMA-Burns will run chi-square or t-test on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #2.

Evaluation Measures

HMA-Burns is reporting on 55 measures, each of which has been mapped to a CMS Milestone. Where relevant, if CMS has mapped one of its SUD measures reported in the SUD quarterly monitoring report to a specific CMS milestone, then HMA-Burns has adopted this mapping as well. For measures other than those that are part of quarterly monitoring to CMS, HMA-Burns has selected the most appropriate milestone to map the measure to. In some instances, both for CMS-defined measures and other measures, there is not an appropriate milestone to map to. These measures appear under “Other” measures in this report.

Data Sources

Claims and encounters, member enrollment, and provider enrollment data from the FSSA Enterprise Data Warehouse was the primary source for computing measures defined in the evaluation.

For some measures defined by HMA-Burns, the evaluators used primary data collected from the managed care entities (MCEs) for Medicaid beneficiaries enrolled in managed care. This was completed for the SUD authorization focus study conducted during the evaluation in which metrics were examined such as authorization approval and denial rates, the number of days requested and approved, and the percentage of denied requests based on the application of medical necessity criteria. HMA-Burns also requested data from the MCEs to determine which of their members with SUD who used inpatient hospital and residential treatment services were enrolled in their case or care management program. This was to support a study on the transitions of care.

The HMA-Burns team collected feedback from a variety of stakeholders to gain perceptions about the implementation of the SUD demonstration, as well as their perspectives related to SUD service delivery for Medicaid beneficiaries. Data sources included one-on-one qualitative interviews with 6 providers and one provider association representative, feedback from 42 providers in an online survey, feedback from 22 Medicaid beneficiaries receiving SUD treatment, and interviews with the MCEs both individually and as a group.

HMA-Burns used data from the National Survey of Substance Abuse Treatment Services (N-SSATS) and its successor National Substance Use and Mental Health Services Survey (N-SUMHSS) to determine the percentage of SUD providers in Indiana who accepted Medicaid in each study year examined.

HMA-Burns used the Indiana Division of Mental Health and Addiction's (DMHA) monthly tracking report to assess the change in licensed residential treatment locations and beds over the course of the demonstration period.

HMA-Burns used FSSA SUD Quarterly Monitoring Reports to assess the Medication Assisted Treatment (MAT) prescribers in Indiana accepting Medicaid clients and to compute the prescription drug monitoring program (named INSPECT) related metrics.

In collaboration with FSSA, vital statistics cause of death data was transferred from the Department of Health to the evaluators for purposes of calculating overdose rates.

HMA-Burns identified all of the items identified in FSSA's SUD Implementation Plan to determine where action had or had not yet been taken on each item. The assessment team conducted a desk review of materials released by FSSA prior to and after the demonstration implementation date. After review of these materials, interviews were conducted with key staff at FSSA to confirm our assessment of each of the planned implementation activities.

Results

The results are summarized in Exhibits 1 through 7 on the following pages. Each exhibit summarizes the findings by each of the six CMS Milestones. Exhibit 7 includes results of other measures not tied to a specific CMS Milestone. The results are organized into three categories—review of measures, status of the State's efforts to date in completion of its SUD Implementation Plan, and feedback from stakeholders.

For the measures, each table shows the desired outcome for each measure, if the desired outcome was met, and if the results were found to be statistically significant.

For the assessment of SUD Implementation Plan activities, HMA-Burns inventoried all activities listed in the State's approved Implementation Plan by CMS milestone. The table shows the number of activities planned, the number completed, and the number abandoned.

For stakeholder feedback, HMA-Burns synthesized the feedback by themes. For each theme, the specific feedback is cited with an indication of the constituent(s) that provided the feedback to the evaluators. HMA-Burns then gave an assessment of the feedback by segmenting it into the following categories—compliment, critique, neutral, or recommendation.

More detailed information on each aspect of the results appears in Section F of the report.

Conclusions

When considering the Logic Model shown in the Evaluation Design Plan, Indiana met the specific aim to reduce the rate of overdose deaths during the current demonstration period. While the number and rate of overdose deaths among Indiana Medicaid beneficiaries increased during the initial demonstration period, since CY 2021, the rate and number of overdose deaths have declined. The rate was at its peak in CY 2020 at 0.94 beneficiaries per 1,000 and at its lowest rate at 0.29 beneficiaries per 1,000 in CY 2023.

Another key finding is related to the progress made with emergency department visits for substance use disorders (on a per 1,000 Medicaid member basis). They have been found to be significant and decreasing at approximately three times the rate in the second demonstration period (January 2021 to December 2023) compared to the initial demonstration (February 2018 to December 2020) and there is a significant difference between the two intervention trends.

When considering the CMS Milestones, Indiana saw success in each milestone over what was observed in the Summative Evaluation. Among the 55 measures reviewed, there were 46 where the desired outcome was met, and 25 measures had an outcome that was statistically significant.

The FSSA was also successful in large part in the activities it set out to do in its SUD Implementation Plan. Among the 31 activities identified, 24 were completed in full. The remainder are in progress with only one item being abandoned. There were implementation activities completed that were targeted for each of the CMS Milestones.

Some key success factors contributed to the positive trends observed in the Interim Evaluation:

- Beneficiaries receiving any SUD service on a monthly basis grew 20 percent during the demonstration period.

- The proportion of SUD providers in the state that accept Medicaid grew during the demonstration period.
- There was continual expansion in the offering of residential treatment services over the demonstration period, both in licensed locations and licensed beds.
- State-sponsored ASAM training continues to be proved helpful to new and existing Medicaid providers.
- There is lower emergency department use after transitioning from ASAM level 4 or ASAM level 3 care.

Assessment of Opportunities for Improvement

Indiana saw significant progress towards its aim to reduce overdose deaths among its Medicaid population through the second demonstration period. With the expansion of coverage for new services across the ASAM continuum and a concentrated effort to increase access to services that had previously been covered through MRO, there remain opportunities for continued improvement as the FSSA enters the latter half of its second SUD demonstration period ending December 31, 2025. The HMA-Burns evaluation team has identified 12 specific areas of opportunity. These are shown in Section G of the report. The primary themes around potential areas of improvement include the following:

- Expansion of provider supply. Specific areas include residential treatment services in northern counties of the state, intensive outpatient services, residential ASAM 3.1, 3.5 and 3.7, and supportive housing/sober living options.
- Consideration of policy changes. Specific areas include the utilization and authorization of intensive outpatient and partial hospitalization.
- Operations. Specific areas include the development of an online, fillable authorization request form, the development of a SUD-specific provider manual, additional ASAM trainings and conducting a root cause analysis for lack of awareness and low uptake for early intervention services among providers.
- Oversight. Specific areas include strengthening oversight of the MCE's SUD authorization processes and the delivery of case or care management to individuals with SUD who use higher ASAM levels of care.

**Exhibit 1. Summary of Findings for CMS Milestone 1
Access to Critical Levels of Care for SUD Treatment**

Measures	
Number of Measures Examined	13
Number of Measures Where Desired Outcome Was Met	11
Number of Measures Where Outcome Was Statistically Significant	8

<u>Measures Where Desired Outcome Was Met:</u>	<u>Outcome</u>
Users of Outpatient Services	Increase
Rate of Outpatient Services	Increase
Users of Intensive Outpatient and Partial Hospitalization	Increase
Rate of Intensive Outpatient and Partial Hospitalization	Increase
Users of Residential and Inpatient Services	Increase
Rate of Residential and Inpatient Services	Increase
Users of Withdrawal Management	Increase
Rate of Withdrawal Management	Increase
Users of Medication-Assisted Treatment	Increase
Rate of Medication-Assisted Treatment	Increase
Proportion of SUD Providers Accepting Medicaid	Increase

Implementation Activities	
Number of Activities Identified in the State's SUD Implementation Plan	17
Number of Activities Completed	12
Number of Activities Abandoned	1

Stakeholder Feedback	Type
The MCEs overwhelmingly were supportive of the demonstration and the resulting improved access.	Compliment
Providers noted that access has improved over the past year, specifically in MAT, OTP and IOT services.	Compliment
Providers and MCEs responded that Medicaid beneficiaries do not understand the benefits available to them. Specific comments were directed toward outpatient and IOP services.	Critique
Beneficiaries stated that they find out about services from a variety of resources including court or jail, followed by a family member or friends.	Neutral
Providers and MCEs responded that utilization of early intervention is low but could improve with provider education.	Recommendation
Providers and MCEs responded that telehealth has had a positive impact on access and adequacy of the provider network.	Compliment
Beneficiaries report receiving almost all services in person and not by telehealth over the past year.	Neutral

**Exhibit 2. Summary of Findings for CMS Milestone 2
Use of Evidence-Based, SUD-specific Patient Placement Criteria**

Measures	
Number of Measures Examined	3
Number of Measures Where Desired Outcome Was Met	2
Number of Measures Where Outcome Was Statistically Significant	none tested
<u>Measures Where Desired Outcome Was Met:</u>	<u>Outcome</u>
Authorization Denial Rate for SUD Services	Decrease
SUD Authorization Denial Reasons	Increase
Implementation Activities	
Number of Activities Identified in the State's SUD Implementation Plan	4
Number of Activities Completed	4
Number of Activities Abandoned	0
Stakeholder Feedback	
While the use of a single form has improved the PA process, providers stated that improvements are still needed.	Critique
While the authorization process is improved, providers feel there is room for improvement in standardization across the MCEs.	Recommendation
Most providers noted that the prior authorization process has improved and is easier and more understandable with the use of a single form.	Compliment
All MCEs expressed that the unwinding of the PHE and staff turnover have contributed to provider confusion and is an opportunity for provider education.	Recommendation
The MCEs continue to express concerns that the unwinding of the PHE contributed to the confusion on the part of providers regarding the ASAM treatment model and PA processes.	Critique

Exhibit 3. Summary of Findings for CMS Milestone 3
Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment

Measures	
Number of Measures Examined	2
Number of Measures Where Desired Outcome Was Met	2
Number of Measures Where Outcome Was Statistically Significant	none tested
Measures Where Desired Outcome Was Met:	Outcome
Number of Licensed SUD Residential Treatment Beds	Increase
Number of Licensed SUD Residential Treatment Locations	Increase
Implementation Activities	
Number of Activities Identified in the State's SUD Implementation Plan	2
Number of Activities Completed	1
Number of Activities Abandoned	0
Stakeholder Feedback	
Providers and the MCEs continue to question why there is not a licensure requirement for ASAM 3.7. This has not changed since the Mid-Point Assessment and was also mentioned in the initial demonstration period.	Critique
Half of the providers describe their interactions with MCEs regarding SUD services for contracting, authorization, and billing as positive or neutral.	Neutral
Similarly to the feedback received during the Mid-Point Assessment, the MCEs continue to express concerns and the need for additional education of providers, specifically around the differences between the ASAM levels of care along the continuum.	Critique

**Exhibit 4. Summary of Findings for CMS Milestone 4
Sufficient Provider Capacity at Critical Levels of Care**

Measures	
Number of Measures Examined	5
Number of Measures Where Desired Outcome Was Met	5
Number of Measures Where Outcome Was Statistically Significant	none tested
<u>Measures Where Desired Outcome Was Met:</u>	
Number of Medicaid SUD MAT Providers	Increase
Number of Medicaid SUD Outpatient Providers	Increase
Number of Medicaid SUD Residential Treatment Providers	Increase
Number of Medicaid SUD Inpatient Hospital or IMD Providers	Increase
MAT prescribers in Indiana accepting Medicaid clients	Increase
Implementation Activities	
Number of Activities Identified in the State's SUD Implementation Plan	4
Number of Activities Completed	4
Number of Activities Abandoned	0
Stakeholder Feedback	
Most beneficiaries responded that they did not find it difficult to figure out where to get treatment.	Neutral
Of those beneficiaries who responded, most noted having no issues finding primary care doctors, psychiatrists or psychologists, outpatient treatment, methadone, or transportation to and from services.	Neutral
Providers observed improvements in the provider network since January 2021, with MAT, OTP, and IOP mentioned most frequently as having improved.	Compliment
Opportunities for improvement in the SUD provider network most often mentioned by providers includes: supportive housing services, IOP, ASAM 3.7 and ASAM 3.5 and 3.1.	Recommendation
MCEs noted that the provider network has an over-abundance of ASAM 3.5 providers, and that there is a need for more providers at the lower levels of care and ASAM 3.7.	Recommendation

Exhibit 5. Summary of Findings for CMS Milestone 5
Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse

Measures	
Number of Measures Examined	5
Number of Measures Where Desired Outcome Was Met	4
Number of Measures Where Outcome Was Statistically Significant	5
Measures Where Desired Outcome Was Met:	
Rate of overdose deaths per 1,000 adult Medicaid beneficiaries	Decrease
Use of Opioids at High Dosage in Persons Without Cancer	Decrease
Concurrent Use of Opioids and Benzodiazepines	Decrease
Rate of emergency department visits for SUD per 1,000 Medicaid beneficiaries	Decrease
Implementation Activities	
Number of Activities Identified in the State's SUD Implementation Plan	3
Number of Activities Completed	2
Number of Activities Abandoned	0
Stakeholder Feedback	
While the MCEs were largely complimentary of FSSAs guidance and communication, they felt more could have been done during unwinding of PHE.	Critique
The MCEs recommended improved guidance related to SUD demonstration efforts.	Recommendation
Providers noted that guidance from FSSA has been helpful but has been lacking since the unwinding of the PHE leading to confusion and inconsistencies.	Critique
Most providers have attended the ASAM trainings sponsored by FSSA and indicated they were helpful.	Compliment
In general, providers find the FSSA bulletins and meetings are helpful in supporting participation and provision of SUD services.	Compliment
While providers do find the FSSA bulletins to be helpful, they felt it would be more helpful if they were to be specific to one topic and having follow-up Q&A sessions.	Recommendation
The majority of providers would like a dedicated contact person at FSSA and the MCEs to call with clarifying questions.	Recommendation
Beneficiaries suggested using social media, AA and NA meetings and healthcare providers as the best method to seek treatment.	Recommendation
All of the MCEs characterized the guidance provided by the state for the Pregnancy Promise Program as helpful and were complimentary of the program.	Compliment
The MCEs continue to suggest dedicated training would be beneficial for new and existing providers on the 1115 SUD demonstration and SUD specific policies.	Recommendation
Providers improvements in the delivery of treatment for SUD in 2023, compared to 2021 including MAT, OTP, telehealth, supportive housing and transportation.	Compliment
Providers commented that understanding processes, coverage, rates and staffing have gotten worse over the past year and are areas for improvement.	Critique
Providers continue to recommend improved consistency between state intentions and actual practice.	Recommendation

Exhibit 6. Summary of Findings for CMS Milestone 6
Improved Care Coordination and Transitions Between Levels of Care

Measures	
Number of Measures Examined	15
Number of Measures Where Desired Outcome Was Met	14
Number of Measures Where Outcome Was Statistically Significant	10
<u>Measures Where Desired Outcome Was Met:</u>	
Initiation of AOD Treatment, Total AOD Population	Increase
Initiation of AOD Treatment, Alcohol Abuse Only	Increase
Initiation of AOD Treatment, Opioid Abuse Only	Increase
Initiation of AOD Treatment, Abuse Other than Alcohol or Opioid	Increase
Engagement of AOD Treatment, Total AOD Population	Increase
Engagement of AOD Treatment, Alcohol Abuse Only	Increase
Engagement of AOD Treatment, Opioid Abuse Only	Increase
Engagement of AOD Treatment, Abuse Other than Alcohol or Opioid	Increase
Follow-up After ED Visit for Alcohol or Other Drug Dependence, 7 day	Increase
Follow-up After ED Visit for Alcohol or Other Drug Dependence, 30 days	Increase
Percentage of Inpatient or Residential Discharges with SUD follow-up, 7 days	Increase
Percentage of Inpatient or Residential Discharges with SUD follow-up, 14 days	Increase
Care coordination rate at MCEs over time	Increase
Rate of Transition to ASAM Level 1 and 2 Services After ASAM 3 or 4	Increase
Implementation Activities	
Number of Activities Identified in the State's SUD Implementation Plan	1
Number of Activities Completed	1
Number of Activities Abandoned	0
Stakeholder Feedback	
Providers experiences were variable on their interactions with the MCEs on care coordination.	Critique
The MCEs noted there is room for improvement in the process and understanding among all parties involved in care coordination.	Recommendation
Providers commented that supportive housing has improved over the past year but there are still opportunities to improve.	Neutral

Exhibit 7. Summary of Findings for Summary of Findings for Other SUD-Related Metrics

Measures	
Number of Measures Examined	12
Number of Measures Where Desired Outcome Was Met	8
Number of Measures Where Outcome Was Statistically Significant	2
Measures Where Desired Outcome Was Met:	
Rate of per capita expenditures for SUD services among the SUD population	Increase
Proportion of per capita expenditures for SUD services across ASAM levels of care	More spread
Rate of per capita expenditures for all services among the SUD population	Increase
Rate of per capita expenditures for all services except SUD services among the SUD pop.	Increase
Rate of access to preventive health services for adult Medicaid beneficiaries with SUD	Increase
Grievances related to SUD treatment services	Decrease
Prescribers Accessing Indiana's INSPECT	Increase
Hospitals that have Integrated with Indiana's INSPECT	Increase

SECTION B: General Background Information

Description of the Demonstration's Policy Goals

Indiana was one of the first states to obtain approval from the Centers for Medicare and Medicaid Services (CMS) for its demonstration for the expansion of the delivery of substance use disorder (SUD) treatment services. Indiana aligned its demonstration goals with the milestones outlined by CMS for SUD demonstrations:

1. Access to critical levels of care for SUD treatment;
2. Use of evidence-based, SUD-specific patient placement criteria;
3. Use of nationally recognized SUD-specific program standards for residential treatment;
4. Sufficient provider capacity at critical levels of care;
5. Implementation of comprehensive treatment and prevention strategies to address opioid abuse; and
6. Improved care coordination and transitions between levels of care.

Indiana identified its primary goals for the SUD component of its 1115 demonstration in its SUD Implementation Plan which was approved February 1, 2018. As per the SUD demonstration renewal, the original SUD Implementation Plan is still in effect. As set forth in the Implementation Plan, Indiana aligned its goals for the SUD demonstration component with the milestones outlined by CMS as follows:

1. Increased rates of identification, initiation, and engagement in treatment;
2. Increased adherence to and retention in treatment;
3. Reductions in overdose deaths, particularly those due to opioids;
4. Reduced utilization of emergency departments and inpatient settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services;
5. Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate; and
6. Improved access to care for physical health conditions among beneficiaries.

Indiana's Implementation Plan describes the planned activities during the demonstration period organized by CMS milestone.

Demonstration Name, Approval Date, and Time Period of Data Analyzed in the Assessment

Name: Healthy Indiana Plan

Project Number: 11-W-00296/5

Approval Date: October 26, 2020

Time Period Covered by Evaluation: January 1, 2021 through December 31, 2025; the Interim Evaluation covers the period from January 1, 2021 through December 31, 2023.

Brief Description and History of Implementation

Indiana's Section 1115 Demonstration Authority

Indiana Medicaid provides coverage of SUD treatment services to its members based on standards outlined through the American Society of Addiction Medicine (ASAM). The matrix below provides an overview of each ASAM level of care with Indiana Medicaid's coverage prior to and then starting with the demonstration in February 2018. Many services that align with an ASAM level of care were covered prior to the implementation of the 1115 demonstration. The most notable change with the demonstration was the implementation of residential treatment at ASAM levels 3.1 and 3.5. Also, Indiana modified coverage to move what had been Medicaid Rehabilitation Option (MRO) services to state plan services. These services became available to all Medicaid members across all programs.

Indiana Medicaid SUD Service Coverage Pre- and Post-Demonstration by ASAM Level of Care				
ASAM	Service	Description	Pre-Waiver Coverage	Post-Waiver Coverage
OTP	Opioid Treatment Program	Pharmacological and non-pharmacological treatment in an office-based setting (methadone)	Yes (as of Sept. 2017)	Yes
0.5	Early Intervention	Services for individuals who are at risk of developing substance-related disorders	Yes, all populations	Yes, all populations
1.0	Outpatient Services	Outpatient treatment (usually less than 9 hours a week), including counseling, evaluations and interventions	Yes, all populations	Yes, all populations
2.1	Intensive Outpatient Services	9-19 hours of structured programming per week	Yes, but for the MRO-eligible population only	Yes, all populations
2.5	Partial Hospitalization	20 or more hours of clinically intensive programming per week	Yes, all populations	Yes, all populations
3.1	Clinically Managed Low- Intensity Residential	24-hour supportive living environment; at least 5 hours of low-intensity treatment per week	No coverage	Yes, all populations
3.5	Clinically Managed High-Intensity Residential	24-hour living environment, more high-intensity treatment	No coverage	Yes, all populations
3.7	Medically Monitored Intensive Inpatient Services	24-hour professionally directed evaluation, observation, medical monitoring, and addiction treatment in an inpatient setting	Yes, for all (based on medical necessity)	Yes, based on medical necessity
4.0	Medically Managed Intensive Inpatient	24-hour inpatient treatment requiring the full resources of an acute care or psychiatric hospital	Yes, for all (based on medical necessity)	Yes, based on medical necessity
Sub-supported	Addiction Recovery Management Services	Services to help people overcome personal and environmental obstacles to recovery	No coverage	Yes, all populations
	Supportive Housing Services	Services for individuals who are transitioning or sustaining housing	No coverage	Explore options to cover

Administration of Indiana's Medicaid Program

The Family and Social Service Administration's (FSSA's) Office of Medicaid Policy and Planning (OMPP)¹ has responsibility for the administration and oversight of Indiana's Medicaid program under demonstration and state plan authorities. As of December 2023, 82.5 percent of beneficiaries were enrolled in one of the State's three risk-based managed care programs that each serves a targeted population—Hoosier Healthwise, Healthy Indiana Plan and Hoosier Care Connect.² The remaining 17.5 percent were enrolled in fee-for-service (FFS).

The approved demonstration provides access to the enhanced SUD benefit package for all Indiana Medicaid beneficiaries, regardless of enrollment in FFS or with one of the managed care entities (MCEs).

The **Hoosier Healthwise (HHW)** program (39.1% of total Medicaid enrollment) began in 1994. By 2005, enrollment

¹ FSSA and OMPP are collectively referred to as Indiana Medicaid throughout this report.

² <https://www.in.gov/fssa/ompp/forms-documents-and-tools2/medicaid-monthly-enrollment-reports/>

with an MCE was mandatory for low-income families, pregnant women, and children. This program is authorized by a 1932(a) state plan amendment. Today, HHW primarily has an enrollment base of child Medicaid members, including those enrolled in the Children's Health Insurance Program.

The **Healthy Indiana Plan (HIP)** program (38.7% of total Medicaid enrollment) was first created in January 2008 under a separate Section 1115 demonstration authority. This program covered adults with family income up to 200 percent of the federal poverty level (FPL) who were not otherwise eligible for Medicaid or Medicare. In more recent years, adult caretakers and most all of the pregnant women who had been enrolled in HHW are now enrolled in HIP.

The **Hoosier Care Connect (HCC)** program (4.7% of total Medicaid enrollment) was implemented in April 2015 under a 1915(b) waiver authority. The HCC is a program that administers and deliver services to aged, blind and disabled members. Children in foster care are also enrolled in HCC.

Traditional Medicaid (FFS) is comprised of the remaining Medicaid enrollees and includes the following populations:

- Individuals dually enrolled receiving Medicare and Medicaid benefits;
- Individuals receiving home- and community-based waiver benefits;
- Individuals receiving care in a nursing facility or other State-operated facility;
- Individuals in specific aid categories (e.g., refugees); and
- Individuals awaiting an assignment to an MCE.

During the demonstration period, five MCEs were under contract with the OMPP to administer services to its managed care programs:

- Anthem, an affiliate of Elevance Health, has been under contract since 2007 and serves members in HHW, HIP, and HCC.
- Managed Health Services, a subsidiary of the Centene Corporation, has been under contract since 1994 and serves members in HHW, HIP, and HCC.
- MDwise, a subsidiary of McLaren Health Care, has been under contract since 1994 and serves members in HHW and HIP.
- CareSource has been under contract since 2017 and serves members in HHW and HIP.
- United Healthcare, an operating division of United Healthcare Group, has been under contract since 2021 and serves members in HCC.

The OMPP has worked in close collaboration with the Division of Mental Health and Addiction (DMHA), another agency under the FSSA, since the implementation of the initial SUD demonstration in early 2018. The DMHA holds responsibility for licensing residential treatment facilities. The DMHA has also undertaken a comprehensive review of its regulations related to service providers and service delivery with an eye toward alignment with ASAM. On a regular basis, a team comprised of OMPP and DMHA staff meet to assess and review policies and procedures related to SUD services. Both divisions met with MCEs and SUD providers frequently at the start of the initial demonstration and continue to do so through the second demonstration period.

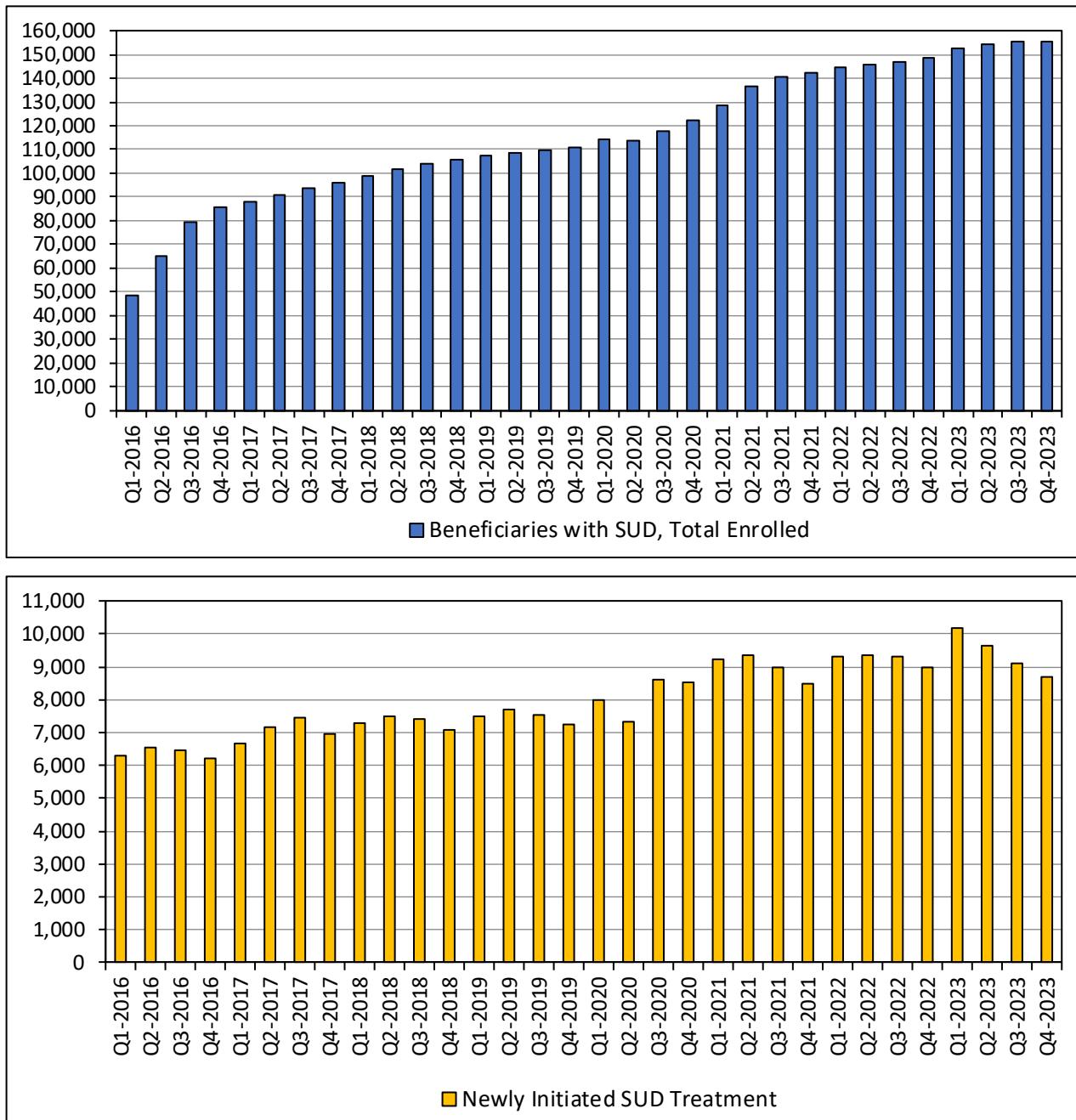
Population Groups Impacted by the Demonstration

The evaluators used CMS's specifications for SUD Metric #3 (Medicaid Beneficiaries with SUD Diagnosis) and Metric #2 (Medicaid Beneficiaries with Newly Initiated SUD Diagnosis) to assess the trend in the Medicaid population most likely to be impacted by the demonstration. Exhibit 8, which appears on the next page, shows the trend on both of these measures on a quarterly basis from Q1-2016 to Q4-2023. This period is roughly the two-year period prior to the start of the initial demonstration through December 2023 of the second SUD demonstration period.

Medicaid beneficiaries with a SUD diagnosis have grown consistently during the eight-year period examined, from 48,860 in Q1-2016 to 155,251 as of Q4-2023. Over the course of the second demonstration period, the population of beneficiaries with SUD grew 20.8 percent (128,486 in Q1-2021 to 155,251 in Q4-2023).

Individuals with a newly initiated SUD diagnosis has been steadier over the eight years. In CY 2016, the average over the four quarters was 6,373 beneficiaries; in CY 2023, the average over the four quarters was 9,398. Over the course of the second demonstration period, the population of beneficiaries with newly initiated SUD grew 4.2 percent (9,016 in CY 2021 to 9,398 in CY 2023).

Exhibit 8. Medicaid Beneficiaries with SUD, by Quarter, CY 2016 – CY 2023



Overall, Medicaid members with a SUD diagnosis represented 6.5 percent by the end of the first SUD demonstration period in December 2020 and increased to 7.2 percent of all enrollees by the end of December 2023. Exhibit 9 on the next page compares the percent of total enrollees with SUD against the overall Medicaid population across a number of subpopulations. As expected, non-elderly adults represent more than half of total Medicaid enrollment, but more than 12.8 percent of non-elderly adults have a SUD diagnosis. Dual eligible, the criminally

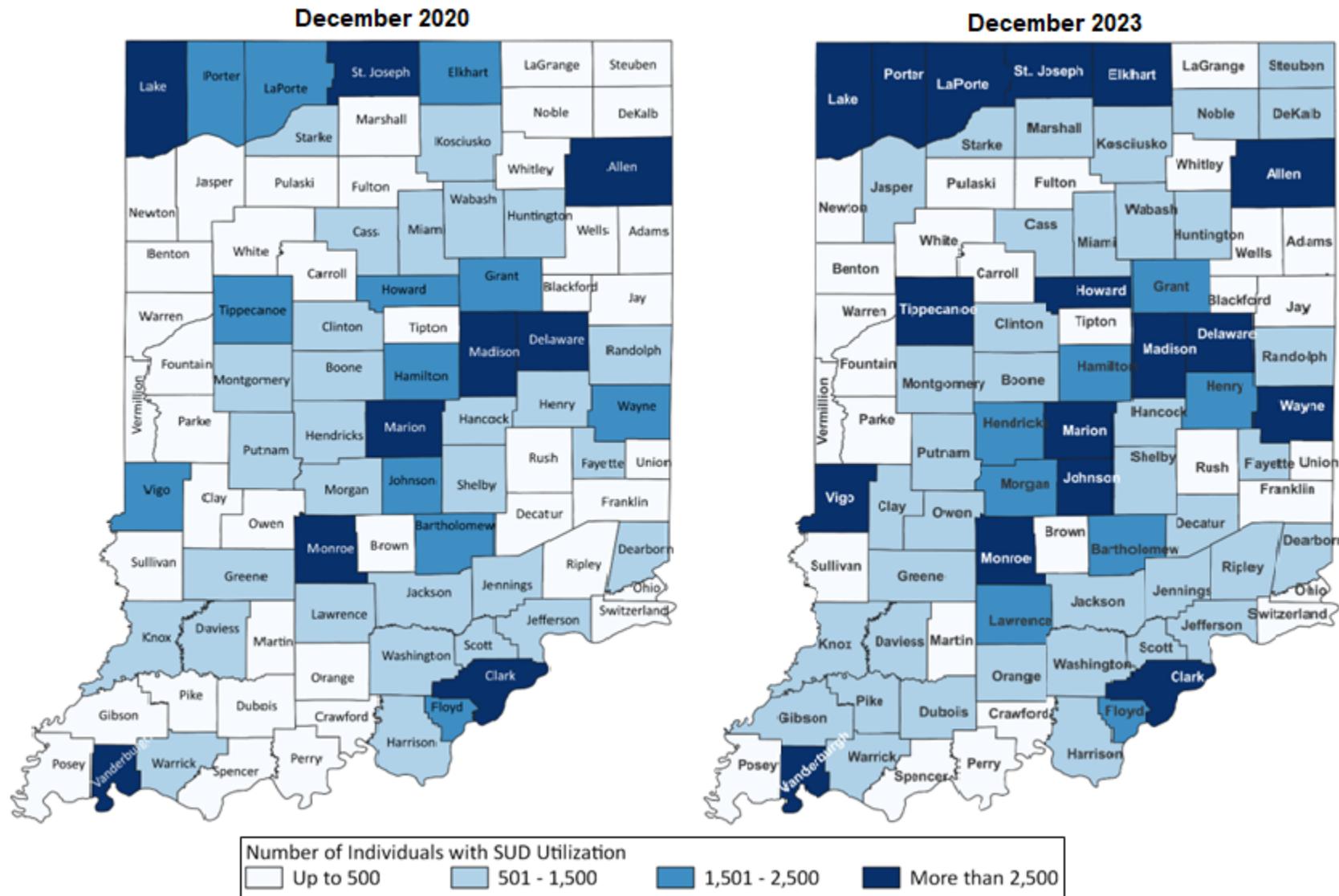
involved, and beneficiaries enrolled in the MRO benefit are also over-represented within the total population with SUD compared to their proportional enrollment in Medicaid overall (i.e., each subpopulation has a higher percentage of its members with SUD than the statewide percentage shown at the top of the exhibit). The FSSA maps each of Indiana's 92 counties into one of eight regions shown in the exhibit. There has been modest change over the demonstration period of the percentage of the Medicaid population with SUD at the region level, but all regions did see an increase. Medicaid enrollees in the East Central, Southwest, and Southeast regions are over-represented in the percentage with SUD compared to the statewide average.

Exhibit 9. Comparison of Medicaid Members with SUD Diagnosis to Total Enrollment

Category	December 2020 end of demonstration period			December 2023 end of demonstration period		
	Total Enrollment	Percent of Total Enrolled	Percent of Total Enrolled with SUD	Total Enrollment	Percent of Total Enrolled	Percent of Total Enrolled with SUD
Total Demonstration Population	1,768,040	100.0%	6.5%	2,041,013	100.0%	7.2%
By Age Group						
Age Less than 18	744,466	42.1%	0.3%	798,163	39.1%	0.5%
Age 18 to 64	899,695	50.9%	11.9%	1,095,075	53.7%	12.3%
Age 65 and Over	123,879	7.0%	3.7%	147,775	7.2%	5.3%
By Cohort Population						
Dual Eligible	154,786	8.8%	7.6%	167,014	8.2%	7.8%
Pregnant	50,000	2.8%	6.4%	82,075	4.0%	5.0%
Criminally Involved	4,780	0.3%	7.2%	4,824	0.2%	22.6%
MRO	45,242	2.6%	19.0%	41,157	2.0%	17.2%
By FSSA Region						
Northwest	222,042	12.6%	5.1%	243,995	12.0%	4.8%
North Central	152,652	8.6%	2.8%	176,842	8.7%	5.2%
Northeast	197,275	11.2%	5.9%	225,123	11.0%	5.7%
West Central	130,064	7.4%	6.3%	148,864	7.3%	6.4%
Central	575,984	32.6%	5.9%	692,645	33.9%	5.3%
East Central	156,655	8.9%	8.4%	180,314	8.8%	8.0%
Southwest	177,387	10.0%	8.8%	200,908	9.8%	8.0%
Southeast	155,742	8.8%	10.4%	172,322	8.4%	8.0%

Exhibit 10 on the next page shows two heat maps at the county level. The left side shows the count of members with SUD as of December 2020, the right side is as of December 2023. Notable changes between the two maps are increases in the SUD population in Jasper, LaPorte and Porter County in the Northwest; Noble and Steuben County in the Northeast; Henry, Howard and Wayne County in the East Central Region; Hendricks, Johnson, and Morgan Counties contiguous with Marion County (Indianapolis); Elkhart and Marshall County in the North Central Region; DeKalb County in the Northeast Region; Decatur and Ripley County in the Southeast Region; Dubois, Gibson, Lawrence, Orange, Owen, and Pike County in the Southwest Region; and Clay, Tippecanoe and Vigo County in the West Central Region.

Exhibit 10
Heat Maps of the Number of Medicaid Beneficiaries with a SUD Diagnosis by County
December 2020 Compared to December 2023



SECTION C: Evaluation Questions and Hypotheses

Defining Relationships: Aims, Primary Drivers and Secondary Drivers

Burns & Associates, a Division of Health Management Associates (HMA-Burns), is serving as the Independent Evaluator for this demonstration. HMA-Burns examined the relationships between CMS and FSSA's goals to develop hypotheses related to Indiana's SUD demonstration renewal. Given the experience of the HMA-Burns team with evaluating Indiana's first SUD demonstration along with our understanding of the specific items identified and carried out in the State's SUD implementation plan since the initial demonstration was approved, the approach by the HMA-Burns team for Indiana's second SUD demonstration is to evaluate the pace of improvement in the access, utilization and delivery of SUD treatment services to Medicaid beneficiaries that builds on the foundation established in the first SUD demonstration period.

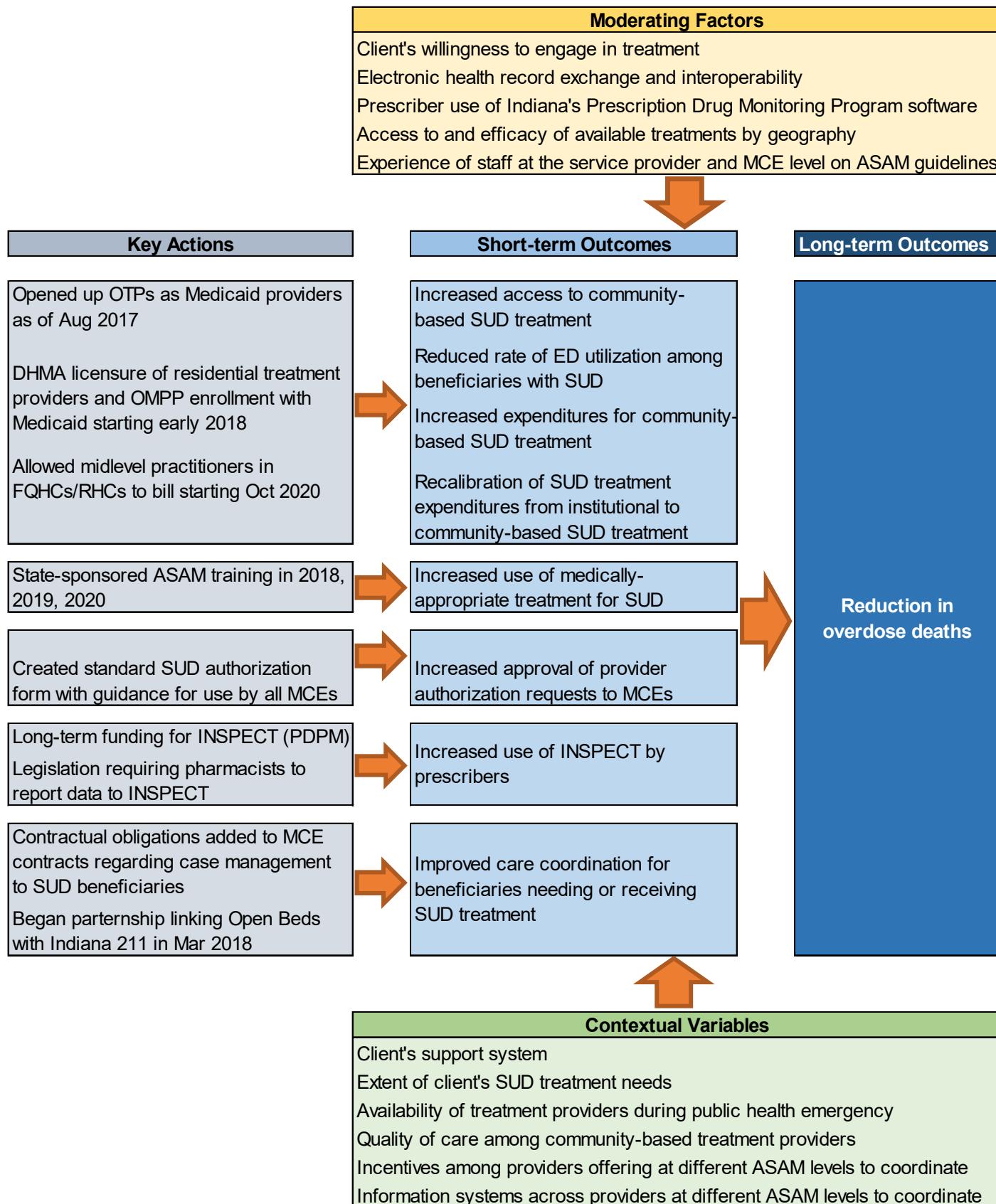
The HMA-Burns team constructed a logic model with the long-term outcome being a reduction in overdose deaths in Indiana because it is a measurable health outcome. The logic model appears as Exhibit 11 on the next page. Based on key actions taken by the State either at the start of the initial SUD demonstration or since the demonstration's initiation, eight short-term outcomes have been identified. The short-term outcomes all tie to eight hypotheses and eight research questions which are introduced in Exhibit 12.

There is recognition that the success of short-term and long-term outcomes may be moderated by factors such as the client's willingness to engage in SUD treatment, the access to and efficacy of available treatments for SUD throughout Indiana, the experience of the staff among MCEs and service providers on ASAM guidelines, and the availability and use of technology by providers and service coordinators to effectively coordinate SUD treatment.

Contextual variables to the success of short-term and long-term outcomes include the extent of need by each client and where the client is located in the state, the client's support system to initiate or continue engagement in treatment, and incentives or disincentives for providers at different ASAM levels to coordinate the transition of care from one ASAM level to another.

The HMA-Burns team identified 32 measures in the evaluation design plan that relate to the outcomes described in the logic model shown in Exhibit 11, the overall demonstration goals, and the research questions for this demonstration evaluation. The measures include those with national measure stewards, those specified by CMS, and evaluator-derived measures. Of the total 32 measures, 23 of them are currently SUD monitoring measures required by CMS for SUD demonstration reporting by states. The CMS-defined metrics will be computed monthly and/or annually as deemed appropriate to each measure specification and will use the CMS technical specifications for computation. To maintain consistency with the evaluation of the initial demonstration, HMA-Burns opted to continue reporting 23 measures from the Summative Evaluation to ensure continuity at the CMS Milestone level. In total, 55 measures were used to conduct this Interim Evaluation.

Exhibit 11. Logic Model for Indiana's SUD Demonstration: Reduce Overdose Deaths



Hypotheses and Research Questions

Exhibit 12 identifies the hypotheses developed for Indiana's SUD demonstration renewal and the research questions associated with each hypothesis and maps them to CMS Milestones and demonstration goals. A full listing of the measures associated with each hypothesis and research question appears in [Appendix A](#). For each hypothesis, a reference is made to compare against either the initial demonstration period (February 2018 to December 2020) or prior to the initial demonstration period (prior to February 2018). When statistically significant improvement was reported in the Summative Evaluation between the initial demonstration period and the pre-demonstration period on measures tied to hypotheses, then the comparison period is the initial demonstration period. When statistically significant improvement was not reported in the Summative Evaluation, then the comparison period is the pre-demonstration period.

Exhibit 12. Mapping Hypothesis and Research Questions to CMS Milestones and Goals

Hypothesis (H)	Research Question (RQ)	CMS Milestone	Goals
H1 The demonstration will decrease the rate of overdose deaths in Indiana since prior to the initial demonstration period.	RQ1 Is the rate of drug overdose deaths in Indiana impacted by the demonstration?	5, Other, HIT	3
H2 The demonstration will increase the percentage of Medicaid beneficiaries who initiate and engage in treatment for OUD and other SUDs since the initial demonstration period.	RQ2 Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?	1 and 6	1
H3 The demonstration will decrease the rate of emergency department visits among Medicaid beneficiaries with SUD since the initial demonstration period.	RQ3 Does the demonstration decrease the rate of emergency department visits among Medicaid beneficiaries with SUD?	5	4
H4 The demonstration will decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD since prior to the initial demonstration period.	RQ4 Does the demonstration decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD?	6	5
H5 The demonstration will increase the percentage of Medicaid beneficiaries who receive care for comorbid conditions since prior to the initial demonstration period.	RQ5 Does the demonstration increase the percentage of Medicaid beneficiaries with SUD who receive care for comorbid conditions?	Other	6
H6 The demonstration will improve access to community-based services for SUD treatment since the initial demonstration period.	RQ6 Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?	1, 2, 3, 4	1, 2, 3, 4
H7 Care coordination and transitions between ASAM levels of care will improve during the demonstration period.	RQ7 Does the demonstration improve transitions between ASAM levels of care?	6	2, 3, 4
H8 The demonstration will further rebalance Medicaid expenditures for treatment of SUD more toward community-based care since the initial demonstration period.	RQ8 Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?	Other	1, 2, 4

SECTION D: Methodology Used in Assessment

Evaluation Design

The evaluation is conducted on Medicaid beneficiaries with SUD during the pre- and post-demonstration period. The approved evaluation design is a mixed-methods approach, drawing from a range of data sources, measures, and analytics to best produce relevant and actionable study findings. The approved Evaluation Design Plan reflects a range of data sources, measures and perspectives. It defines the most appropriate study population and sub-populations and describes the five analytic methods included in the evaluation design. The Evaluation Design Plan approved by CMS on March 23, 2023 appears in [Appendix A](#), with modifications found in Section E of this report.

The five analytic methods used by the evaluators include:

1. Chi-square (Chi) or T-Test (TT),
2. Interrupted Time Series (ITS),
4. Onsite reviews (OR)
5. Desk reviews (DR) and,
6. Facilitated interviews (FI).

Exhibit 13 presents a chart displaying which method(s) are used for each hypothesis.

Exhibit 13. Summary of Five Analytic Methods and Data Sources by Hypothesis

Hypothesis (H)	Method					Data Sources
	Chi TT	ITS	OR	DR	FI	
H1 The demonstration will decrease the rate of overdose deaths in Indiana since prior to the initial demonstration period.	X			X		Claims data, vital statistics, PDMP stats
H2 The demonstration will increase the percentage of Medicaid beneficiaries who initiate and engage in treatment for OUD and other SUDs since the initial demonstration period.	X	X		X	X	Claims data, enrollment data
H3 The demonstration will decrease the rate of emergency department visits among Medicaid beneficiaries with SUD since the initial demonstration period.		X		X		Claims data, enrollment data
H4 The demonstration will decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD since prior to the initial demonstration period.	X			X		Claims data, enrollment data
H5 The demonstration will increase the percentage of Medicaid beneficiaries who receive care for comorbid conditions since prior to the initial demonstration period.		X		X		Claims data, enrollment data
H6 The demonstration will improve access to community-based services for SUD treatment since the initial demonstration period.			X	X	X	Claims data, enrollment data, MCE data files, MCE case files
H7 Care coordination and transitions between ASAM levels of care will improve during the demonstration period.			X	X	X	Claims data, enrollment data, MCE data files, MCE case files
H8 The demonstration will further rebalance Medicaid expenditures for treatment of SUD more toward community-based care since the initial demonstration period.	X			X		Claims data, enrollment data

Chi = Chi-square; TT = T-Test; ITS = Interrupted Time Series; OR = Onsite Reviews; DR = Desk Reviews; FI = Facilitated

Target and Comparison Population

Target Population

The target population is any Indiana Medicaid beneficiary with a diagnosis of SUD in the study period. HMA-Burns used the specifications developed by CMS in its SUD Monitoring Plan for identification of beneficiaries with SUD to flag individuals as an indicator of those most likely to have exposure to the changes in the demonstration (CMS Metric #3 and CMS Metric #4). This population comprises the demonstration population. HMA-Burns also developed sub-populations which were tracked and reported on in the Summative Evaluation of the initial demonstration period, and the Mid-Point Assessment of the current demonstration period. The same sub-populations are being reported on in this Interim Evaluation.

- **Managed Care Model (Model):** Includes the target population enrolled in one of the managed care programs.
- **Opioid Use Disorder (OUD):** It is likely that beneficiaries with OUD, compared to those with other types of SUD, may have different health outcomes and access a different mix of services. Therefore, it is possible that the demonstration impacts these populations differently. HMA-Burns will identify OUD beneficiaries (using the CMS-defined specification) to examine these individuals as a separate sub-population.
- **Dual eligible:** Includes the target population who meet criteria for being dually-eligible for both the Medicare and Medicaid program.
- **Pregnant:** Includes the target population who meet the criteria for having a pregnancy.
- **Criminally Involved:** Includes the target population who meet the criteria for being criminally involved. HMA-Burns used Indiana Department of Correction data to match against the demonstration population to identify whether or not a person was incarcerated at any time in the calendar year.
- **Medicaid Rehabilitation Option (MRO):** Includes the target population who meet criteria for being eligible to receive MRO services in the calendar year.
- **Region:** The eight regions that have customarily been used by the FSSA match each of Indiana's 92 counties to a region in the state. Individuals in the demonstration were matched to a home county and then a region based on their zip code on a base date in the calendar years included in the study. A map that shows the match between each county and region appears in [Appendix B](#).

Comparison Groups

As described in the Section Evaluation Period below, HMA-Burns will create groups of Medicaid beneficiaries with SUD across four time periods in order to compare outcomes.

Evaluation Period

Monthly Measures

For measures which are computed on a monthly basis, statistical testing using Interrupted Time Series (ITS) will be applied. HMA-Burns will consider four different time periods when conducting ITS. Each time period will contain 25 observations (months).

- **Time Period #1: Pre-Demonstration.** This is the period just prior to the approval of Indiana's first SUD demonstration, from January 2016 through January 2018.
- **Time Period #2: Demonstration 1 period.** This is the first 25 months of Indiana's initial SUD demonstration, from February 2018 through February 2020. Indiana's initial SUD demonstration ended in December 2020. The first 25 months of the demonstration are included in the analysis instead of the last 25 months of the demonstration because the last nine months of Indiana's truncated 35-month demonstration period were during the onset of the public health emergency (PHE).

- Time Period #3: Demonstration 2 initial period. This is the 25-month period from December 2021 through December 2023. Time Period #3 will be compared to either Time Period #1 or Time Period #2 when ITS testing is conducted for reporting in the Interim Evaluation.
- Time Period #4: Demonstration 2 later period. This is the 25-month period from December 2023 through December 2025. Time Period #4 will be compared to either Time Period #1 or Time Period #2 when ITS testing is conducted for reporting in the Summative Evaluation.

The determination of whether Time Periods #3 and #4 are tested against either Time Period #1 or Time Period #2 are based on the results that HMA-Burns found in its Summative Evaluation of Indiana's first SUD demonstration.

- If it was found in the Summative Evaluation of the first demonstration period when ITS was run that there was not a statistically significant finding for a given measure, then HMA-Burns will run ITS on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #1.
- If it was found in the Summative Evaluation of the first demonstration period when ITS was run that there was a statistically significant finding for a given measure, then HMA-Burns will run ITS on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #2. Since it was already established in the first demonstration evaluation that statistically significant improvement was found, for the second demonstration evaluation HMA-Burns would assess if improvement continued and if the pace of this improvement was statistically significant compared to the findings from the first demonstration period.

Annual Measures

For measures which are computed on an annual basis, statistical testing using chi-square or t-test will be applied. HMA- Burns will consider four different time periods when conducting chi-square or t-test.

- Time Period #1: Pre-Demonstration. This will include the average results for Calendar Years 2016 and 2017.
- Time Period #2: Demonstration 1 period. This will include the average results for Calendar Years 2018 and 2019.
- Time Period #3: Demonstration 2 initial period. This will include the average results for Calendar Years 2022 and 2023.
- Time Period #4: Demonstration 2 later period. This will include the average results for Calendar Years 2024 and 2025.

Similar to the approach that will be used for monthly measures, the determination of whether Time Periods #3 and #4 are tested against either Time Period #1 or Time Period #2 are based on the results that HMA-Burns found in its Summative Evaluation of Indiana's first SUD demonstration.

- If it was found in the Summative Evaluation of the first demonstration period when chi-square or t-test was run that there was not a statistically significant finding for a given measure, then HMA-Burns will run the chi-square or t-test on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #1.
- If it was found in the Summative Evaluation of the first demonstration period when chi-square or t-test was run that there was a statistically significant finding for a given measure, then HMA-Burns will run the chi-square or t-test on that measure using Time Period #3 (for the Interim Evaluation) or Time Period #4 (for the Summative Evaluation) against Time Period #2.

Evaluation Measures

HMA-Burns is reporting on 55 measures, each of which has been mapped to a CMS Milestone as shown in Exhibit 14. Where relevant, if CMS has mapped one of its SUD measures reported in the SUD quarterly monitoring report to a specific CMS milestone, then HMA-Burns has adopted this mapping as well. For measures other than those that

are part of quarterly monitoring to CMS, HMA-Burns has selected the most appropriate milestone to map the measure to. In some instances, both for CMS-defined measures and other measures, there is not an appropriate milestone to map to. These measures appear on the last row of the table below under “Other” measures.

Exhibit 14: Mapping of CMS Milestones to Interim Evaluation Measures				
CMS Milestone	Measures in CMS Monitoring Reports	Measures Defined by HMA-Burns	Measures Defined by Another Source	Total Measures
Access to critical levels of care for SUD treatment	6	7	0	13
Use of evidence-based, SUD-specific patient placement criteria	0	3	0	3
Use of nationally recognized SUD-specific program standards for residential treatment	0	2	0	2
Sufficient provider capacity at critical levels of care	0	5	0	5
Implementation of comprehensive treatment and prevention strategies to address opioid abuse	5	0	0	5
Improved care coordination and transitions between levels of care	10	3	2	15
Other Measures not associated to a specific milestone	6	3	3	12
TOTAL	27	23	5	55

In Section F of the report, each measure is shown on a separate one-page summary of findings report. The measures are organized by CMS Milestone. As an introduction to each milestone, a summary exhibit is provided which lists out each measure, the desired outcome, if the outcome was met or not, and if the result was statistically significant. The test applied for statistical significance is also cited.

Data Sources

HMA-Burns used a number of data sources to conduct the evaluation. The three main components used to assess the effectiveness of the demonstration against each CMS Milestone were computation of measures, assessment of FSSA's completion of its SUD Implementation Plan, and stakeholder feedback. The data sources used for each component are identified below.

Computation of Measures

Claims and encounters with dates of service (DOS) from January 1, 2016 and ongoing are collected from the FSSA Enterprise Data Warehouse (EDW), facilitated by FSSA's EDW vendor, Gainwell Technologies. Managed care encounter data has the same record layout as fee-for-service claims in the EDW and includes variables such as charges and payments at the header and line level. Payment data for MCE encounters represents actual payments made to providers by the MCEs. In total, five MCEs will have encounter data in the dataset.

Because the HMA-Burns team already has built a relationship with the FSSA Data Analytics team and with Gainwell, the HMA-Burns team currently receives monthly tables from the EDW representing member enrollment and demographic information, provider enrollment and demographic information, claims and encounter data at the detail claim line level. Data has been received, validated, and used by HMA-Burns for the pre-demonstration and initial demonstration periods. On an ongoing basis today and throughout the second demonstration period, the HMA-Burns team continues to receive these files on a monthly basis from the EDW. The data is validated by the HMA-Burns team upon intake and trended against information received in prior months across multiple dimensions. The HMA-Burns team has built a comprehensive database that incorporates utilization and enrollment data going back to CY 2016 up to the present.

Claims and encounters is the primary source for computing measures defined by CMS. Some CMS measures, as well as many measures defined by HMA-Burns, use a combination of claim/encounter, member enrollment, and provider enrollment files. An example of this is the HMA-Burns measure to track the average distance travelled by Medicaid members to specific services. HMA-Burns joined data on claims and encounters with the Medicaid member enrollment file to map the physical location where providers render services and the home address of individual Medicaid beneficiaries. Driving distance was computed for each trip using external software.

Data from the provider file was supplemented in some instances by primary research conducted by the HMA-Burns evaluation team. Using the average distance example from above, because the provider ID on file in the EDW may have a provider entity's corporate office assigned and not individual locations where services are rendered, the HMA-Burns team conducted internet research of provider websites and utilized reports from DMHA that track residential providers to use the correct service address for the average distance measure. This process was also used to plot the locations of providers on maps shown in exhibits in Section F.

For other measures defined by HMA-Burns, the evaluators used primary data collected from MCEs for Medicaid beneficiaries enrolled in managed care. This was completed for the SUD authorization focus study conducted during the evaluation in which metrics were examined such as authorization approval and denial rates, the number of days requested and approved, and the percentage of denied requests based on the application of medical necessity criteria. Additional data was collected directly by evaluation team members through the remote review of authorization records.

Another focus study conducted by the evaluation team relates to the transition of care for SUD members across ASAM levels. This study was conducted as a desk review using data from the State's EDW. HMA-Burns also requested data from the MCEs to determine which of their members who used inpatient hospital and residential treatment services were enrolled in case or complex care management with the MCE.

Three other data sources were used for specific measures. HMA-Burns used data from the National Survey of Substance Abuse Treatment Services (N-SSATS) and its successor National Substance Use and Mental Health Services Survey (N-SUMHSS) to determine the percentage of SUD providers in Indiana who accepted Medicaid in each study year examined. HMA-Burns used the Indiana DMHA's monthly tracking report to assess the change in licensed residential treatment locations and beds over the course of the demonstration period. HMA-Burns used FSSA SUD Quarterly Monitoring Reports to assess the MAT prescribers in Indiana accepting Medicaid clients and to compute the prescription drug monitoring program (named INSPECT) related metrics. In collaboration with FSSA, vital statistics cause of death data was transferred from the Department of Health to the evaluators for purposes of calculating overdose rates.

Implementation Plan Action Items

HMA-Burns identified all of the items identified in FSSA's SUD Implementation Plan to determine where action had or had not yet been taken on each item. The assessment team conducted a desk review of materials released by FSSA prior to and after the demonstration implementation date. After review of these materials, interviews were conducted with key staff at FSSA to confirm our assessment of each of the planned implementation activities.

Qualitative Feedback from Key Stakeholders

While there were no fundamental changes to the delivery of SUD services with the extension of the demonstration, the HMA-Burns team collected feedback from a variety of stakeholders to gain perceptions about the implementation of the SUD demonstration, as well as their perspectives related to SUD service delivery for Medicaid beneficiaries. For the Interim Evaluation, HMA-Burns built upon the methodology used in the Mid-Point Assessment of the January 2021 through December 2025 demonstration by using providers defined as having delivered services using the specifications for CMS's Metrics #7 through #12 to identify actively billing SUD providers in CY 2023. For each of the metrics, the top 20 providers by metric were identified and consolidated into one unduplicated provider list across the metrics. Providers outside of the top 20 were added to the contact list if they met any of the following: previously appeared in the top twenty providers in the Summative Evaluation or Mid-Point Assessment; had a provider specialty of 835 and 836; or appeared on a SUD and SMI stakeholder list as provided by FSSA. In total, HMA-Burns outreached to 551 providers representing 100% of total dollars paid for SUD services to offer the opportunity to provide feedback. Of the 551, 43 providers (60.0% of payments) were offered a choice of in-person or zoom interviews, and online survey options to provide feedback. The remaining 508 providers received a link to the online provider survey. Feedback was collected through interviews that were conducted remotely via Zoom for the Interim Evaluation. Outreach was made to interview stakeholders in person, but they opted for virtual settings.

Three options were offered to providers to give feedback:

1. A link to a 13-question online survey. For most questions on the survey, providers selected from a pre-determined list of responses. There was an opportunity to provide written feedback as well. Providers were given the option of remaining anonymous. A total of 42 providers completed the online survey.
2. Participate in an interview over Zoom with the evaluation team. Each provider was asked to provide feedback on the same set of questions. A total of six providers and one provider association opted for the remote interview over Zoom.
3. Participate in an in-person interview with the evaluation team. Each provider was asked to provide feedback on the same set of questions. Of the 43 providers offered this option, none selected the in-person interview as their method to provide feedback.

For the Interim Evaluation interviews, the appointments were set in advance so that the appropriate provider representatives could be present. Each provider was sent the same set of questions in advance of their interview. Although the evaluators covered the topics in each question, providers were encouraged to provide feedback on any other topic related to the SUD demonstration as well.

The providers were given discretion as to who from their organization attended the interview. Typically, two to three representatives attended. The HMA-Burns team consisted of two members, a lead who participated in the Mid-Point and Summative interviews, and a supporting colleague that gathered notes and feedback. Interviews were set for 60 minutes in duration.

The list of questions sent to providers in advance of each interview appear in [Appendix C](#).

The online survey tool released to providers appears in [Appendix D](#).

In addition to provider interviews, HMA-Burns created a five-question online survey for beneficiaries. Providers were asked to assist HMA-Burns with outreaching to members by making the survey available to their Medicaid clients. Survey respondents were totally anonymous. In contrast to the low response rate for the Mid-Point Assessment beneficiary survey (n=1), 22 members responded to the Interim Evaluation survey. All results were incorporated into the feedback received during the Interim Evaluation.

The list of questions covered in client feedback interviews for this Interim Evaluation appears in [Appendix E](#).

As done with the Summative Evaluation and the Mid-Point Assessment, HMA-Burns conducted one interview session with all MCEs contracted with the FSSA for the Interim Evaluation. The MCEs were asked to ensure that representatives that regularly communicate with SUD providers participate in this meeting. Each MCE complied with this request.

Similar to the provider interviews, the MCEs were given questions in advance of the meetings so that they could be prepared for a meaningful discussion. The all-MCE session was 90 minutes in length. Two HMA-Burns team members who conducted MCE interviews previously and a supporting colleague that gathered notes and feedback attended the all-MCE meeting. There was equal participation and feedback from the representatives from all MCEs in attendance.

The list of questions sent to the MCEs in advance of their Interim Evaluation interview appears in [Appendix F](#).

The HMA-Burns team mapped the themes identified by each stakeholder group (service providers, beneficiaries, and MCEs) to the six milestones set out by the FSSA in its SUD demonstration. Summaries of responses related to each CMS Milestone appear in Section F.

Analytic Methods

Among the 55 measures examined, tests of significance were run on 32 measures. Exhibit 15 on the following page shows the type of test applied to each measure, including the baseline and comparison period. Results of each test appear in [Appendix G](#). A detailed discussion of each method is described in the approved Evaluation Design Plan found in [Appendix A](#).

For the Summative Evaluation, HMA-Burns will assess whether it is feasible to conduct statistical testing for the following measures where descriptive statistics was applied in the Interim Evaluation. Where there is sufficient data and it is feasible to do so, HMA-Burns may run a chi-square test as part of the Summative Evaluation.

Proposed Measures for Possible Chi-Square Test for Summative Evaluation	
• Proportion of SUD Providers Accepting Medicaid	• Percentage of Inpatient or Residential Discharges with SUD follow-up, 14 days
• Authorization Denial Rate for SUD Services	• Percentage of discharges for SUD that readmit for inpatient or residential within 180 days
• SUD Authorization Denial Reasons	• Care coordination rate at MCEs over time
• MAT prescribers in Indiana accepting Medicaid clients	• Rate of Transition to ASAM Level 1 and 2 Services After Receiving ASAM Leve 3 or 4 Service
• Percentage of Inpatient or Residential Discharges with SUD follow-up, 7 days	• Proportion of per capita expenditures for SUD services across ASAM levels of care

Exhibit 15. Analytic Methods Applied to Measures

Measures where Interrupted Time Series was Applied	Baseline Period	Comparison Period
1 Users of Outpatient Services	February 2018 - February 2020	December 2021 - December 2023
2 Rate of Outpatient Services	February 2018 - February 2020	December 2021 - December 2023
3 Users of Intensive Outpatient and Partial Hospitalization	January 2016 - January 2018	December 2021 - December 2023
4 Rate of Intensive Outpatient and Partial Hospitalization	January 2016 - January 2018	December 2021 - December 2023
5 Users of Residential and Inpatient Services	February 2018 - February 2020	December 2021 - December 2023
6 Rate of Residential and Inpatient Services	February 2018 - February 2020	December 2021 - December 2023
7 Users of Withdrawal Management	February 2018 - February 2020	December 2021 - December 2023
8 Rate of Withdrawal Management	February 2018 - February 2020	December 2021 - December 2023
9 Users of Medication-Assisted Treatment	January 2016 - January 2018	December 2021 - December 2023
10 Rate of Medication-Assisted Treatment	January 2016 - January 2018	December 2021 - December 2023
11 Rate of emergency department visits for SUD per 1,000 Medicaid beneficiaries	February 2018 - February 2020	December 2021 - December 2023
12 Rate of per capita expenditures for SUD services among the SUD population	January 2016 - January 2018	December 2021 - December 2023
13 Rate of per capita expenditures for SUD services in IMDs among the SUD population	January 2016 - January 2018	December 2021 - December 2023
14 Rate of per capita expenditures for all services among the SUD population	February 2018 - February 2020	December 2021 - December 2023
15 Rate of per capita expenditures for all services except SUD services among the SUD pop.	February 2018 - February 2020	December 2021 - December 2023
Measures where Chi-square was Applied		
16 Continuity of Pharmacotherapy for Opioid Use Disorder	CY 2018 - CY 2019	CY 2022 - CY 2023
17 Use of Opioids at High Dosage in Persons Without Cancer	CY 2018 - CY 2019	CY 2022 - CY 2023
18 Use of Opioids from Multiple Providers in Persons Without Cancer	CY 2018 - CY 2019	CY 2022 - CY 2023
19 Concurrent Use of Opioids and Benzodiazepines	CY 2018 - CY 2019	CY 2022 - CY 2023
20 Initiation of Alcohol and Other Drug Dependence Treatment, Total AOD Population	CY 2018 - CY 2019	CY 2022 - CY 2023
21 Initiation of Alcohol and Other Drug Dependence Treatment, Alcohol Abuse Only	CY 2018 - CY 2019	CY 2022 - CY 2023
22 Initiation of Alcohol and Other Drug Dependence Treatment, Opioid Abuse Only	CY 2018 - CY 2019	CY 2022 - CY 2023
23 Initiation of Alcohol and Other Drug Dependence Treatment, Abuse Other than Alcohol or Opioid	CY 2018 - CY 2019	CY 2022 - CY 2023
24 Engagement of Alcohol and Other Drug Dependence Treatment, Total AOD Population	CY 2018 - CY 2019	CY 2022 - CY 2023
25 Engagement of Alcohol and Other Drug Dependence Treatment, Alcohol Abuse Only	CY 2018 - CY 2019	CY 2022 - CY 2023
26 Engagement of Alcohol and Other Drug Dependence Treatment, Opioid Abuse Only	CY 2018 - CY 2019	CY 2022 - CY 2023
27 Engagement of Alcohol and Other Drug Dependence Treatment, Abuse Other than Alcohol or Opioid	CY 2018 - CY 2019	CY 2022 - CY 2023
28 Follow-up After ED Visit for Alcohol or Other Drug Dependence, 7 days	CY 2018 - CY 2019	CY 2022 - CY 2023
29 Follow-up After ED Visit for Alcohol or Other Drug Dependence, 30 days	CY 2018 - CY 2019	CY 2022 - CY 2023
30 Rate of inpatient hospital readmissions among beneficiaries with SUD	CY 2016 - CY 2017	CY 2022 - CY 2023
31 Rate of access to preventive health services for adult Medicaid beneficiaries with SUD	CY 2016 - CY 2017	CY 2022 - CY 2023
Measures where T-test was Applied		
32 Rate of overdose deaths per 1,000 adult Medicaid beneficiaries	CY 2016 - CY 2017	CY 2022 - CY 2023
Measures where Descriptive Statistics (frequencies and percentages) was Applied		
33 Proportion of SUD Providers Accepting Medicaid	CY 2017	CY 2022
34 Average Driving Distance to SUD Residential Services by Region	CY 2021	CY 2023
35 Authorization Denial Rate for SUD Services	CY 2018	CY 2020, CY 2023
36 Authorized residential treatment days as a percentage of total requested days	CY 2023	Baseline measure
37 SUD Authorization Denial Reasons	CY 2018	CY 2020, CY 2023
38 Number of Licensed SUD Residential Treatment Beds	December 2018	December 2020, December 2023
39 Number of Licensed SUD Residential Treatment Locations	December 2018	December 2020, December 2023
40 Number of Medicaid SUD MAT Providers	December 2018	December 2020, December 2023
41 Number of Medicaid SUD Outpatient Providers	December 2018	December 2020, December 2023
42 Number of Medicaid SUD Residential Treatment Providers	December 2018	December 2020, December 2023
43 Number of Medicaid SUD Inpatient Hospital or IMD Providers	December 2018	December 2020, December 2023
44 MAT prescribers in Indiana accepting Medicaid clients	CY 2018	CY 2023
45 Percentage of Inpatient or Residential Discharges with SUD follow-up, 7 days	CY 2018 - CY 2019	CY 2022 - CY 2023
46 Percentage of Inpatient or Residential Discharges with SUD follow-up, 14 days	CY 2018 - CY 2019	CY 2022 - CY 2023
47 Percentage of discharges for SUD that readmit for inpatient or residential within 180 days	CY 2018 - CY 2019	CY 2022 - CY 2023
48 Care coordination rate at MCEs over time	CY 2020	CY 2023
49 Rate of Transition to ASAM Level 1 and 2 Services After Receiving ASAM Level 3 or 4 Service	July - December 2021	January - June 2023
50 Proportion of per capita expenditures for SUD services across ASAM levels of care	CY 2016	CY 2020, CY 2023
51 Grievances related to SUD treatment services	Q1 CY 2019	Quarterly through Q4 CY 2023
52 Appeals related to SUD treatment services	Q1 CY 2019	Quarterly through Q4 CY 2023
53 Prescribers Accessing Indiana's INSPECT	Q1 CY 2018	Quarterly through Q4 CY 2023
54 Patient Requests Made Into Indiana's INSPECT	Q1 CY 2018	Quarterly through Q4 CY 2023
55 Hospitals that have Integrated with Indiana's INSPECT	Q1 CY 2018	Quarterly through Q4 CY 2023

SECTION E: Methodological Limitations

The Evaluation Team believes that the approved Evaluation Design Plan provides more than adequate rigor in the observational study design, especially when considering the range of supplemental evaluation methods that were included. The study mitigates known limitations to the extent feasible drawing upon the range of options to fill gaps in the observational study design. The primary source data used in the study was information obtained from the FSSA's Enterprise Data Warehouse for member enrollment, provider enrollment, and service utilization through claims and encounters data. HMA-Burns conducted an extensive review to ensure the accuracy and completeness of the data provided. Although no inherent limitations were found in using these data, it should be noted that the primary source for utilization comes from MCE encounter submissions to the state. Since more than 80 percent of Indiana's Medicaid population is enrolled in managed care, there is the possibility that some utilization is missing from the managed care population in the study.

The HMA-Burns team did identify the following items that pose limitations in this evaluation:

1. *Small sample size.* For some measures and/or sub-populations, the sample size may not be meaningful for reporting and insufficient statistical power to detect a difference is a concern. HMA-Burns identifies the specific measures where this is a concern in Section F. In other situations, the demonstration population and many sub-populations studied had sufficient sample size to detect trends, while other sub-populations had a limited sample to conduct meaningful evaluation. As a whole, the Medicaid population of individuals with SUD age 18 and under was too small to examine in isolation; therefore, findings are not reported with a stratification by age. The criminally involved subpopulation also had insufficient sample size to assess trends for many measures. This is cited on the report dashboards in Section F when it applies.

For any observational studies, especially if the population size exposures and the outcomes being assessed are rare, it is difficult to find statistically significant results. It is not unexpected, therefore, that many of the outcome measure sample sizes will be too small to observe statistically significant results. HMA-Burns recommends a threshold for minimum numbers of observations. For any measures below this threshold, the expectation of statistical testing would be waived.

2. *Exogenous factors may impact results.* Many of the outcome measures are multi-dimensional and influenced by social determinants of health. While changes in the demonstration period related to access to care may be one dimension of various outcomes of interest and may contribute to improvements, it may be difficult to achieve statistically significant findings in the absence of data on other contributing dimensions such as social determinants of health (e.g., housing, employment and previous incarcerations).
3. *Comparator group.* While CMS may prefer a comparator group from another state, the proliferation of the SUD demonstrations across the country renders few comparable states to Indiana. Moreover, this would require significantly more resources and cooperation with another state on sharing data. Therefore, HMA-Burns used statistical tests comparing the pre- and post-demonstration period to test hypotheses in the absence of a control group.
4. *Public health emergency.* The obvious limitation in this evaluation is the impact on service utilization and provider supply during the public health emergency period which continued through much of this demonstration period. HMA-Burns used the cutoff date of March 2020 for conducting any statistical significance tests on measures to mitigate any impact that the public health emergency caused. For interrupted time series analyses, 50 months of data were used—25 months in the pre-demonstration period (January 2016 to January 2018 or February 2018 to February 2020) and 25 months in the demonstration period (December 2021 to December 2023). For chi square and t-tests that were used for measures reported annually, two years of data were used in the pre-demonstration period (Calendar Years 2016 and 2017 or Calendar Years 2018 and 2019) and two years were used in the demonstration period (Calendar

Years 2022 and 2023). Although the demonstration did not begin until February 1, 2018, for purposes of these tests, HMA-Burns considered Calendar Year 2018 as a demonstration year. Results from Calendar Year 2020 and 2021 were tracked for all measures examined but are often not reported on in Section F due to the significant disruption in utilization patterns caused by the public health emergency. However, data through Calendar Year 2023 for all utilization metrics can be found in [Appendix H](#) of this report.

Likewise, conducting sensitivity analyses on those metrics where interrupted time series is used as the analytic method was not feasible in this Interim Evaluation due to the disruptions to service utilization and provider supply patterns during the public health emergency period occurring through much of the initial and current demonstration periods. HMA-Burns intends to conduct sensitivity analyses in accordance with the Approved Evaluation Design Plan in the Summative Evaluation.

5. *Modifications to the Approved Evaluation Design.* To maintain consistency with the evaluation of the initial demonstration, there were 23 measures added to this Interim Evaluation to ensure continuity with the Summative Evaluation at the CMS Milestone level. In addition, HMA-Burns is continuing the use of the t-test to assess the statistical significance of the rate of overdose deaths to maintain consistency with the methodology used for this particular metric in the Summative Evaluation.

SECTION F: Results

The findings from HMA-Burns' assessment of Indiana's SUD demonstration are organized by milestone and include the following components:

1. Review of the measures as defined by CMS in Indiana's SUD monitoring protocol and measures defined in the Evaluation Design Plan;
2. Status of the State's efforts to date in completion of the items identified in its SUD Implementation Plan; and
3. Feedback from stakeholders.

In this section of the report, each CMS milestone serves as a heading and each component mentioned above serves as a subheading. There is a seventh heading at the end of Section F to report on measures that were included in the Evaluation Design Plan but cannot be mapped to a specific CMS milestone.

At the start of each subsection that reports on measures, there is a summary table that lists each measure reviewed that was mapped to the CMS milestone. The table shows the desired outcome for each measure, if the desired outcome was met, and if the results were found to be statistically significant (when testing for significance was conducted). The test used for statistical significance is also shown where applicable.

After the summary table, each of the 55 measures examined appears on a one-page dashboard report. Information about the research question posed, the measure and measure steward, and the data source used to analyze the measure are provided. Results are displayed graphically for the entire demonstration population. Results from any statistical testing appear below the graphical representation. Statistical significance tests were conducted at a significance level of $\alpha = 0.05$ on the demonstration population only and not any of the sub-populations.

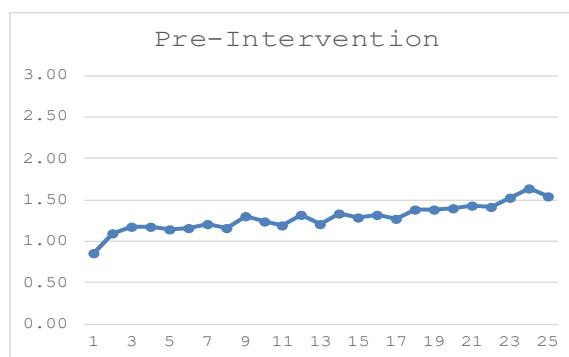
Descriptive statistics are provided on the sub-populations for most of the measures, including a comparison of the trend for each sub-population compared to the trend for the overall demonstration population. At the bottom of each dashboard, a summary of the key findings for the measure are provided.

Interrupted Time Series (ITS) statistical tests were conducted at a significance level of $\alpha = 0.05$. The data was collected by month as detailed in the table on the following page for both the pre-intervention and post-intervention time frames. The pre-intervention has 25 data points from January 2016 to January 2018 or February 2018 to February 2020. The post-intervention has 25 data points from December 2021 to December 2023. Also included is a plot of each of the data points used to visualize the trend within each intervention time frame. A summary box, like the table highlighted in blue, appears in the body of the report with the remaining results of ITS found in [Appendix G](#). This summary box provides the statistical review details including the desired trend for each measure and p-values for each of the tests performed.

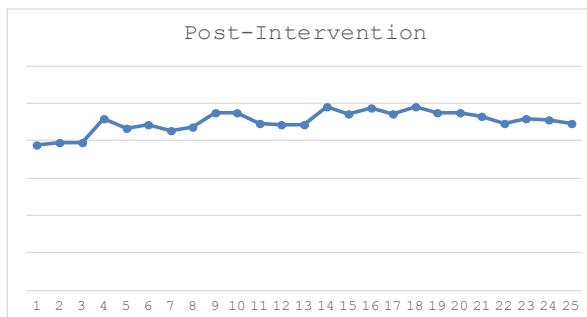
Using Metric 10 (Residential and Inpatient Services per 1,000 Medicaid Beneficiaries) as an example, the pre-intervention trend was significant with a p-value = $<.0001$. The post-intervention trend was highly significant with a p-value $<.0001$ as shown in Exhibit 16. Also significant with a p-value = 0.0243 was the test comparing the post-intervention trend and the pre-intervention trend. Further, the estimate for the post-intervention trend (0.0115) is 0.57 times the pre-intervention trend (0.0201) which can be interpreted that Residential and Inpatient Services are increasing at approximately half the rate in the second demonstration period (post-intervention period) compared to the initial demonstration (pre-intervention period) and there is a significant difference between the two intervention trends.

Exhibit 16. Interrupted Time Series results example for Metric 10 (Residential and Inpatient Services)

Pre-Intervention			Post-Intervention		
OUTCOME	time	t	OUTCOME	time	t
0.86	201802	1	1.95	202112	26
1.09	201803	2	1.98	202201	27
1.18	201804	3	1.98	202202	28
1.17	201805	4	2.29	202203	29
1.15	201806	5	2.16	202204	30
1.16	201807	6	2.21	202205	31
1.21	201808	7	2.14	202206	32
1.16	201809	8	2.18	202207	33
1.3	201810	9	2.38	202208	34
1.24	201811	10	2.38	202209	35
1.19	201812	11	2.23	202210	36
1.32	201901	12	2.21	202211	37
1.21	201902	13	2.21	202212	38
1.33	201903	14	2.45	202301	39
1.29	201904	15	2.36	202302	40
1.32	201905	16	2.44	202303	41
1.28	201906	17	2.36	202304	42
1.38	201907	18	2.45	202305	43
1.38	201908	19	2.38	202306	44
1.4	201909	20	2.37	202307	45
1.43	201910	21	2.32	202308	46
1.41	201911	22	2.23	202309	47
1.52	201912	23	2.29	202310	48
1.64	202001	24	2.27	202311	49
1.54	202002	25	2.23	202312	50



Pre-intervention trend significant with p-value = <.0001.



Post-intervention trend is significant with p-value=<.0001.

Desired Trend:	Increase		Statistical Review:	Interrupted Time Series
		Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend		-0.0087	0.0243	Yes
Pre-intervention trend		0.0201	<.0001	Yes
Post-intervention trend		0.0115	<.0001	Yes

For the assessment of SUD Implementation Plan activities, HMA-Burns inventoried all activities listed in the State's approved Implementation Plan by CMS milestone. A summary table is shown under each CMS Milestone to indicate the proposed action taken by the state, the intended completion date, if the action was completed and when, and any notes relevant to the action proposed.

For stakeholder feedback, HMA-Burns synthesized the feedback from beneficiaries, providers, and the MCEs into one summary table for each CMS Milestone. Feedback was organized by themes. For each theme, the specific feedback is cited with an indication of the constituent(s) that provided the feedback to the evaluators. HMA-Burns then gave an assessment of the feedback by segmenting it into the following categories—compliment, critique, neutral, or recommendation.

Milestone #1: Access to Critical Levels of Care for SUD Treatment

Evaluation Measures

Thirteen measures were examined to assess the access to levels of care for SUD treatment. In Exhibit 17 below, it shows that the desired outcome was met in eleven out of the thirteen measures. A test for statistical significance was conducted on eleven of the thirteen measures. For eight of these measures, the outcome was statistically significant. More detailed information can be found on each measure in the pages that follow.

Exhibit 17. Summary of Findings for Metrics Mapped to CMS Milestone 1 – Total Demonstration

Tests for statistical significance were conducted at a significance level of alpha = 0.05

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Users of Outpatient Services	Increase	Yes	Interrupted Time Series	Yes	<.0001
2	Rate of Outpatient Services	Increase	Yes	Interrupted Time Series	Yes	0.0004
3	Users of Intensive Outpatient and Partial Hospitalization	Increase	Yes	Interrupted Time Series	No	0.8593
4	Rate of Intensive Outpatient and Partial Hospitalization	Increase	Yes	Interrupted Time Series	Yes	0.0016
5	Users of Residential and Inpatient Services	Increase	Yes	Interrupted Time Series	Yes	0.0243
6	Rate of Residential and Inpatient Services	Increase	Yes	Interrupted Time Series	No	0.7101
7	Users of Withdrawal Management	Increase	Yes	Interrupted Time Series	Yes	0.0492
8	Rate of Withdrawal Management	Increase	Yes	Interrupted Time Series	No	0.0511
9	Users of Medication-Assisted Treatment	Increase	Yes	Interrupted Time Series	Yes	<.0001
10	Rate of Medication-Assisted Treatment	Increase	Yes	Interrupted Time Series	Yes	0.0013
11	Continuity of Pharmacotherapy for Opioid Use Disorder	Increase	No	Chi-square	Yes	< .0001
12	Proportion of SUD Providers Accepting Medicaid	Increase	Yes	no test run	N/A	N/A
13	Average Driving Distance to SUD Residential Services by Region	Decrease	No	no test run	N/A	N/A

Exhibit 18. Results from CMS Metric #8: Count of Medicaid beneficiaries with an SUD diagnosis receiving Outpatient Treatment

Research Question:

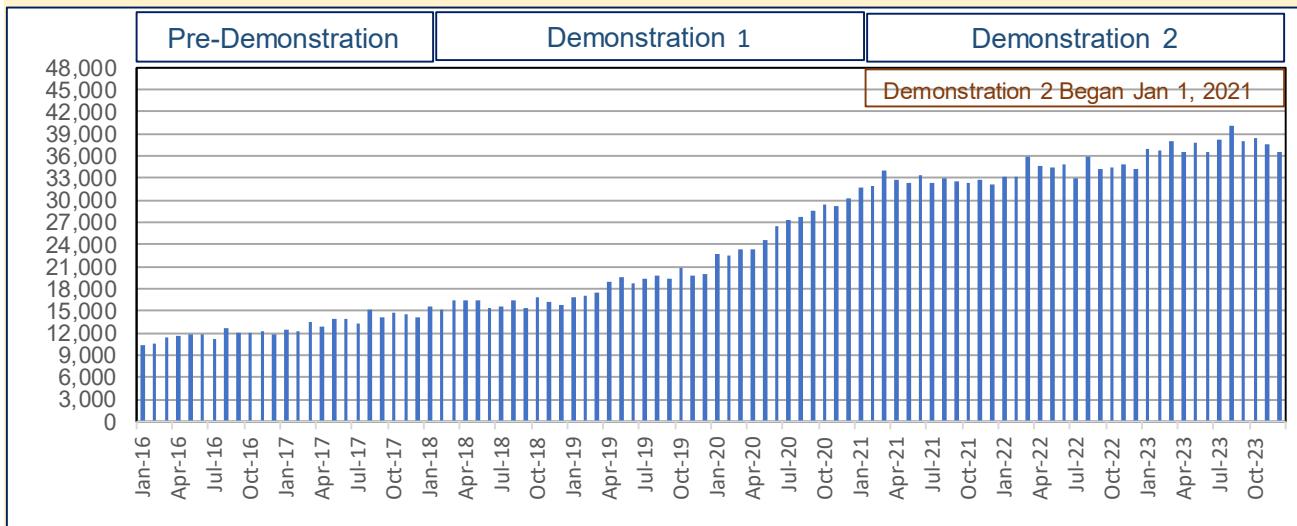
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Count of Medicaid beneficiaries with an SUD diagnosis receiving outpatient treatment

Measure Steward: CMS [Metric #8]

Results for the Demonstration Population



Desired Trend:	Increase	Statistical Review:	Interrupted Time Series		
			Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend		-0.2069	<.0001	Yes	
Pre-intervention trend		0.2917	<.0001	Yes	
Post-intervention trend		0.0849	0.0008	Yes	

Trend Analyzed: 25-mo avg pre-Demonstration against 25-mo avg during Demonstration

Result for Demonstration: increase of 99.8%

Results for Subpopulations within the Demonstration:

Model	124.9%	Northwest Region	59.6%
OUD	149.4%	North Central Region	45.5%
Dual Eligible	31.6%	Northeast Region	81.8%
Pregnant Women	262.7%	West Central Region	116.9%
Criminally Involved	low sample	Central Region	123.1%
MRO	15.6%	East Central Region	146.8%
		Southwest Region	101.3%
		Southeast Region	94.7%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The average number of beneficiaries with SUD using outpatient services in the demonstration period was 35,864 compared to 17,954 during the pre-demonstration period, an increase of 99.8 percent. Each cohort population increased at least 15.6 percent during the demonstration period.

Exhibit 19. Results from HMA-Burns Metric: Rate of Medicaid beneficiaries with an SUD diagnosis receiving Outpatient Treatment

Research Question:

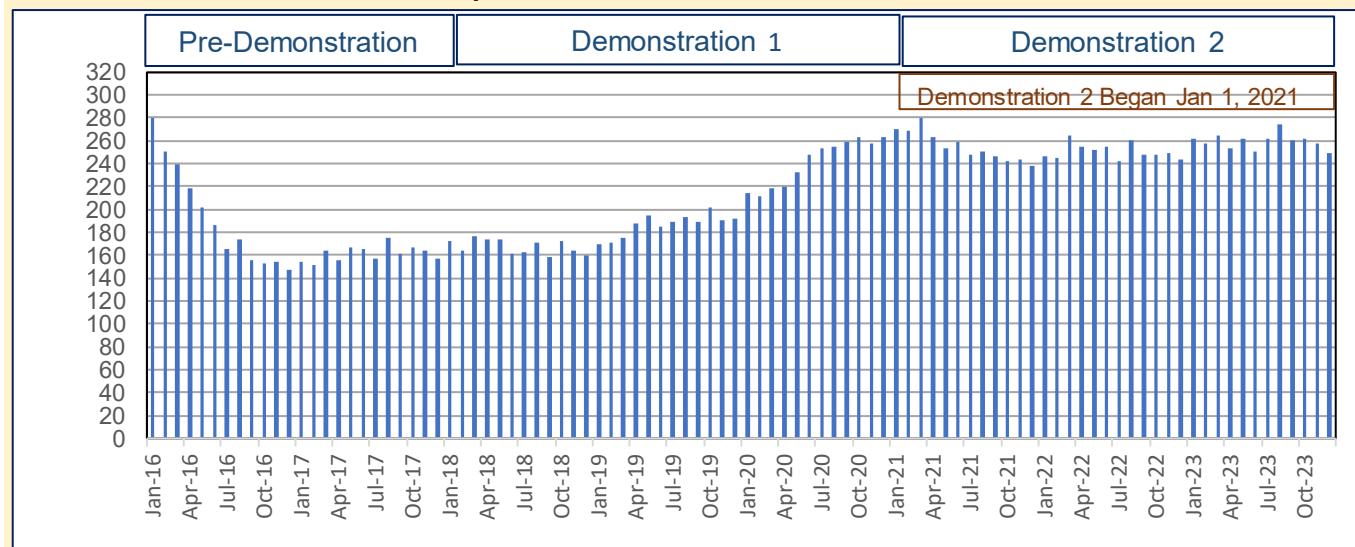
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Rate of Medicaid beneficiaries with an SUD diagnosis receiving outpatient treatment

Measure Steward: HMA-Burns using CMS Metric #8 as the Numerator with CMS Metric #3 as the Denominator

Results for the Demonstration Population



Desired Trend:	Increase	Statistical Review:	Interrupted Time Series		
			<u>Estimate</u>	<u>P-Value</u>	<u>Significant</u>
Post-intervention trend compared to pre-intervention trend			-1.2527	0.0004	Yes
Pre-intervention trend			1.8003	<.0001	Yes
Post-intervention trend			0.5476	0.0180	Yes

The average rate of beneficiaries with SUD using outpatient services in the demonstration period was 255 compared to 180 during the pre-demonstration period, an increase of 41.3 percent.

Exhibit 20. Results from CMS Metric #9: Count of Medicaid beneficiaries with an SUD diagnosis receiving Intensive Outpatient or Partial Hospitalization

Research Question:

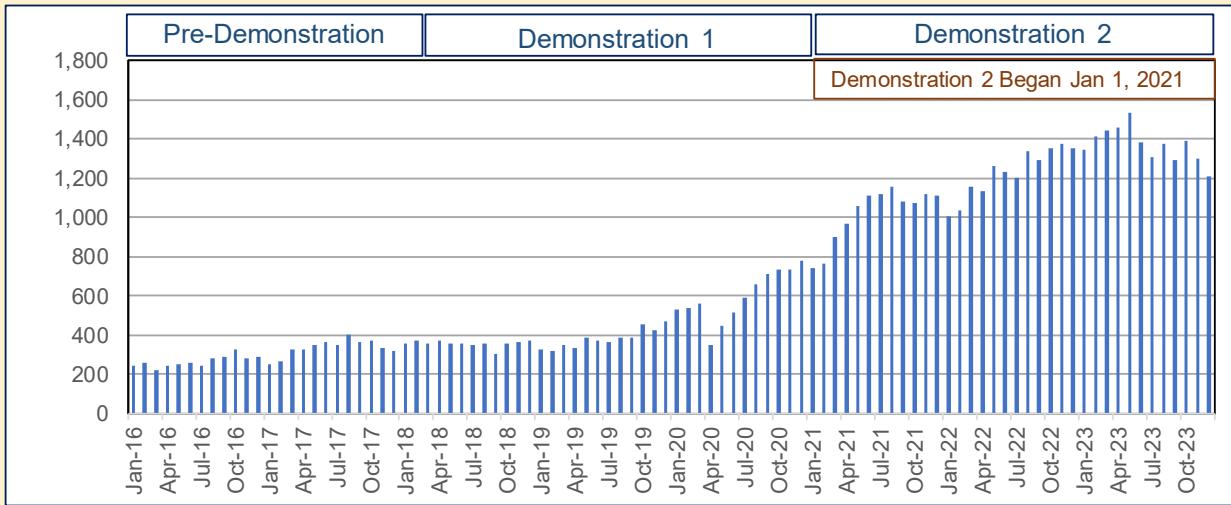
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Count of Medicaid bene's with an SUD diagnosis receiving Intensive OP or Partial Hospitalization

Measure Steward: CMS [Metric #9]

Results for the Demonstration Population



Desired Trend:

Increase

Statistical Review:

	Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend	0.0003	0.8593	No
Pre-intervention trend	0.0052	<.0001	Yes
Post-intervention trend	0.0054	<.0001	Yes

Trend Analyzed: 25-mo avg pre-Demonstration against 25-mo avg during Demonstration

Result for Demonstration: increase of 324.8%

Results for Subpopulations within the Demonstration:

Model	545.5%	Northwest Region	67.0%
OUD	232.6%	North Central Region	low sample
Dual Eligible	low sample	Northeast Region	low sample
Pregnant Women	low sample	West Central Region	low sample
Criminally Involved	low sample	Central Region	404.7%
MRO	-9.1%	East Central Region	low sample
		Southwest Region	low sample
		Southeast Region	low sample

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The average number of beneficiaries with SUD using intensive outpatient or partial hospitalization services in the demonstration period was 1,290 compared to 304 during the pre-demonstration period, an increase of 324.8 percent. Overall volume is low for this service. Although the post-intervention trend compared to the pre-intervention trend is not significant, the post-intervention trend continues to be significant with the desired trend similar to the pre-intervention trend.

Exhibit 21. Results from HMA-Burns Metric: Rate of Medicaid beneficiaries with an SUD diagnosis receiving Intensive Outpatient or Partial Hospitalization

Research Question:

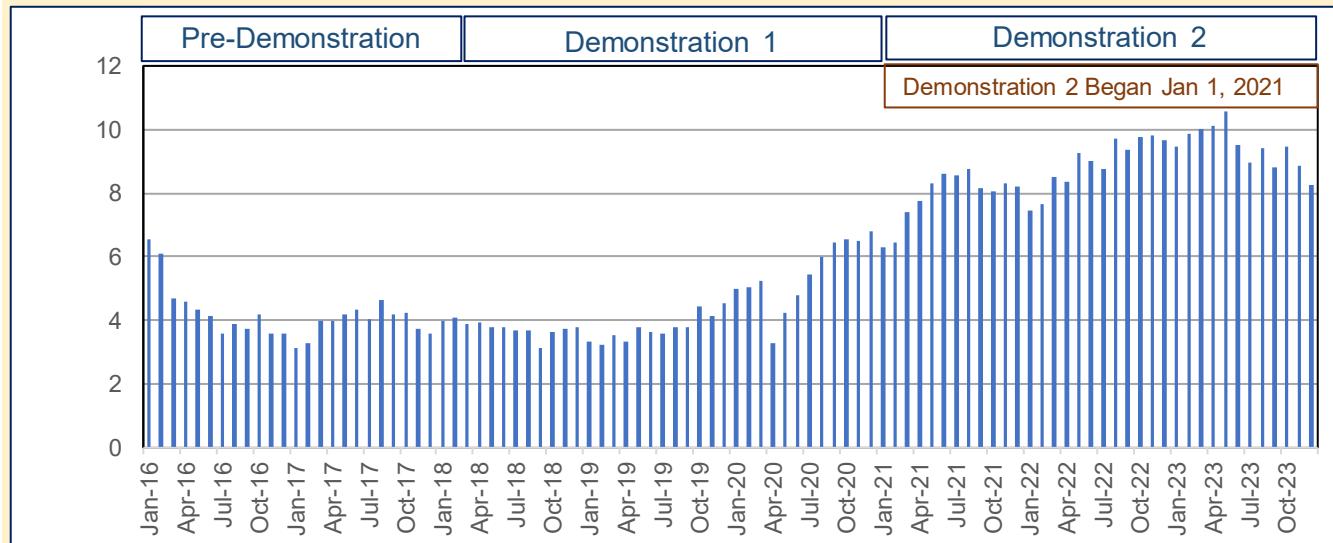
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Rate of Medicaid beneficiaries with an SUD diagnosis receiving Intensive Outpatient or Partial Hospitalization

Measure Steward: HMA-Burns using CMS Metric #9 as the Numerator with CMS Metric #3 as the Denominator

Results for the Demonstration Population



Desired Trend:

Increase

Statistical Review:

	Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend	0.0925	0.0016	Yes
Pre-intervention trend	-0.0479	0.0180	Yes
Post-intervention trend	0.0446	0.0222	Yes

The average rate of beneficiaries with SUD using Intensive Outpatient or Partial Hospitalization services in the demonstration period was 9 compared to 4 during the pre-demonstration period, an increase of 137.8 percent.

Exhibit 22. Results from CMS Metric #10: Count of Medicaid beneficiaries with an SUD diagnosis receiving Residential and Inpatient Services

Research Question:

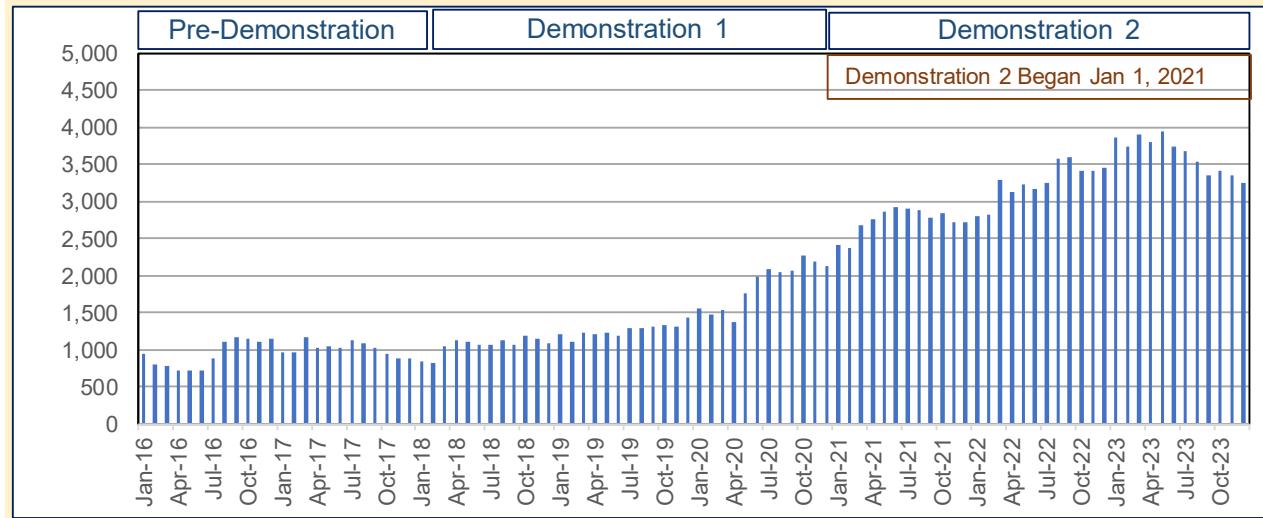
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Count of Medicaid beneficiaries with an SUD diagnosis receiving Residential and Inpatient Services

Measure Steward: CMS [Metric #10]

Results for the Demonstration Population



Desired Trend:	Increase	Statistical Review:	Interrupted Time Series	
		Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend		-0.0087	0.0243	Yes
Pre-intervention trend		0.0201	<.0001	Yes
Post-intervention trend		0.0115	<.0001	Yes

Trend Analyzed: 25-mo avg pre-Demonstration against 25-mo avg during Demonstration

Result for Demonstration: increase of 183.6%

Results for Subpopulations within the Demonstration:

Model	233.5%	Northwest Region	131.8%
OUD	188.7%	North Central Region	251.7%
Dual Eligible	115.1%	Northeast Region	202.3%
Pregnant Women	low sample	West Central Region	314.6%
Criminally Involved	low sample	Central Region	186.3%
MRO	156.4%	East Central Region	172.6%
		Southwest Region	152.6%
		Southeast Region	203.4%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The average number of beneficiaries with SUD using inpatient hospital or residential treatment for SUD in the demonstration period was 3,419 compared to 1,205 during the pre-demonstration period, an increase of 183.6 percent. The greatest growth in utilization was in the OUD subpopulation. Utilization varies by region.

Exhibit 23. Results from HMA-Burns Metric: Rate of Medicaid beneficiaries with an SUD diagnosis receiving Residential and Inpatient Services

Research Question:

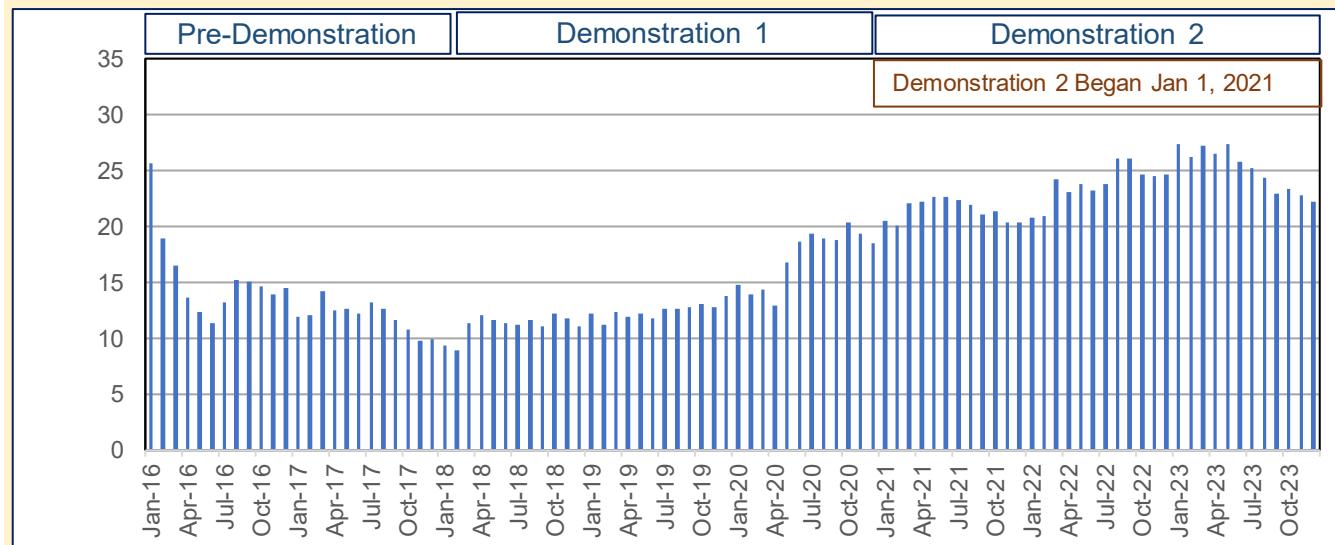
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Rate of Medicaid beneficiaries with an SUD diagnosis receiving Residential and Inpatient Services

Measure Steward: HMA-Burns using CMS Metric #10 as the Numerator with CMS Metric #3 as the Denominator

Results for the Demonstration Population



Desired Trend: Increase

Statistical Review:

Interrupted Time Series

	Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend	-0.0339	0.7101	No
Pre-intervention trend	0.1279	<.0001	Yes
Post-intervention trend	0.0940	0.3043	No

The average rate of beneficiaries with SUD using Residential and Inpatient services in the demonstration period was 24 compared to 12 during the pre-demonstration period, an increase of 100.7 percent.

Exhibit 24. Results from CMS Metric #11: Count of Medicaid beneficiaries with an SUD diagnosis receiving Withdrawal Management

Research Question:

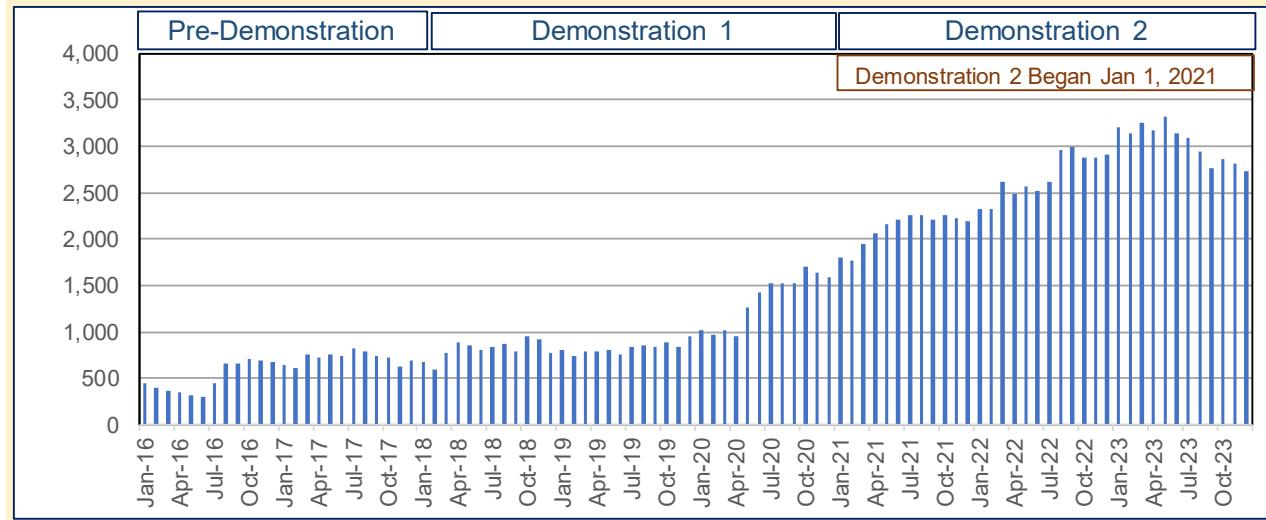
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Count of Medicaid beneficiaries with an SUD diagnosis receiving Withdrawal Management

Measure Steward: CMS [Metric #11]

Results for the Demonstration Population



Desired Trend:	Increase	Statistical Review:	Interrupted Time Series	
		Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend		0.0073	0.0492	Yes
Pre-intervention trend		0.0059	0.0256	Yes
Post-intervention trend		0.0132	<.0001	Yes

Trend Analyzed: 25-mo avg pre-Demonstration against 25-mo avg during Demonstration

Result for Demonstration: increase of 237.3%

Results for Subpopulations within the Demonstration:

Model	279.8%	Northwest Region	187.1%
OUD	198.5%	North Central Region	low sample
Dual Eligible	low sample	Northeast Region	312.9%
Pregnant Women	low sample	West Central Region	low sample
Criminally Involved	low sample	Central Region	212.9%
MRO	196.6%	East Central Region	229.1%
		Southwest Region	216.3%
		Southeast Region	277.9%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The average number of beneficiaries with SUD using withdrawal management in the demonstration period was 2,829 compared to 839 during the pre-demonstration period, an increase of 237.3 percent. Overall volume is low for this service. Results for multiple regions and subpopulations could not be reported due to low sample.

Exhibit 25. Results from HMA-Burns Metric #11: Rate of Medicaid beneficiaries with an SUD diagnosis receiving Withdrawal Management

Research Question:

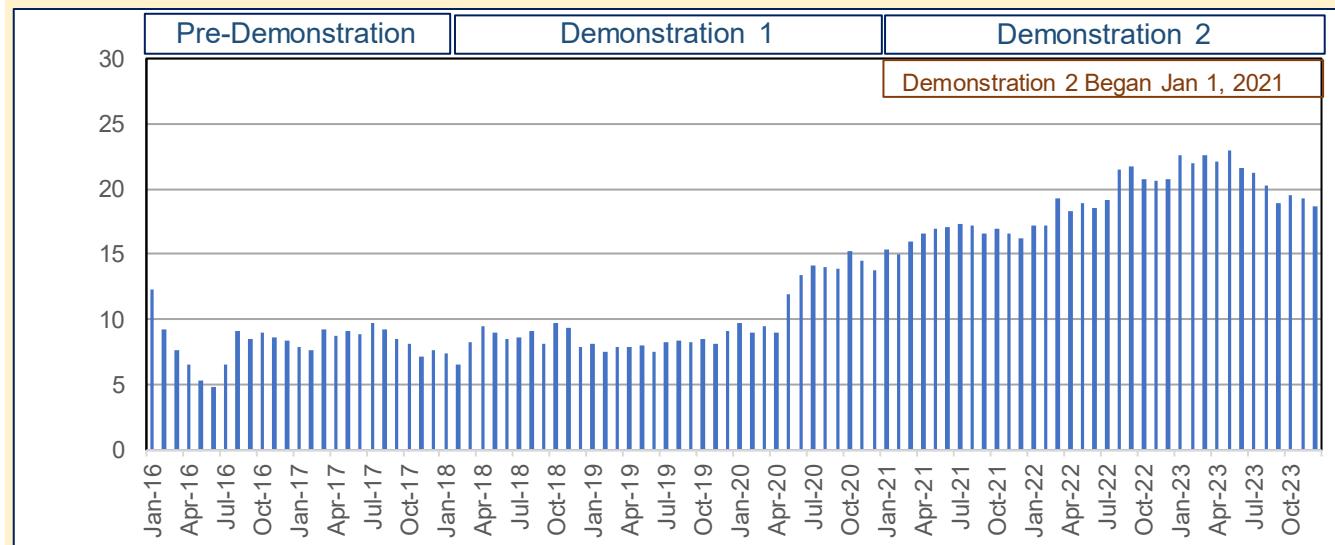
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Rate of Medicaid beneficiaries with an SUD diagnosis receiving Withdrawal Management

Measure Steward: HMA-Burns with CMS Metric #11 as the Numerator with CMS Metric #3 as the Denominator

Results for the Demonstration Population



Desired Trend:

Increase

Statistical Review:

	Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend	0.1025	0.0511	No
Pre-intervention trend	0.0115	0.7520	No
Post-intervention trend	0.1140	0.0016	Yes

The average rate of beneficiaries with SUD using Withdrawal Management services in the demonstration period was 20 compared to 8 during the pre-demonstration period, an increase of 137.9 percent.

Exhibit 26. Results from CMS Metric #12: Count of Medicaid beneficiaries with an SUD diagnosis receiving Medication-Assisted Treatment (MAT)

Research Question:

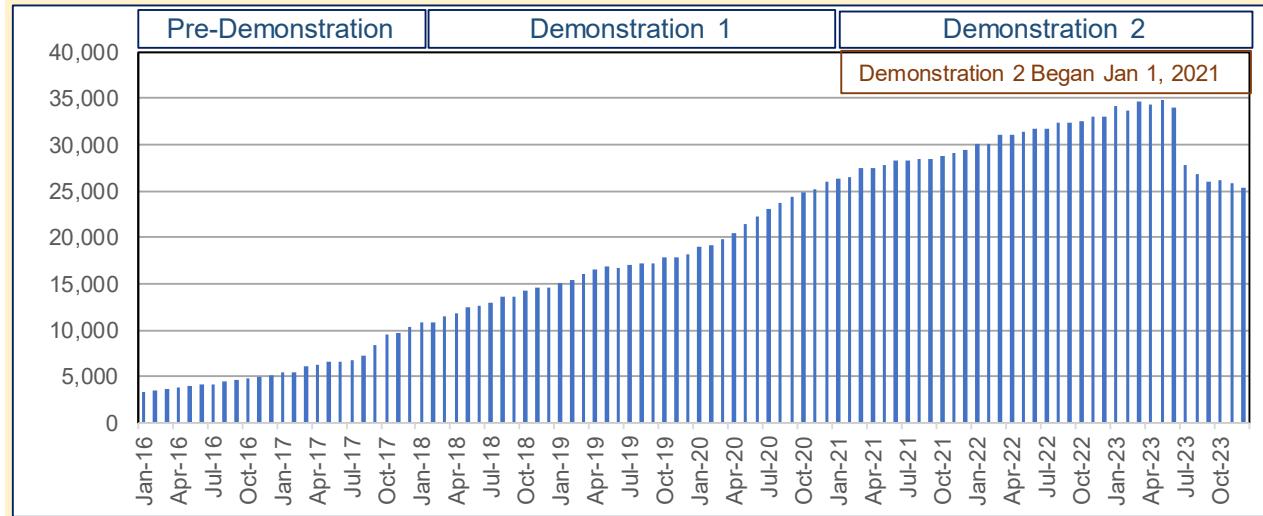
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Count of Medicaid beneficiaries with an SUD diagnosis receiving Medication-Assisted Treatment (MAT)

Measure Steward: CMS [Metric #12]

Results for the Demonstration Population



Desired Trend:	Increase	Statistical Review:	Interrupted Time Series	
		Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend		-0.4495	<.0001	Yes
Pre-intervention trend		0.2875	<.0001	Yes
Post-intervention trend		-0.1620	0.0008	Yes

Trend Analyzed: 25-mo avg pre-Demonstration against 25-mo avg during Demonstration

Result for Demonstration: increase of 416.6%

Results for Subpopulations within the Demonstration:

Model	432.8%	Northwest Region	339.9%
OUD	529.6%	North Central Region	371.2%
Dual Eligible	low sample	Northeast Region	911.0%
Pregnant Women	1048.5%	West Central Region	489.3%
Criminally Involved	low sample	Central Region	328.7%
MRO	175.7%	East Central Region	493.6%
		Southwest Region	458.8%
		Southeast Region	392.6%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The average number of beneficiaries with SUD using medication assisted treatment in the demonstration period was 30,956 compared to 5,992 during the pre-demonstration period, an increase of 416.6 percent. Each cohort population increased at least double during the demonstration period.

Exhibit 27. Results from CMS Metric #12: Rate of Medicaid beneficiaries with an SUD diagnosis receiving Medication-Assisted Treatment (MAT)

Research Question:

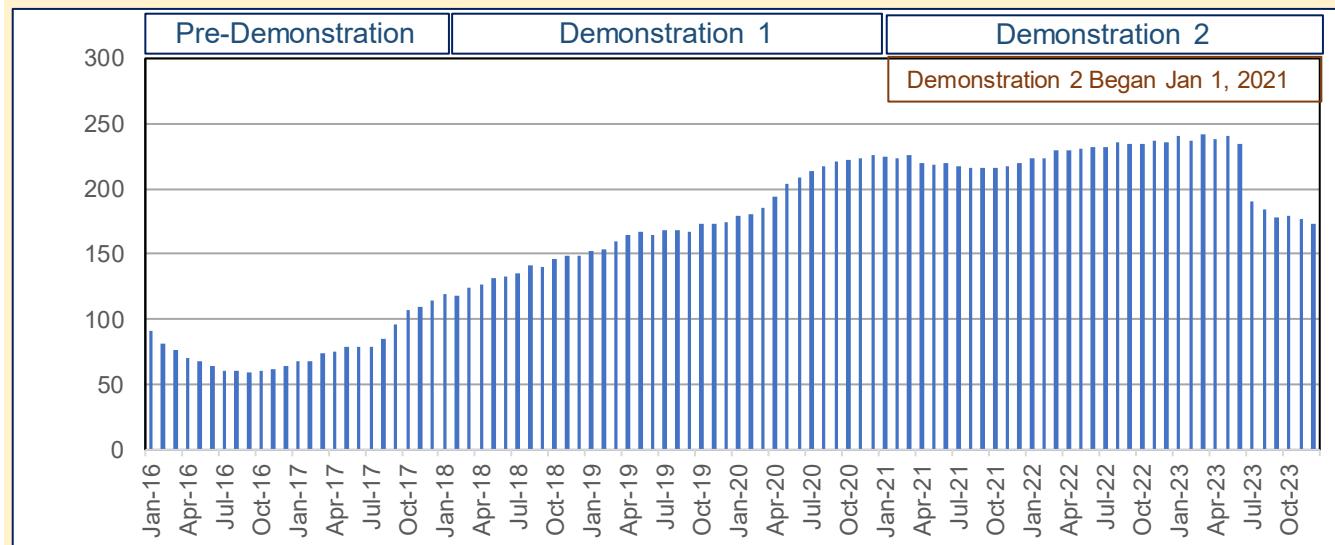
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Rate of Medicaid beneficiaries with an SUD diagnosis receiving Medication-Assisted Treatment (MAT)

Measure Steward: HMA-Burns using CMS Metric #12 as the Numerator with CMS Metric #3 as the Denominator

Results for the Demonstration Population



Desired Trend: Increase

Statistical Review:

	Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend	-3.5528	0.0013	Yes
Pre-intervention trend	1.6136	0.0350	Yes
Post-intervention trend	-1.9392	0.0412	Yes

The average rate of beneficiaries with SUD using MAT services in the demonstration period was 220 compared to 154 during the pre-demonstration period, an increase of 43.4 percent.

Exhibit 28. Results from CMS Metric #22: Continuity of Pharmacotherapy for Opioid Use Disorder

Research Question:

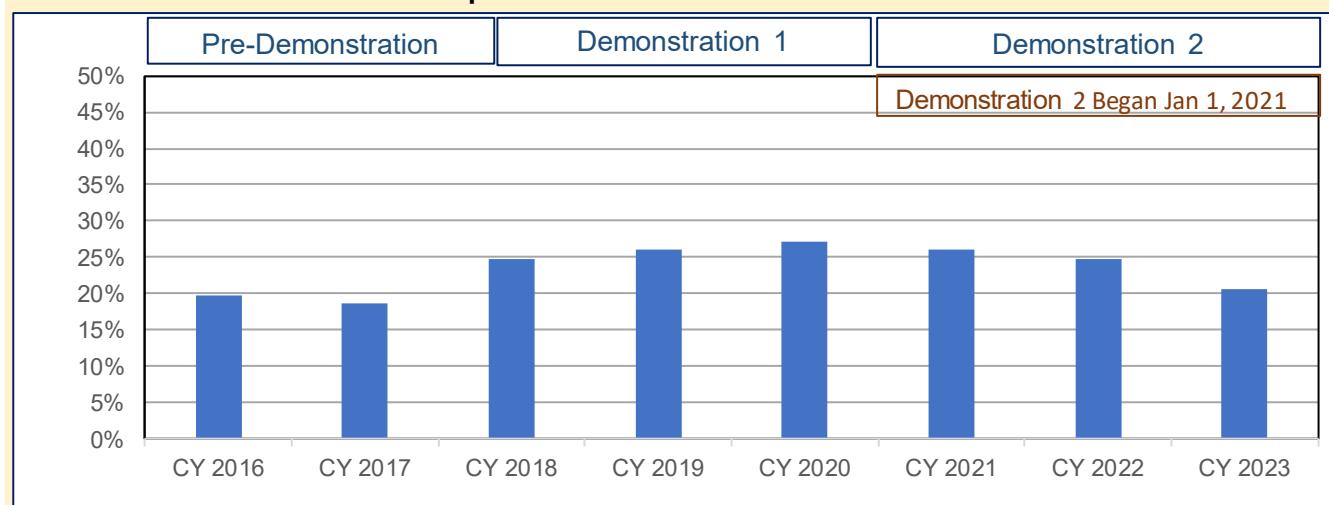
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

Measure(s) Used to Answer Question:

Continuity of Pharmacotherapy for Opioid Use Disorder

Measure Steward: National Quality Forum #3175 [CMS Monitoring Metric #22]

Results for the Demonstration Population



Desired Trend:
CY2018-2019 average
CY2022-2023 average
Percent Change, Demonstration

Increase
25.4%
22.7%
-10.8%

Statistical Review:
Probability:
Finding:

Chi-Square
< .0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	-7.9%	23.7% Northwest Region	34.9%	24.0%
OUD	-9.3%	24.9% North Central Region	-16.6%	21.8%
Dual Eligible	low sample	3.7% Northeast Region	-35.0%	18.0%
Pregnant Women	-14.7%	23.1% West Central Region	-12.1%	21.4%
Criminally Involved	2.5%	12.3% Central Region	-12.5%	21.5%
MRO	-18.1%	17.3% East Central Region	-10.1%	27.1%
		Southwest Region	-24.8%	22.3%
		Southeast Region	-18.9%	24.5%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above

Point change is 2 to 5 points below

Point change is 2 to 5 points above

Point change is more than 5 points below

Point change is 2 points above to 2 below

Sample is too small to report on (n < 50 obs)

The average rate of continuity of pharmacotherapy for opioid use disorder among the OUD population decreased 9.3 percentage points, or 10.8 percent between the pre- and post-demonstration period. The criminally involved subpopulation was the only subpopulation that increased for the CY 2022-2023 period. The Northwest region was the only region to increase. In absolute numbers, OUD and pregnant women had a rate above the demonstration rate of 22.7 percent for the CY 2022-2023 period.

Exhibit 29. Proportion of SUD Providers Accepting Medicaid as a Percentage of Total SUD Providers

Research Question:

Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

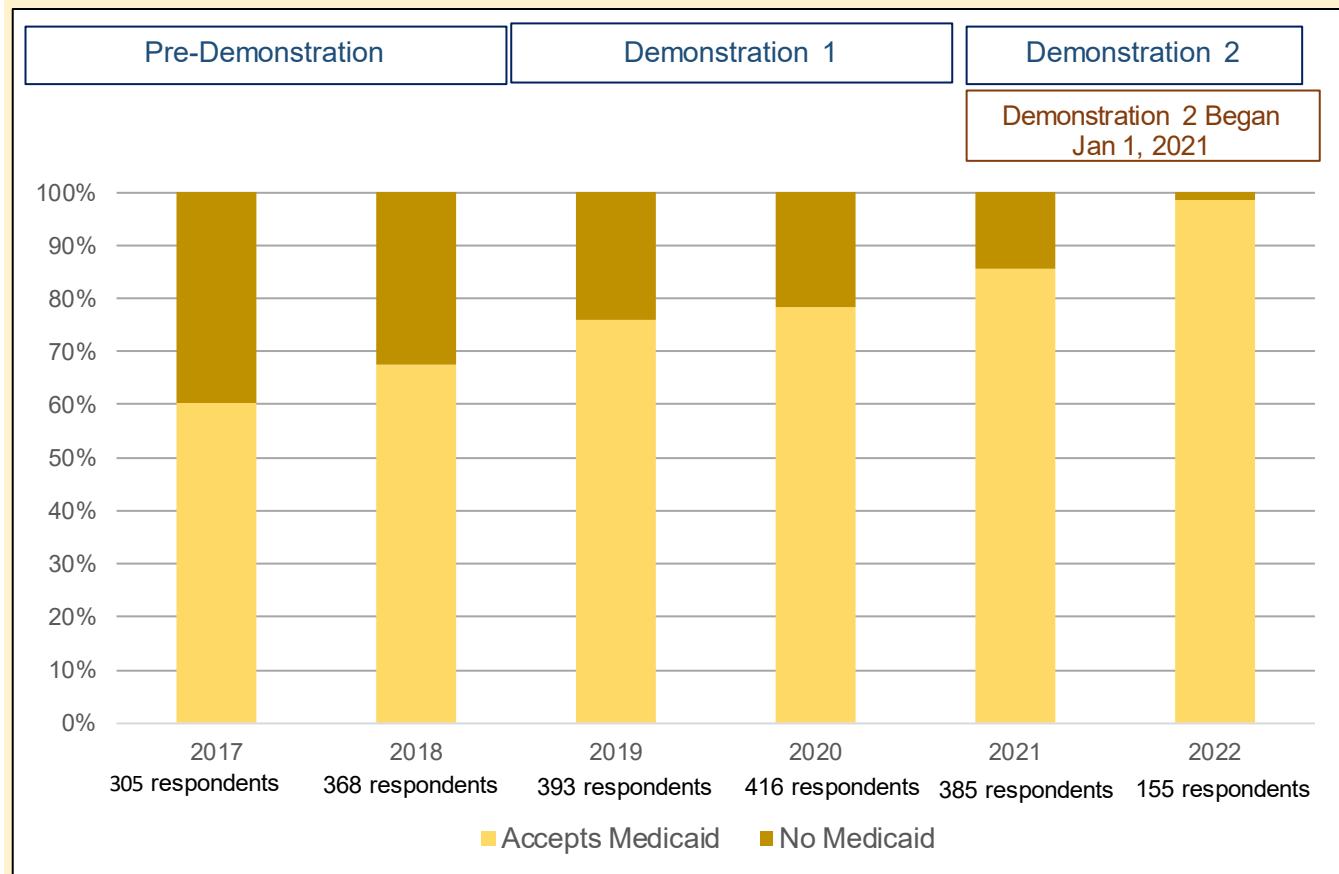
Measure(s) Used to Answer Question:

Proportion of SUD Providers Accepting Medicaid as a Percentage of Total SUD Providers in Indiana

Measure Steward: HMA-Burns

Data Source: National Survey of Substance Abuse Treatment Services (N-SSATS), 2017 to 2020; and National Substance Use and Mental Health Services Survey (N-SUMHSS), 2021 to 2022

Results



Desired Trend: Increase Medicaid participation

Finding: Increase

Statistical Review: No statistical tests were run on this measure

As per the N-SSATS and now the N-SUMHSS annual survey, the percentage of SUD providers in Indiana that state that they accept Medicaid clients increased from 60 percent of the total in the 2017 survey to 98 percent of the total in the 2022 survey.

Exhibit 30. Average Driving Distance to SUD and Primary Care Services by Region

Research Question:

Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

Measure(s) Used to Answer Question:

Average distance travelled by Medicaid beneficiaries seeking residential treatment by region

Measure Steward: HMA-Burns

Data Source: State claims/encounters and enrollment data

Results	# trips for SUD Residential Treatment			Average Driving Distance (in miles)		
	CY 2021	CY 2022	CY 2023	CY 2021	CY 2022	CY 2023
Northwest	927	1,091	1,262	24	29	29
North Central	407	761	1,000	56	52	52
Northeast	938	1,640	2,045	28	26	26
West Central	1,478	1,846	2,374	55	56	55
Central	7,555	9,018	10,352	26	29	28
East Central	2,171	2,611	2,905	54	53	52
Southwest	2,401	2,751	2,778	34	36	40
Southeast	2,455	2,818	3,308	44	42	41

Desired Trend: Decrease in average driving distance

Finding: No material change

Statistical Review: No statistical tests were run on this measure

For individuals identified with SUD in CMS Metric #4, HMA-Burns identified the unique pairings of Medicaid members to SUD residential treatment providers. The utilization from CMS Metric #10 for residential treatment was used. The study is limited to one pairing for each combination even if the member saw the same provider more than once during the year. The driving distance was computed from each member's home to the provider location. Weighted average values were computed for each of the eight regions of the state defined by the FSSA.

The total trip utilization increased for members within each region over the three-year period. This is because the number of Medicaid beneficiaries with SUD increased from 127,915 in CY 2021 to 145,034 in CY 2023. The average distances travelled did not improve to any noticeable degree, however, in any region of the state.

State SUD Implementation Plan

FSSA identified 17 specific items in its Implementation protocol related to access to critical levels of care. Among these, twelve have been completed. Refer to Exhibit 31 for additional details.

Exhibit 31. Tracking Completion of Action Items in the SUD Implementation Plan for CMS Milestone 1

Action Item Description	Intended Completion Date	Current Status
1 Pursue Indiana Administrative Code (IAC) change for coverage and reimbursement of OTPs	12/31/2018	Completed.
2 Pursue IAC amendments to Mental Health Services Rule	12/31/2018	Open. Added LCAC 09/01/2021; IAC changes pending
3 Pursue IAC change to remove Intensive Outpatient Treatment (IOT) from MRO	12/31/2018	Open. SPA approved 03/19/19; IAC changes pending
4 Pursue State Plan Amendment (SPA) to move IOT coverage from MRO	06/30/2018	Completed.
5 Pursue amendment to 1915(b)(4) waiver	06/30/2018	Completed.
6 Make necessary system changes to CoreMMIS to remove IOT from MRO	06/30/2018	Completed.
7 Develop provider communication over new benefits- billing for IOT/IOP	Contingent upon approval of SPA	Completed.
8 Make necessary system change to CoreMMIS to enroll residential addiction facilities and to reimburse for residential treatment	03/01/2018	Completed.
9 Develop provider communication over new benefits- residential treatment	Ongoing and as part of roll-out	Completed. Communication ongoing throughout 2018.
10 Determine final action and necessary system changes to CoreMMIS to allow reimbursement for inpatient SUD stays on a per diem basis	Fall 2018	Abandoned. Not pursuing proposed change based on provider input.
11 Develop provider communication over new benefits- inpatient SUD stays	Ongoing and as part of roll-out	Completed. Communication ongoing throughout 2018.
12 Make necessary system changes to allow reimbursement for Addiction Recovery Management Services	Spring 2018	Completed.
13 Pursue SPA to add coverage and reimbursement of Addiction Recovery Management Services	Spring 2018	Completed.
14 Pursue IAC changes to add coverage of Addiction Recovery Management Services	12/31/2018	Open. SPA approved 03/18/19 to add crisis intervention, IOP and peer recovery services to all programs; IAC changes pending.
15 Develop provider communication over new benefits Addiction Recovery Management Services	Ongoing and as part of roll-out	Completed. Communication ongoing including updated Behavioral Health Services Provider Module.
16 Invite representatives from each of the MCEs, the Indiana Housing and Community Development Authority (IHCDA) and other interested stakeholders towards developing a supportive housing solution	No specific date- implied some time in 2018	Open. DMHA awarded \$4.7 million in one time funding to eight community organizations for recovery residences; a total of 206 beds are expected to be added as a result of the grant.
17 Establish allowed criteria to use for authorizing inpatient detoxification	02/01/2018	Completed.

Stakeholder Feedback

Stakeholders offered appreciation that the FSSA took advantage of pursuing the demonstration authority to expand access to services. The greatest concern is beneficiary knowledge about what is available.

Exhibit 32. Stakeholder Feedback Related to CMS Milestone 1

Topic	From Whom	Type of Feedback	Feedback
Understanding benefits offered	Providers	Critique	<i>Beneficiaries continue to not have a good understanding of the SUD benefits offered by Medicaid.</i> Over half of the providers responded that there is confusion on the part of members about covered services for SUD, with outpatient services and IOP mentioned most frequently.
	MCEs	Critique	<i>Beneficiaries continue to not have a good understanding of the SUD benefits offered by Medicaid.</i> The MCEs maintain there is still confusion on the part of members about covered services for SUD. Additionally, they note some confusion on the part of providers, often pertaining to the differentiation between levels of care and medical necessity requirements by ASAM level.
	Beneficiaries	Neutral	<i>Members find out about services from a variety of resources.</i> Members most commonly find out about where they can get treatment from court or jail, followed by a family member or friends.
Access to services	Providers	Compliment	<i>Access has improved over the past year specifically in MAT, OTP and IOP.</i> More than half (26 of 48) of the providers observed improved access over the past year, with specific mentions regarding MAT, OTP and IOP.
	MCEs	Compliment	<i>The demonstration has resulted in improved access.</i> All of the MCEs were complimentary regarding the demonstration and the resulting improved access.
	MCEs	Recommendation	<i>Utilization of early intervention services is low but could improve with provider education.</i> All of the MCEs commented on the low uptake of early intervention services. They recommend provider education, improved tracking and data analysis and addressing potentially low reimbursement rates to improve service use.
	Providers	Recommendation	<i>Utilization of early intervention services is low but could improve with provider education.</i> The majority (40 of 48) of providers commented that they were not aware or did not understand coverage for early intervention services and recommended targeted provider education materials to improve knowledge and potential utilization of the service.
Telehealth improved access to services	Providers	Compliment	<i>Overall, providers responded that Telehealth had a positive impact on access and adequacy of the provider network across the spectrum of ASAM levels of care.</i> The majority (32 of 48) of providers responded that Telehealth had a positive impact on the adequacy of the provider network, most often in access for outpatient services, MAT and IOP.
	MCEs	Neutral	<i>Telehealth has had a positive effect on access but the unwinding of the PHE policies has created some confusion with providers.</i> Overall, the MCEs commented that telehealth has had a positive impact on the adequacy of the provider network and improved access to various SUD services, with specific mention of IOP, outpatient counseling and increased member engagement. However, they noted some lingering confusion regarding the requirement for initial in-person evaluations resulting from the unwinding of the PHE policies, and concerns regarding privacy in IOP groups.
	Beneficiaries	Neutral	<i>Beneficiaries report receiving almost all services in person over the past year.</i> Almost all (21 out of 22) beneficiaries who responded indicated that they did not receive any alcohol and/or drug treatment services online or by phone in the last 12 months.

Milestone #2: Use of Evidence-Based, SUD-specific Patient Placement Criteria

Evaluation Measures

Three measures were examined to assess the use of evidence-based, SUD-specific patient placement criteria. In Exhibit 33 below, it shows that the desired outcome was met in two out of the three measures. Tests for statistical significance were not conducted on these measures. More detailed information can be found on each measure in the pages that follow.

Exhibit 33. Summary of Findings for Metrics Mapped to CMS Milestone 2 – Total Demonstration

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Authorization Denial Rate for SUD Services	Decrease	Yes	no test run	N/A	
2	Authorized residential treatment days as a percentage of total requested days	Increase	Baseline	no test run	N/A	
3	SUD Authorization Denial Reasons	Increase in proportion of medical necessity denials	Yes	no test run	N/A	

Exhibit 34. SUD Authorization Denial Rate

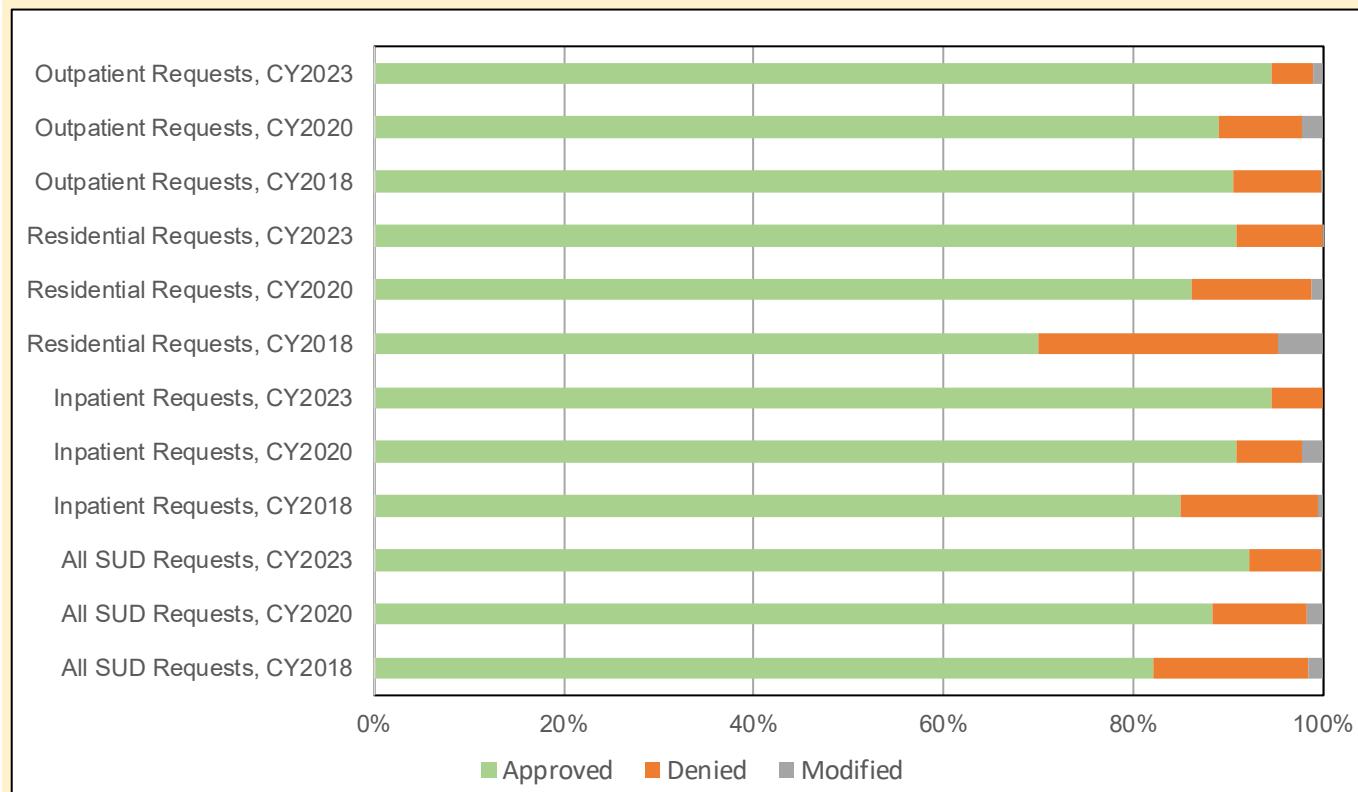
Research Question:

Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

Measure(s) Used to Answer Question:

SUD Authorization Denial Rate for inpatient hospital, residential treatment, and outpatient services

Measure Steward: HMA-Burns **Data Source:** Data reported by managed care entities to the evaluators

Results


Inpatient is inpatient hospital services. Residential is residential treatment center services.

Outpatient is community-based SUD services, primarily Intensive Outpatient and Partial Hospitalization.

Desired Trend: Decrease in authorization denials

Finding: Decrease

Statistical Review: No statistical tests were run on this measure

The denial rate for authorization requests by SUD providers to Indiana's Medicaid managed care entities continued to decline from the initial demonstration through December 2023 of the second demonstration period. Overall, the denial rate across SUD settings declined from 16.3 percent initially in CY 2018, to 9.9 percent during CY 2020, and to 7.6 percent in CY 2023. While the declines were most pronounced from CY 2018 to CY 2020, the denial rate continued to decline across treatment settings. Part of the reason why the denial rate is lower in CY 2020 and continues to CY 2023 is due to the FSSA's requirement at the onset of the public health emergency that initial inpatient requests for SUD be approved for 7 days and residential treatment requests be initially approved for 21 days.

Exhibit 35. Authorized Residential Treatment Days as a Percentage of Requested Days – CY 2023

Research Question:

Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

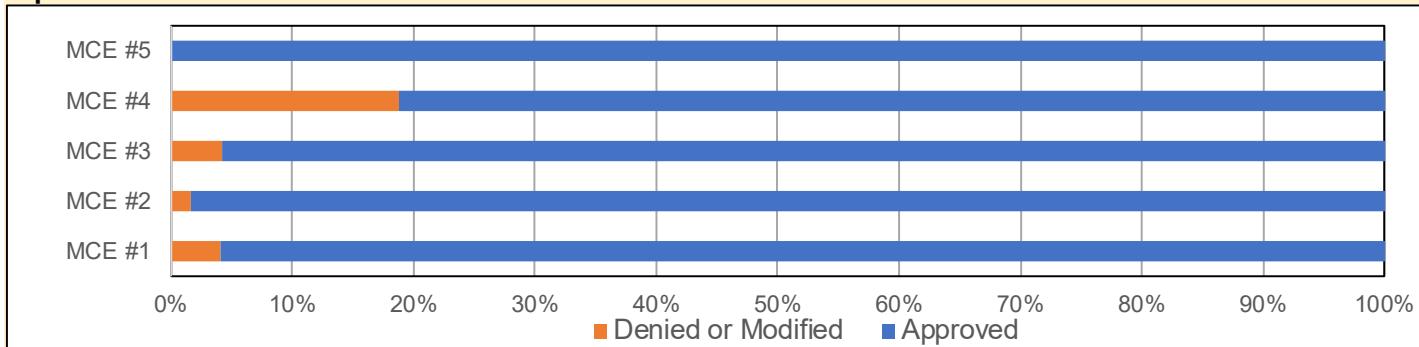
Measure(s) Used to Answer Question:

Authorized residential treatment days as a percentage of total requested days

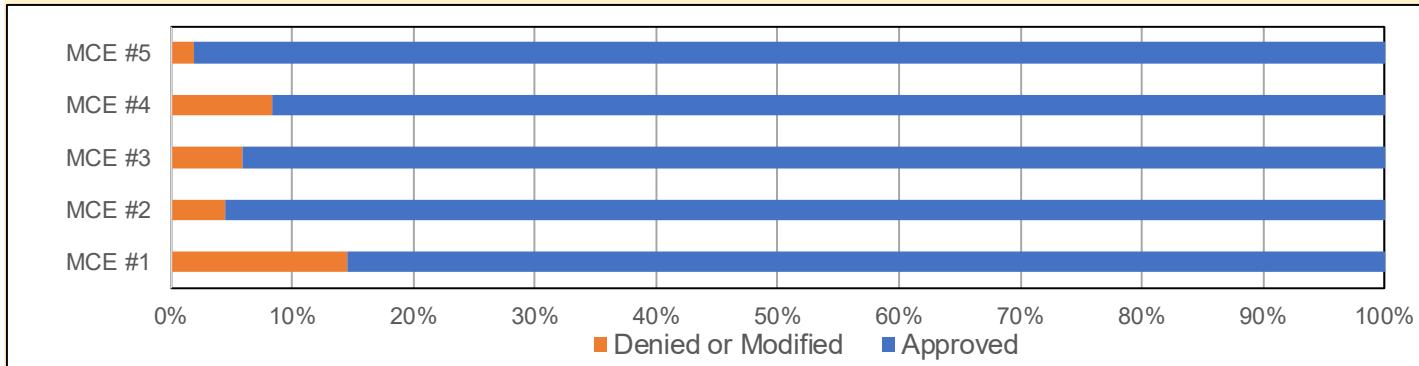
Measure Steward: HMA-Burns **Data Source:** Data reported by managed care entities to the evaluators

Results

Inpatient



Residential



Desired Trend: Increase

Finding: Baseline data; study to be repeated for Summative Evaluation

Statistical Review: Descriptive

In CY 2023, the proportion of days approved was 95 percent for inpatient services and 89 percent for residential treatment centers. Only 5 percent of requested inpatient days and 11 percent of requested residential treatment days were denied or modified. This study will be repeated for the Summative Evaluation.

Exhibit 36. SUD Authorization Denial Reasons

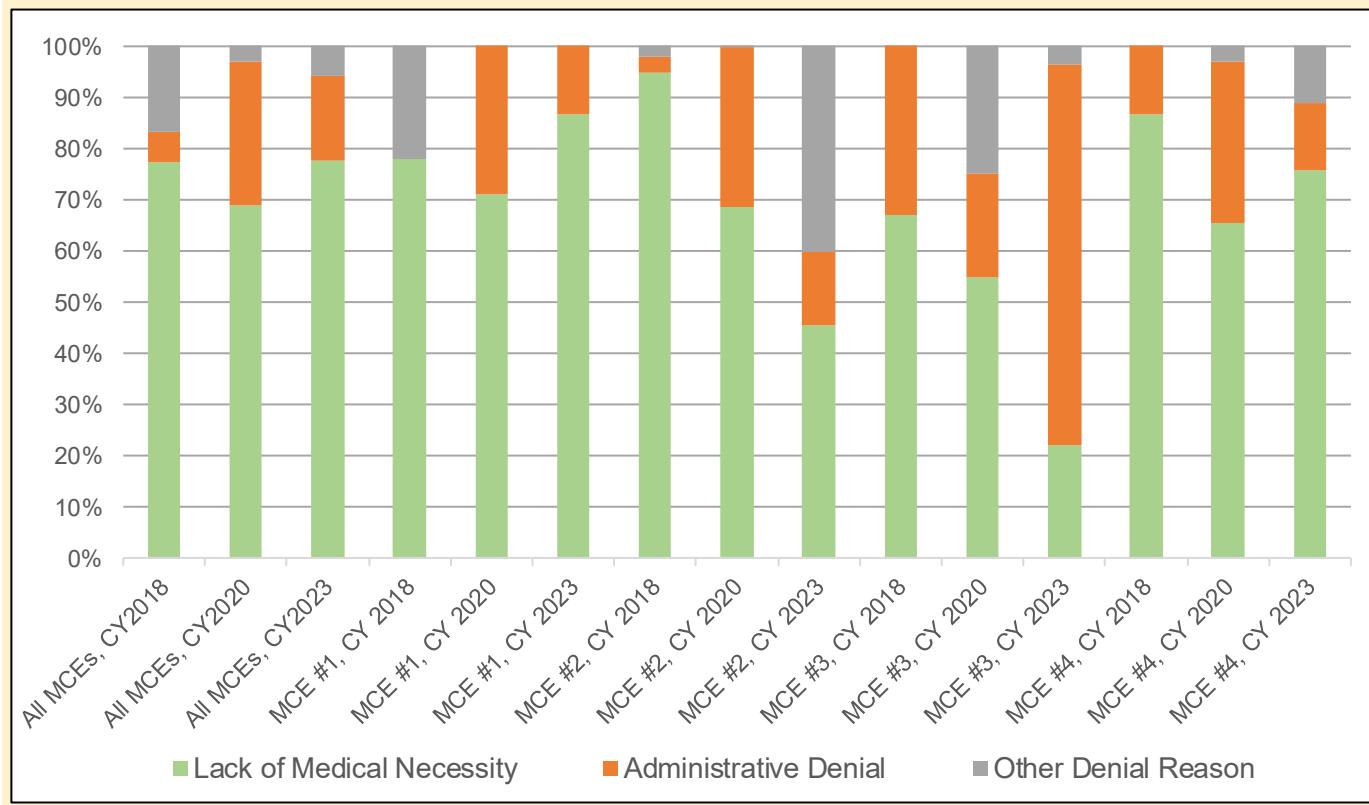
Research Question:

Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

Measure(s) Used to Answer Question:

SUD Authorization Denial Reasons

Measure Steward: HMA-Burns **Data Source:** Data reported by managed care entities to the evaluators

Results


Desired Trend: Increase in proportion of medical necessity-related denials

Finding: Met desired trend

Statistical Review: No statistical tests were run on this measure

For authorization requests specific to SUD services, the rate of denials due to lack of medical necessity declined during the demonstration, from 77% of all denials during CY 2018 to 69 percent during CY 2020 but increased to 78 percent in CY 2023. Denials for administrative reasons increased sharply, from 6 percent during CY 2018 to 28 percent during CY 2020 but then declined to 17 percent in CY 2023. This finding may partially be attributed to the FSSA's requirement at the onset of the public health emergency that initial inpatient requests for SUD be approved for 7 days and residential treatment requests be initially approved for 21 days. Therefore, the medical necessity test was not required. The MCEs have improved tracking of denial reasons since only 3 percent of denials were for a reason other than administrative or lack of medical necessity during CY 2020 and 6 percent in CY 2023. In CY 2018, this rate was 17 percent.

State SUD Implementation Plan

All four specific items identified by FSSA related to evidence-based patient placement criteria have been completed, as found in Exhibit 37.

Exhibit 37. Tracking Completion of Action Items in the SUD Implementation Plan for CMS Milestone 2

Action Item Description		Intended Completion Date	Current Status
18	Provider education on ASAM criteria	Ongoing throughout 2018	Completed. ASAM trainings sponsored by FSSA ongoing since 2019.
19	Development of standard prior authorization SUD treatment form	07/01/2018	Completed
20	Review MCE and FFS vendor contracts and pursue amendments, where necessary	07/01/2018	Completed
21	Review CANS/ANSA for alignment with ASAM criteria	12/31/2018	Completed. Determined consolidated tool not feasible and providers will continue to use CANS or ANSA tool along with ASAM tool.

Stakeholder Feedback

Providers expressed concerns with the consistency in service authorization determinations. Providers and MCEs note improvements in the authorization process, but both encourage more education on ASAM.

Exhibit 38. Stakeholder Feedback Related to CMS Milestone 2

Topic	From Whom	Type of Feedback	Feedback
1 Prior Authorization (PA) Process	Providers	Critique	<i>There is room for improvement to standardize authorization processes and forms across all applicable ASAM levels of care.</i> While the use of a single form has improved the PA process, providers stated that improvements are still needed. Specifically, there are still different requirements and forms for each MCE, and discrepancies in getting days covered.
	Providers	Recommendation	<i>There is room for improvement to standardize authorization processes and forms across all applicable ASAM levels of care.</i> While the authorization process is improved, there is room for improvement in standardization of policies and forms across MCEs, increasing the length of approval time, and improving response and/or approval turnaround time.
2 Improvements in the PA process	Providers	Compliment	<i>More than half (32 of 48) of responding providers indicated that the prior authorization (PA) process and use of a single form has made PA easier.</i> Most providers noted that the prior authorization process has improved and is easier and more understandable with the use of a single form.
3 Additional clarification on PA criteria and processes needed	MCEs	Recommendation	<i>Confusion regarding authorization requirements, billing and general knowledge of SUD demonstration.</i> All MCEs expressed that the unwinding of the PHE and staff turnover have contributed to provider confusion regarding authorization, billing and general knowledge of what the SUD demonstration is and the services offered; and that this is an opportunity to provide education on the SUD demonstration, policies and processes to help providers.
4 Lack of provider understanding of the ASAM levels	MCEs	Critique	<i>PHE changes contributed to provider confusion.</i> The MCEs continue to express concern that the unwinding of the PHE contributed to the confusion on the part of providers regarding the ASAM treatment model and PA processes.

Milestone #3: Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment

Evaluation Measures

Two measures were examined to assess the use of evidence-based, SUD-specific patient placement criteria. In Exhibit 39 below, it shows that the desired outcome was met in both measures. Tests for statistical significance were not conducted on these measures. More detailed information can be found on these measures on the next page.

Exhibit 39. Summary of Findings for Metrics Mapped to CMS Milestone 3 – Total Demonstration

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Number of Licensed SUD Residential Treatment Beds	Increase	Yes	no test run	N/A	
2	Number of Licensed SUD Residential Treatment Locations	Increase	Yes	no test run	N/A	

Exhibit 40. Number of SUD Residential Treatment Locations and Beds Licensed by the DMHA

Research Question:

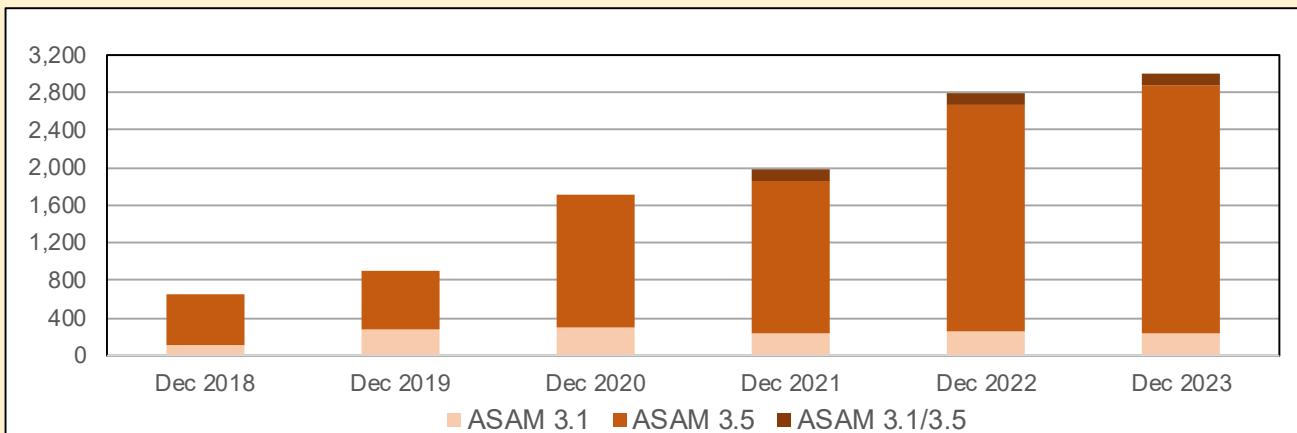
Do the number of locations and residential treatment beds for SUD licensed by the state increase during the demonstration?

Measure(s) Used to Answer Question:

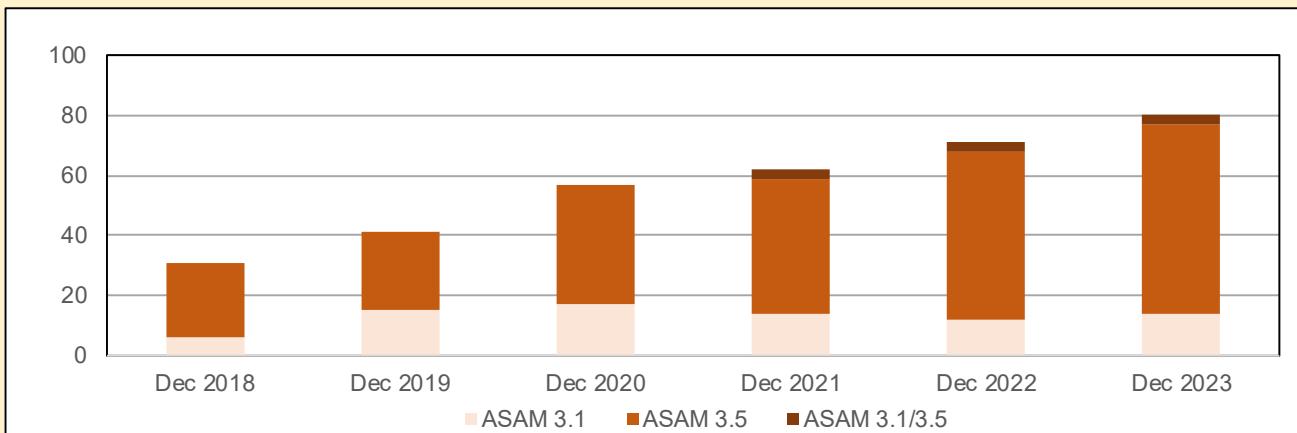
Number of SUD Residential Treatment Locations and Beds Licensed by the Division of Mental Health and Addiction

Measure Steward: HMA-Burns **Data Source:** Indiana DMHA monthly tracking report

Results for Number of Licensed Residential Treatment Beds



Results for Number of Licensed Residential Treatment Locations



Desired Trend: Increase licensed beds and locations **Finding:** Increase

Statistical Review: No statistical tests were run on this measure

Both the number of beds and the number of locations licensed by the FSSA's Division of Mental Health and Addiction (DMHA) increased during the demonstration period. Licensure began in February 2018 at the start of the demonstration and DMHA tracks this monthly. HMA-Burns assessed the prevalence of providers and locations as of December in each demonstration year. The number of locations increased from 31 in December 2018 to 57 in December 2020 and 80 in December 2023. The number of licensed beds increased from 659 to 2,997 during this period.

State SUD Implementation Plan

There are two items identified by FSSA related to SUD-specific program standards for residential treatment. The item related to provisional ASAM designation was completed with the FSSA developing a formal licensure process for ASAM residential levels 3.1 and 3.5 which has been in place since July 2018. The task related to IAC language changes are pending.

Exhibit 41. Tracking Completion of Action Items in the SUD Implementation Plan for CMS Milestone 3

Action Item Description		Intended Completion Date	Current Status
22	Finalize process for provisional ASAM designation	12/31/2017	Completed.
23	Insert permanent certification language in IAC	12/31/2018	Open. IAC changes pending

Stakeholder Feedback

Stakeholder feedback in this area focused on which ASAM levels that the Division of Mental Health and Addiction are currently licensing as well as the general knowledge of ASAM criteria among providers.

Exhibit 42. Stakeholder Feedback Related to CMS Milestone 3

	Topic	From Whom	Type of Feedback	Feedback
1	ASAM licensure	MCEs	Critique	<i>No licensure for ASAM 3.7.</i> Providers and the MCEs continue to question why there is not a licensure requirement for ASAM 3.7. This has not changed since the Mid-Point Assessment and was also mentioned in the initial demonstration period.
		Providers	Critique	<i>No licensure for ASAM 3.7.</i> Providers and the MCEs continue to question why there is not a licensure requirement for ASAM 3.7. This has not changed since the Mid-Point Assessment and was also mentioned in the initial demonstration period.
2	Issues with credentialing and onboarding with MCEs	Providers	Neutral	<i>No significant change in interactions with MCEs over the past year.</i> Half (24 of 48) of the providers describe their interactions with MCEs regarding SUD services for contracting, authorization, and billing as positive or neutral. The most frequently mentioned area of difficulty is with authorizations and billing, and differing documentation requirements between MCEs.
3	Re-education of provider staff on ASAM due to large turnover since the PHE	MCEs	Critique	<i>PHE policies have meant reeducation of providers on authorization and ASAM level of care requirements.</i> Similarly to the feedback received during the Mid-Point Assessment, the MCEs continue to express concerns and the need for additional education of providers, specifically around the differences between the ASAM levels of care along the continuum.

Milestone #4: Sufficient Provider Capacity at Critical Levels of Care

Evaluation Measures

Five measures were examined to assess sufficient provider capacity at critical levels of care. In Exhibit 43 below, it shows that the desired outcome was met in all five measures. Tests for statistical significance were not conducted on these measures. More detailed information can be found on each measure in the pages that follow.

Exhibit 43. Summary of Findings for Metrics Mapped to CMS Milestone 4 – Total Demonstration

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Number of Medicaid SUD MAT Providers	Increase	Yes	no test run	N/A	
2	Number of Medicaid SUD Outpatient Providers	Increase	Yes	no test run	N/A	
3	Number of Medicaid SUD Residential Treatment Providers	Increase	Yes	no test run	N/A	
4	Number of Medicaid SUD Inpatient Hospital or IMD Providers	Increase	Yes	no test run	N/A	
5	MAT prescribers in Indiana accepting Medicaid clients	Increase	Yes	no test run	N/A	

Exhibits 46 through 51 appear on subsequent pages. Each exhibit shows a region of the state (northern, central, and southern). In the first of two maps for each region, SUD providers identified as inpatient hospitals, IMDs, residential treatment centers, or medication-assisted treatment providers are plotted to show their service location in the region. In the second map, SUD outpatient providers are plotted. A comparison is shown of the providers available to Medicaid beneficiaries in December 2020 compared to December 2023 to show any growth in provider capacity. The counties in each region are color-coded to show the density of Medicaid beneficiaries with SUD in each county. Key findings from these maps are as follows:

- In the Northern Region, provider supply increased in MAT, residential and outpatient provider categories between December 2020 and December 2023. There appears to be lower residential provider capacity than there is need.
- In the Central Region, provider supply increased for each of the provider categories between December 2020 and December 2023. There was an increase in some but not all of the rural counties located in the region. Marion County saw the largest increase in the supply of MAT providers.
- In the Southern Region, MAT and outpatient provider supply increased, while the remaining provider types remained relatively unchanged between December 2020 and December 2023.

Exhibit 52 shows the location of SUD residential treatment facilities and the 20-mile radius around each facility to show coverage. From December 2020 than in December 2023, coverage has improved with more counties having some or all of the county within 20-miles of a residential treatment facility.

Exhibit 44. Active SUD Providers as of December 2018, 2020 and 2023

Research Question:

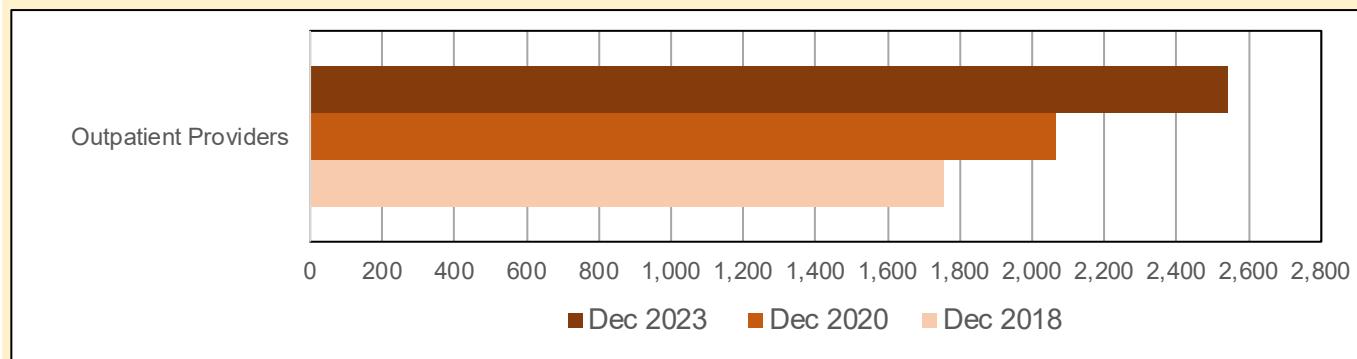
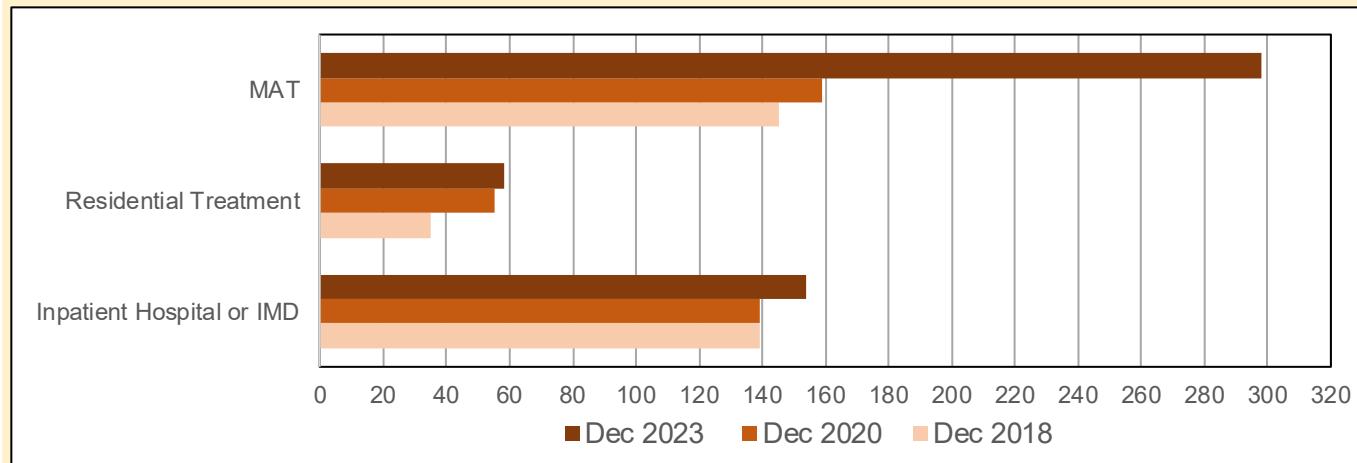
Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

Measure(s) Used to Answer Question:

Active SUD Providers as of December 2018, 2020 and 2023

Measure Steward: HMA-Burns **Data Source:** FSSA data warehouse of claims and encounters

Results for Number of Medicaid SUD Providers, by ASAM Level of Care



Desired Trend: Increase providers at each ASAM level **Finding:** Increase for all categories

Statistical Review: No statistical tests were run on this measure

HMA-Burns used CMS Metrics 7 through 12 to compute the unique number of SUD providers serving Indiana Medicaid beneficiaries. From the initial demonstration through December 2023, Indiana continued to experience growth in unique counts of providers serving Medicaid beneficiaries across all ASAM levels. From December 2020 to December 2023, unique provider counts increased for: inpatient and IMDs by 15; residential treatment by 3; MAT by 139; and outpatient by 478.

Exhibit 45. MAT Prescribers Accepting Medicaid Clients

Research Question:

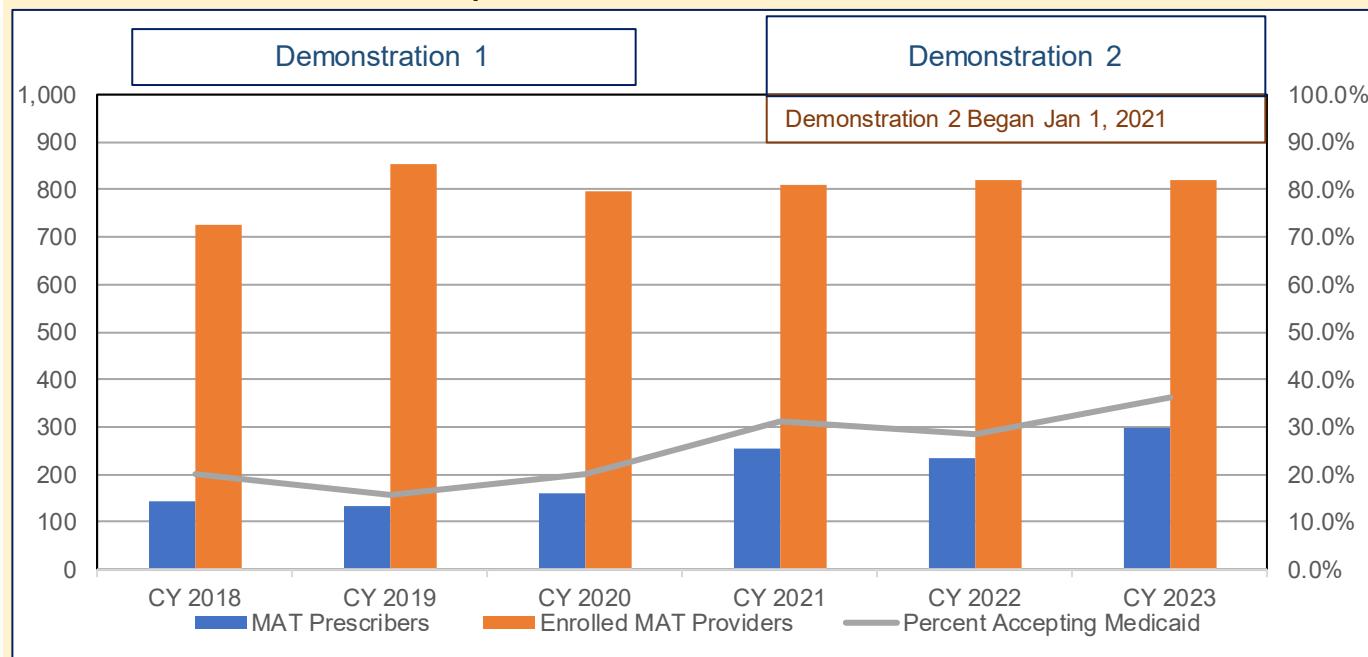
Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?

Measure(s) Used to Answer Question: MAT prescribers in Indiana accepting Medicaid clients

Numerator: Using CMS Metric #12, unique count of MAT prescribers in Indiana that received payment for delivering MAT.

Denominator: CMS Metric #14 MAT providers

Measure Steward: HMA-Burns **Data Source:** FSSA data warehouse of claims and encounters, and SUD quarterly monitoring reports

Results for the Demonstration Population, for SUD visits


Desired Trend: Increase

Statistical Review: No statistical tests were run on this measure

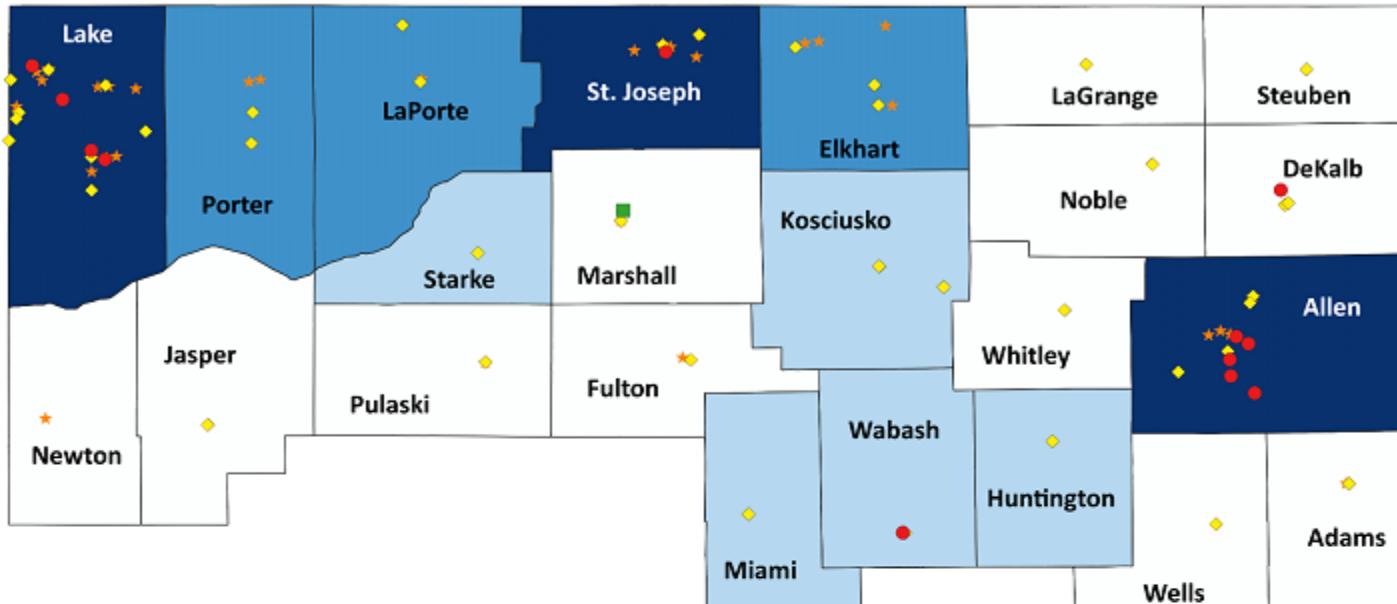
Finding: Increase in MAT providers

accepting Medicaid clients

Over the initial and current demonstration period, both the number of enrolled MAT providers and those accepting (i.e., actively billing) Medicaid increased from 20 percent to 36.3 percent.

Exhibit 46
Location of SUD Providers in the Northern Regions of the State
December 2020 vs December 2023

December 2020



December 2023

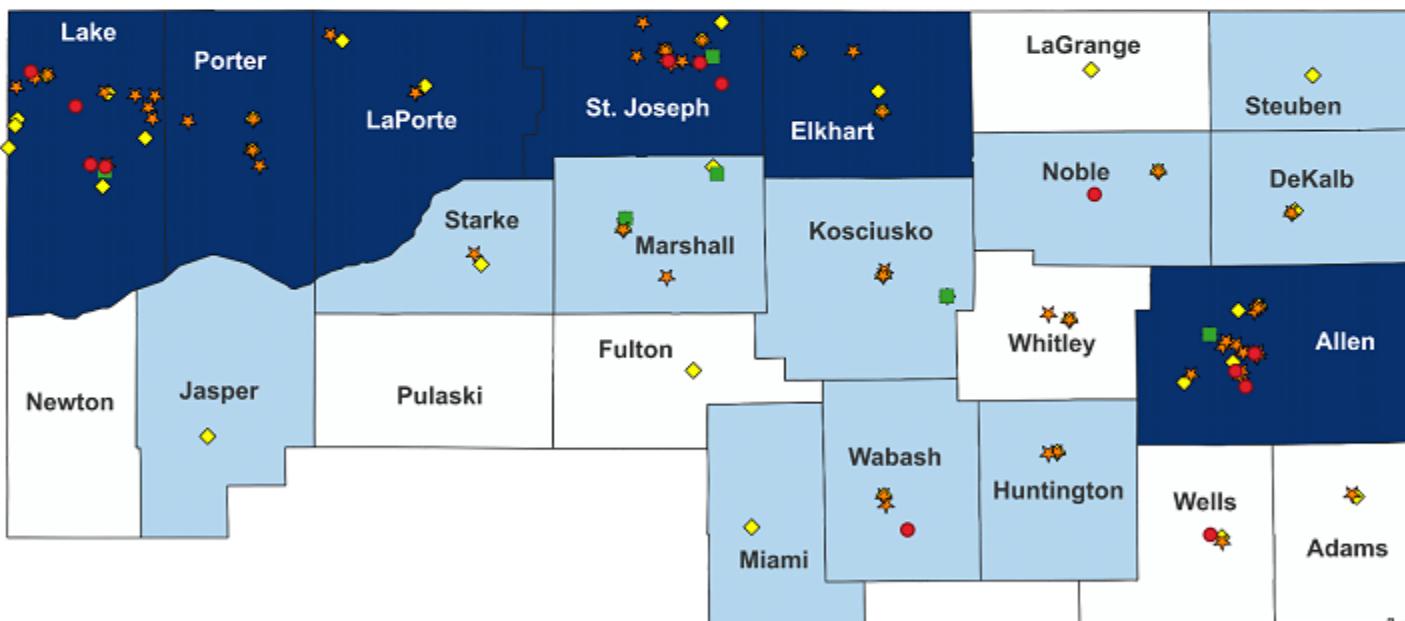
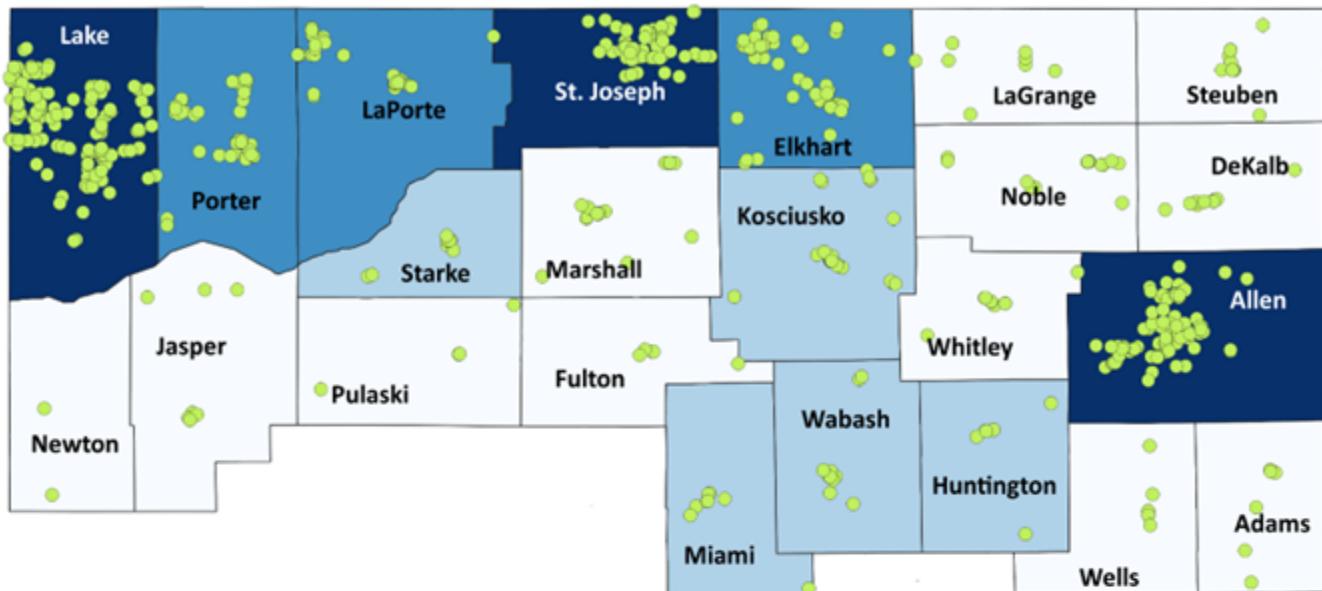
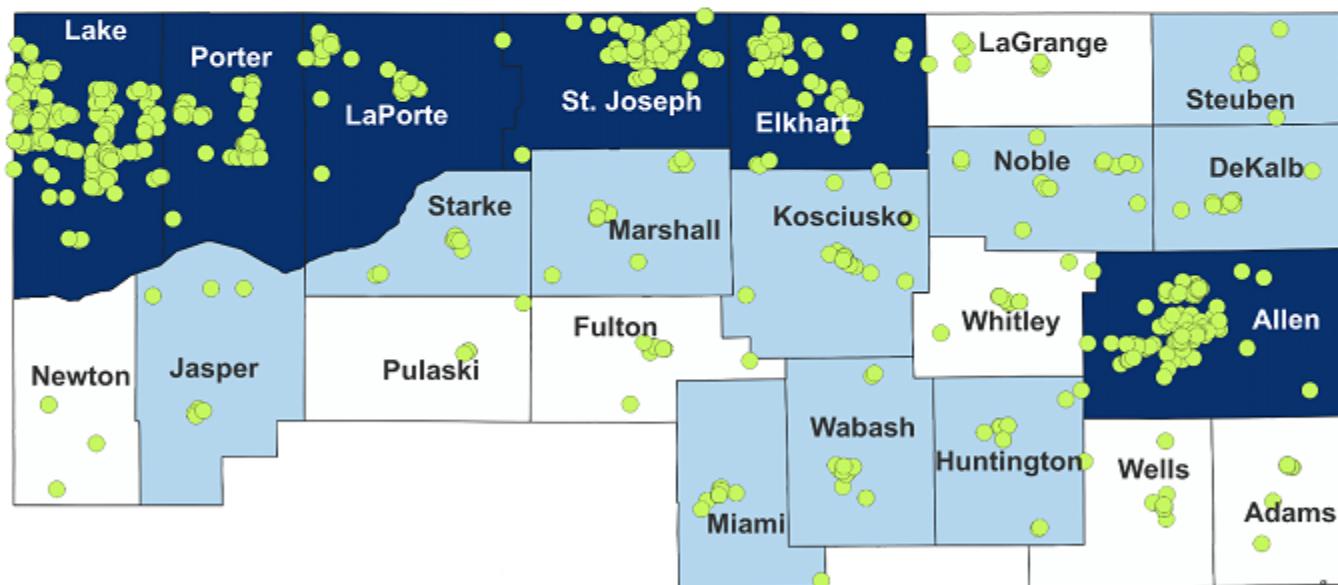


Exhibit 47
Location of SUD Outpatient Providers in the Northern Regions of the State
December 2020 vs December 2023

December 2020



December 2023

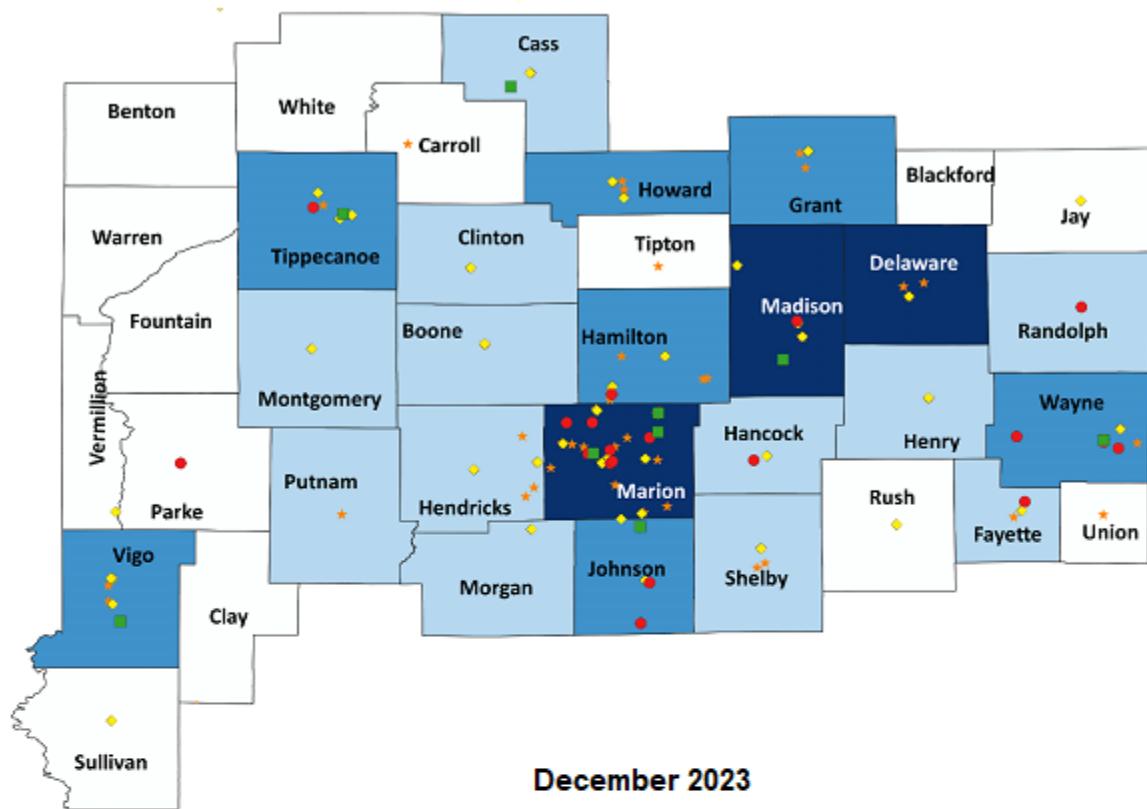


Provider Type
● Outpatient

Number of Individuals with SUD Utilization

Up to 500	501 - 1,500	1,501 - 2,500	More than 2,500
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Exhibit 48
Location of SUD Providers in the Central Regions of the State
December 2020 vs December 2023
December 2020



December 2023

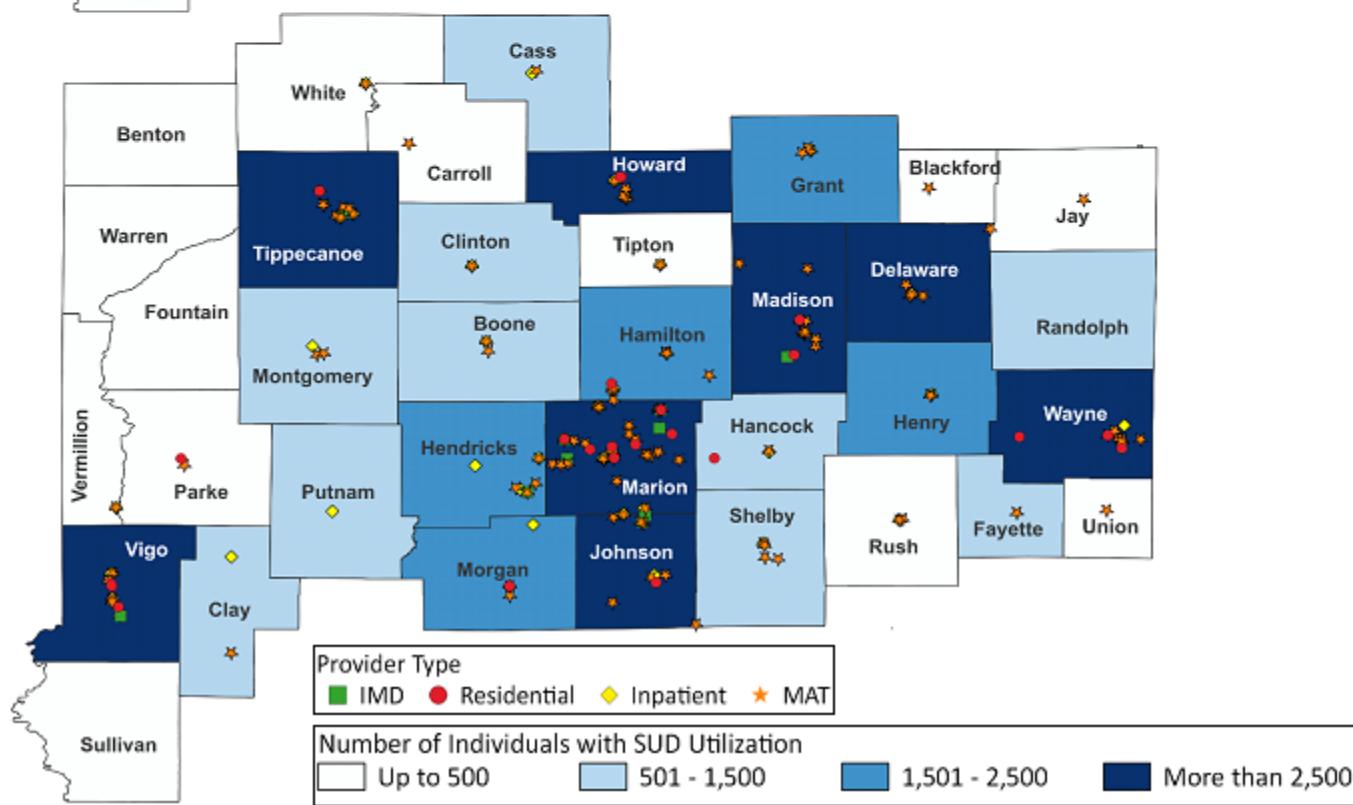


Exhibit 49
Location of SUD Outpatient Providers in the Central Regions of the State
December 2020 vs December 2023

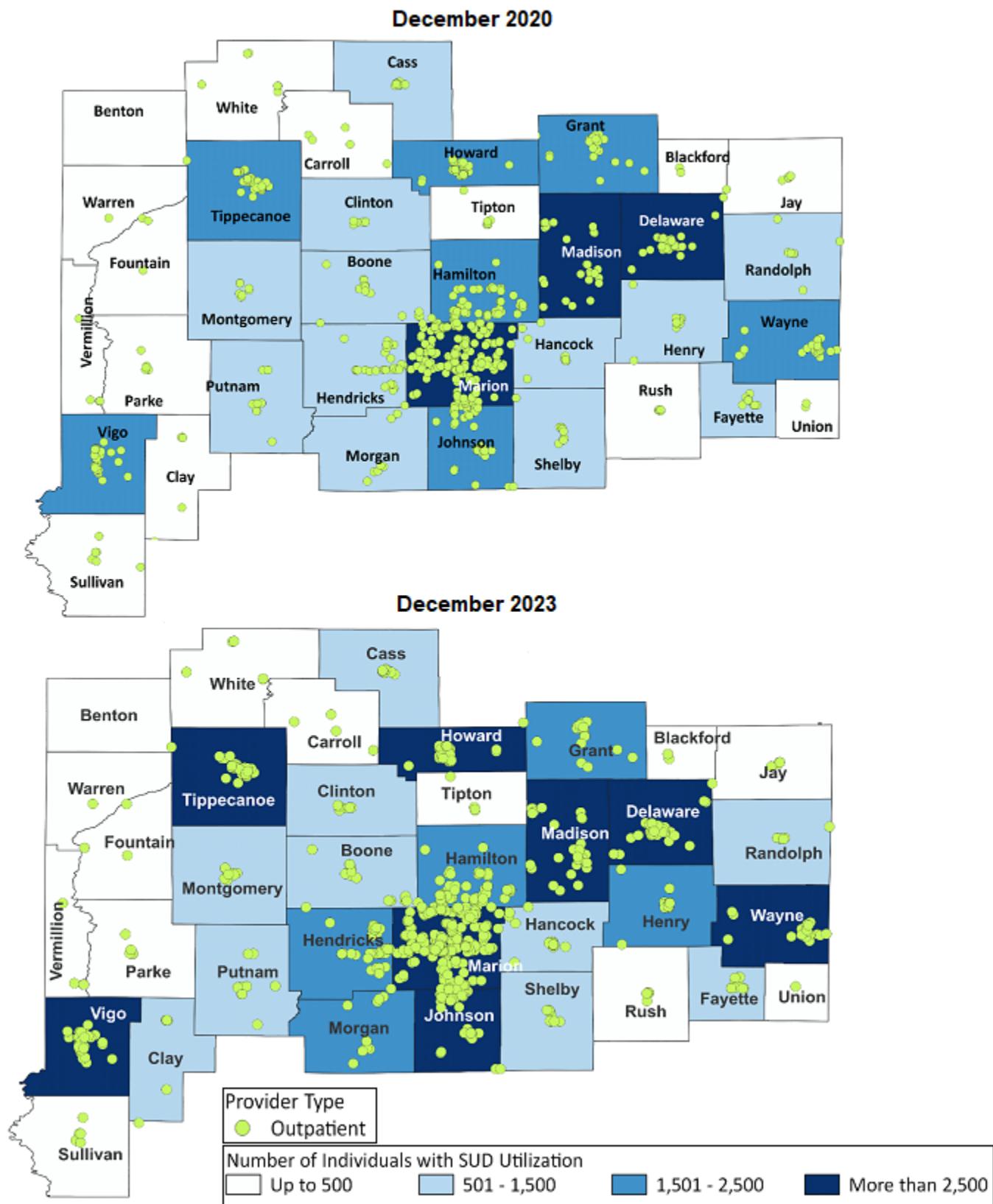


Exhibit 50
Location of SUD Providers in the Southern Regions of the State

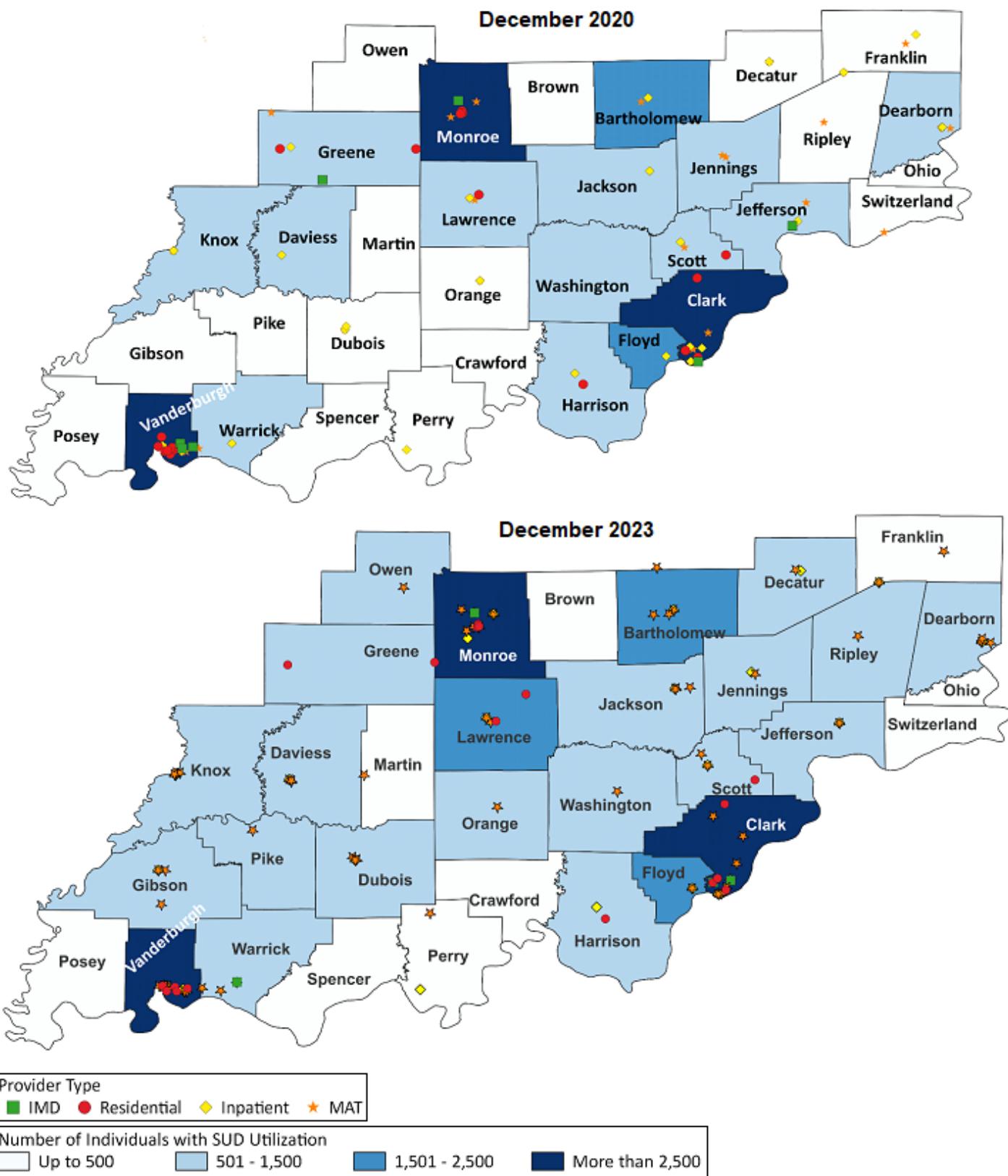


Exhibit 51
Location of SUD Outpatient Providers in the Southern Regions of the State
December 2020 vs December 2023

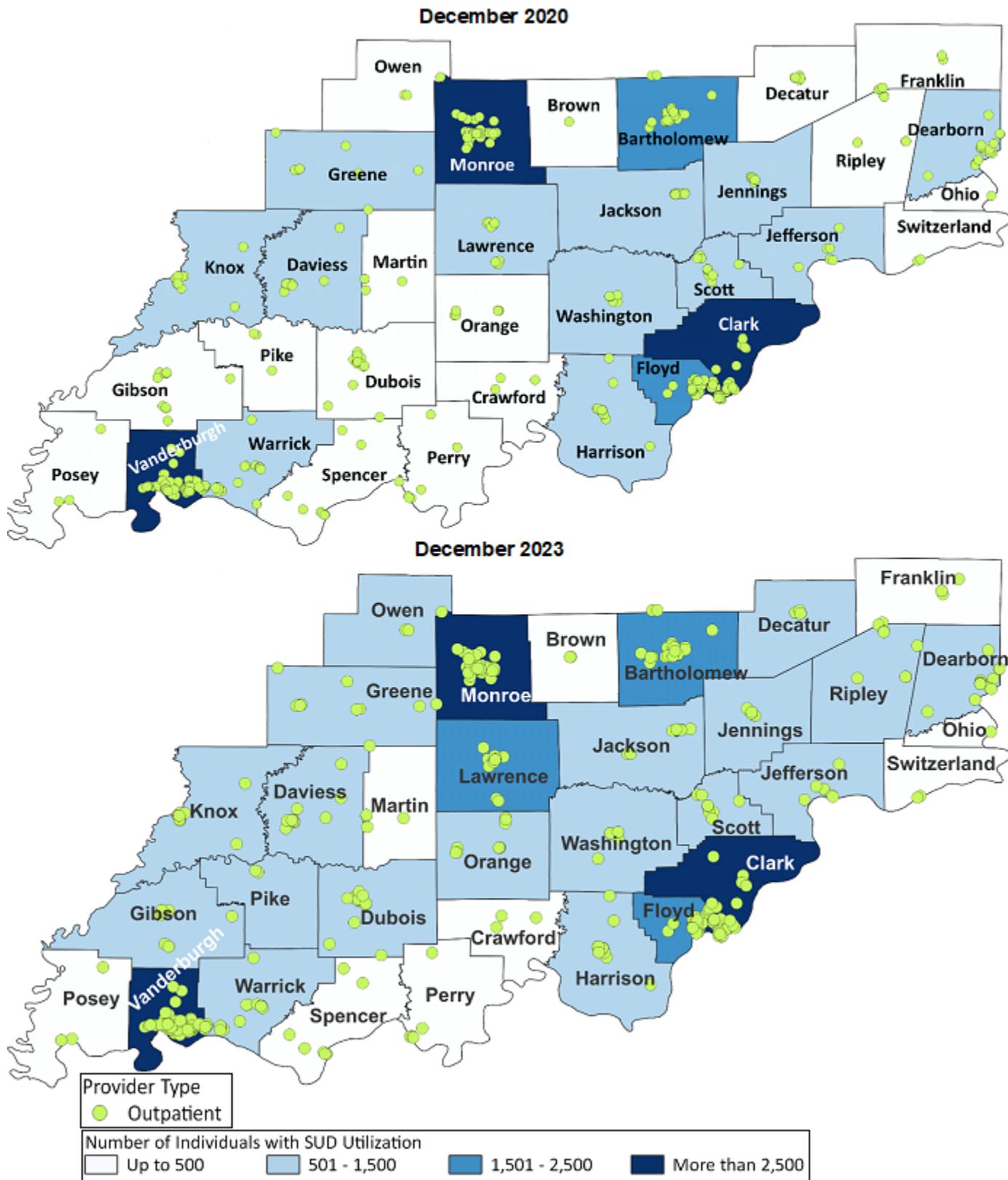
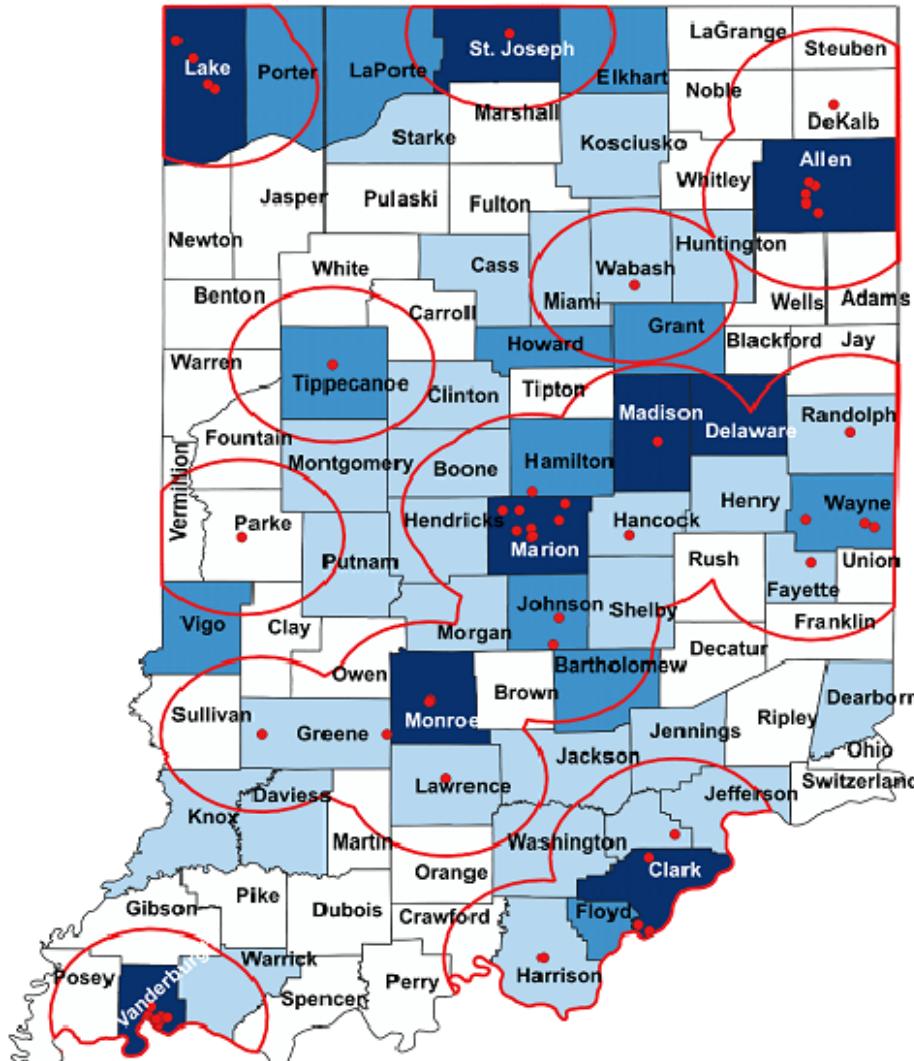


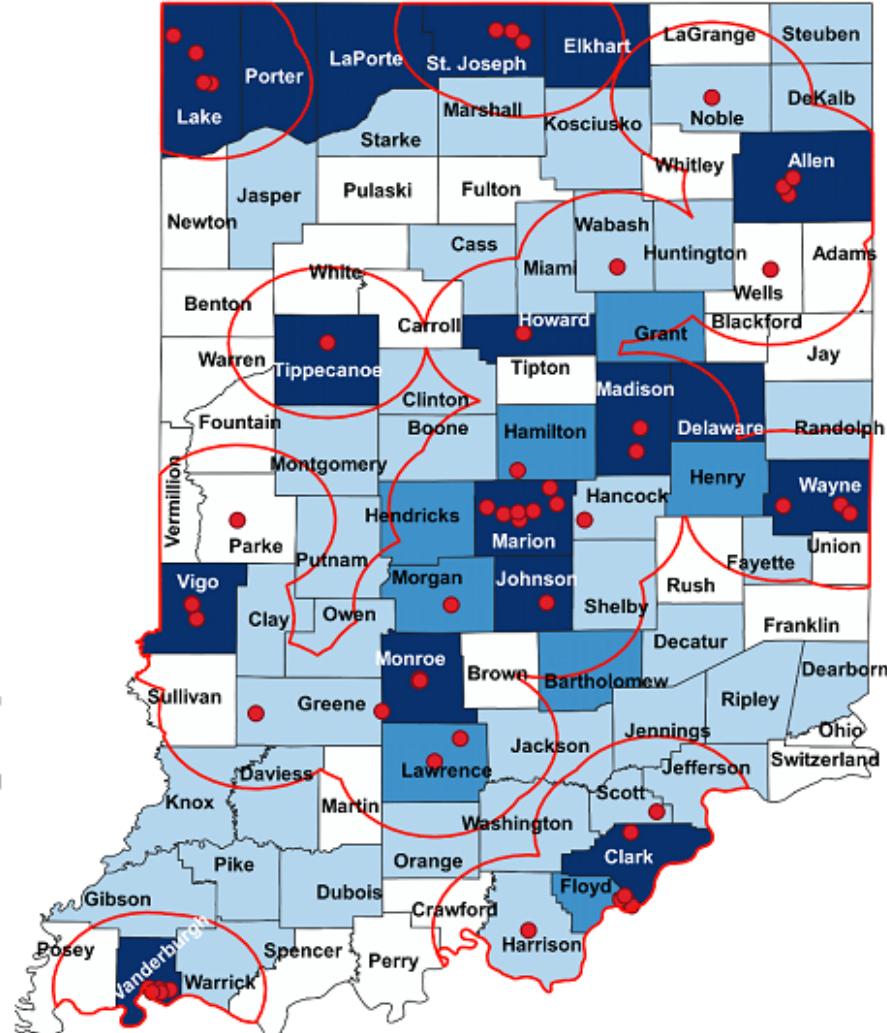
Exhibit 52
Comparison of Residential Treatment Providers Under Contract with FSSA, December 2020 and December 2023

Residential Providers as of December 2020



● Residential Providers □ 20 Mile Radius

Residential Providers as of December 2023



Number of Individuals with SUD Utilization

Up to 500

501 - 1,500

1,501 - 2,500

More than 2,500

State SUD Implementation Plan

Four items were built into FSSA's protocol related to provider capacity. All have been completed in the timeframe outlined by FSSA. The items included in the protocol are specific to systems tracking and reporting by ASAM levels as opposed to items related to expanding capacity per se.

Exhibit 53. Tracking Completion of Action Items in the SUD Implementation Plan for CMS Milestone 4

Action Item Description	Intended Completion Date	Current Status
24 Create new provider specialty for residential addictions facilities	03/01/2018	Completed
25 Data reporting by provider specialty and ASAM level of care	03/31/2018	Completed
26 New training materials on 1115-approved services as well as provider enrollment for residential facilities	Early 2018	Completed. Initial materials released 01/04/2018. Additional materials released throughout 2018.
27 Assessment of ASAM providers and services (by level of care, includes MAT)	12/31/2018	Completed

Stakeholder Feedback

Beneficiaries, providers, and the MCEs who provided feedback all indicated specific areas where provider supply is lower than needed to deliver SUD services as found in Exhibit 54. Of particular note was supportive housing, IOP, ASAM 3.1 residential, and ASAM 3.7 residential.

Exhibit 54. Stakeholder Feedback Related to CMS Milestone 4

Topic	From Whom	Type of Feedback	Feedback	
1	Ease of finding treatment options	Beneficiaries	Neutral	<i>Of those responding, most beneficiaries reported it was mostly not difficult to find treatment.</i> Most beneficiaries (19 of 22) responded that they did not find it difficult to figure out where to get treatment. Of the minority of beneficiaries who found it difficult to figure out where to get treatment, respondents noted that they found a provider, but they had a waiting list.
2	Observations regarding provider network	Beneficiaries	Neutral	<i>Of those responding, most beneficiaries reported it was mostly not difficult to find providers.</i> Of those beneficiaries who responded, most noted having no issues finding primary care doctors, psychiatrists or psychologists, outpatient treatment, methadone, or transportation to and from services. A minority of beneficiaries reported having some difficulties finding counselors and residential treatment.
		Providers	Compliment	<i>Providers observe improvements in the provider network since January 2021.</i> Half of the providers noted an improvement in the adequacy of the provider network since January 2021. MAT, OTP, and IOP were mentioned most frequently as areas that have improved.
		Providers	Recommendation	<i>Opportunities for improvement in the provider network.</i> Less than half of the providers felt there was no change in the provider network, with a small number indicating that provider network adequacy was somewhat worse since January 2021. Areas most often mentioned as opportunities for improvement include: supportive housing services, IOP, ASAM 3.7 and ASAM 3.5 and 3.1.
		MCEs	Recommendation	<i>Opportunities for improvement in the provider network.</i> While the provider network may be robust at certain levels, the MCEs felt it lacked flexibility. In particular, they noted that the provider network has an over-abundance of ASAM 3.5 providers, but there is a need for more providers at the lower levels of care and ASAM 3.7.

Milestone #5: Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse

Evaluation Measures

Five measures were examined to assess the implementation of comprehensive treatment and prevention strategies to address opioid abuse. In Exhibit 55, it shows that the desired outcome was met in four out of the five measures. A test for statistical significance was conducted and the outcome was statistically significant in the results for all five measures. More detailed information can be found on each measure in the pages that follow.

Exhibit 55. Summary of Findings for Metrics Mapped to CMS Milestone 5 – Total Demonstration

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Rate of overdose deaths per 1,000 adult Medicaid beneficiaries	Decrease	Yes	T-test	Yes	<.0001
2	Use of Opioids at High Dosage in Persons Without Cancer	Decrease	Yes	Chi-square	Yes	<.0001
3	Use of Opioids from Multiple Providers in Persons Without Cancer	Decrease	No	Chi-square	Yes	<.0001
4	Concurrent Use of Opioids and Benzodiazepines	Decrease	Yes	Chi-square	Yes	<.0001
5	Rate of emergency department visits for SUD per 1,000 Medicaid beneficiaries	Decrease	Yes	Interrupted Time Series	Yes	0.0434

Exhibit 56. Results from CMS Metric #27: Rate of Overdose Deaths

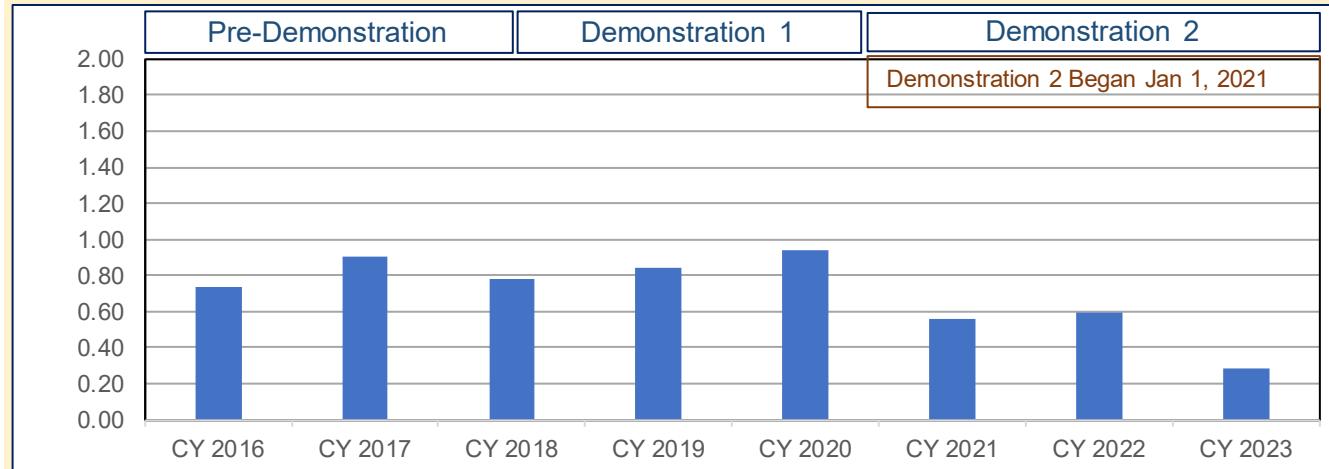
Research Question:

Is the rate of drug overdose deaths in Indiana impacted by the demonstration?

Measure(s) Used to Answer Question:

Rate of Overdose deaths

Measure Steward: CMS [CMS Monitoring Metric #27]

Results for the Demonstration Population Rate of Overdose Deaths per 1,000 Beneficiaries

Desired Trend:

CY2018-2019 average

Decrease

CY2022-2023 average

0.810

Change

0.444

-45.3%

Statistical Review:

T-test

Probability > [t]:

<.0001

Finding:

Significant

While the number and rate of overdose deaths among Indiana Medicaid beneficiaries increased during the initial demonstration period, since CY 2021, the rate and number of overdose deaths have declined. The rate was at its peak in CY 2020 at 0.94 beneficiaries per 1,000 and at its lowest rate at 0.29 beneficiaries per 1,000 in CY 2023.

Exhibit 57. Results from CMS Metric #18: Use of Opioids at High Dosage in Persons Without Cancer

Research Question:

Is the rate of drug overdose deaths in Indiana impacted by the demonstration?

Measure(s) Used to Answer Question:

Use of Opioids at High Dosage in Persons Without Cancer

Measure Steward: National Quality Forum #2940 [CMS Monitoring Metric #18]

Results for the Demonstration Population



Desired Trend:

CY2018-2019 average

Decrease

5.1%

Statistical Review:

Chi-Square

<.0001

CY2022-2023 average

3.0%

Probability:

Significant

Change

-41.8%

Finding:

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	-40.6%	3.0% Northwest Region	-38.2%	1.3%
OUD	-55.6%	4.7% North Central Region	-48.7%	4.4%
Dual Eligible	low sample	0.1% Northeast Region	-14.6%	6.5%
Pregnant Women	low sample	0.6% West Central Region	-58.7%	1.8%
Criminally Involved	low sample	0.0% Central Region	-42.4%	3.4%
MRO	low sample	2.3% East Central Region	-48.3%	2.3%
		Southwest Region	-48.4%	2.2%
		Southeast Region	-55.0%	2.3%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Color coding is inverted for this measure because the desired trend is a decrease, not an increase.

Point change more than 5 points below	Point change is 2 to 5 points above
Point change is 2 to 5 points below	Point change is more than 5 points above
Point change is 2 points below to 2 above	Sample is too small to report on (n < 50 obs)

The use of opioids at high dosage in persons without cancer decreased 41.8 percent during the demonstration, from a pre-demonstration average of 5.1 percent to a demonstration average of 3.0 percent. Percentage change values varied by subpopulation and region. The absolute average rate during the demonstration period was similar for the two subpopulations that did not have low sample size. The North Central, Northeast and Central regions had rates higher than the demonstration average.

Exhibit 58. Results from CMS Metric #19: Use of Opioids from Multiple Providers in Persons Without Cancer

Research Question:

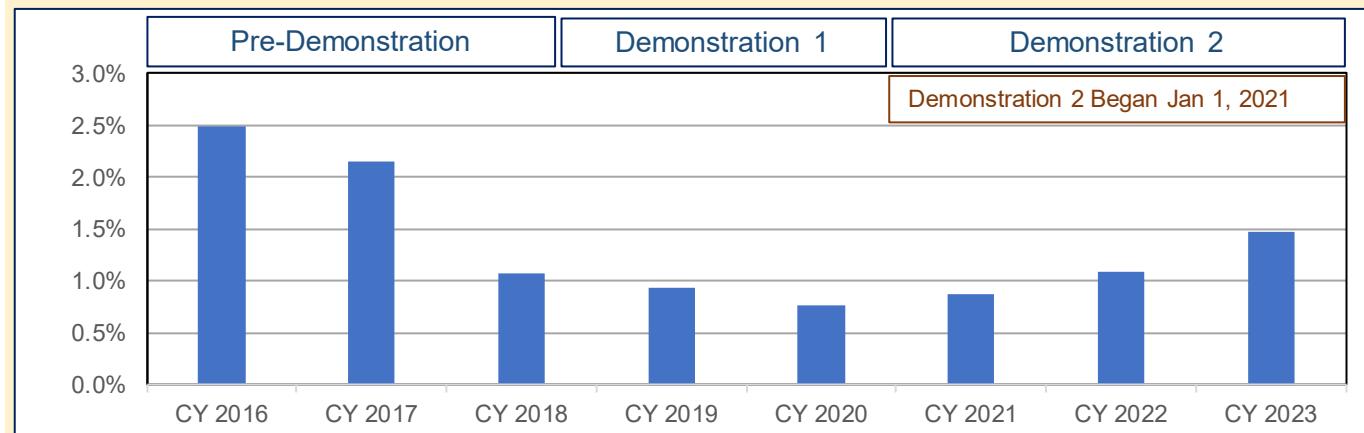
Is the rate of drug overdose deaths in Indiana impacted by the demonstration?

Measure(s) Used to Answer Question:

Use of Opioids from Multiple Providers in Persons Without Cancer

Measure Steward: National Quality Forum #2950 [CMS Monitoring Metric #19]

Results for the Demonstration Population



Desired Trend:

CY2018-2019 average

Decrease

1.0%

Statistical Review:

Chi-Square

CY2022-2023 average

1.3%

<.0001

Change

27.7%

Probability:

Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	38.1%	1.3% Northwest Region	27.0%	0.8%
OUD	5.3%	2.5% North Central Region	low sample	1.5%
Dual Eligible	low sample	0.1% Northeast Region	24.2%	1.4%
Pregnant Women	low sample	1.8% West Central Region	low sample	1.3%
Criminally Involved	low sample	4.5% Central Region	-0.3%	1.5%
MRO	19.7%	1.9% East Central Region	46.0%	1.1%
		Southwest Region	97.4%	1.4%
		Southeast Region	40.8%	1.0%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Color coding is inverted for this measure because the desired trend is a decrease, not an increase.

Point change more than 5 points below

Point change is 2 to 5 points above

Point change is 2 to 5 points below

Point change is more than 5 points above

Point change is 2 points below to 2 above

Sample is too small to report on (n < 50 obs)

The use of opioids from multiple providers in persons without cancer increased 27.7 percent during the demonstration, from a pre-demonstration average of 1.0 percent to a demonstration average of 1.3 percent. The three subpopulations that did not have low sample data, all had increases. The Northwest, East Central and Southeast regions all had average rates below the statewide average during the demonstration. Only the Central region saw improvement when compared to its pre-demonstration period rate.

Exhibit 59. Results from CMS Metric #21: Concurrent Use of Opioids and Benzodiazepines

Research Question:

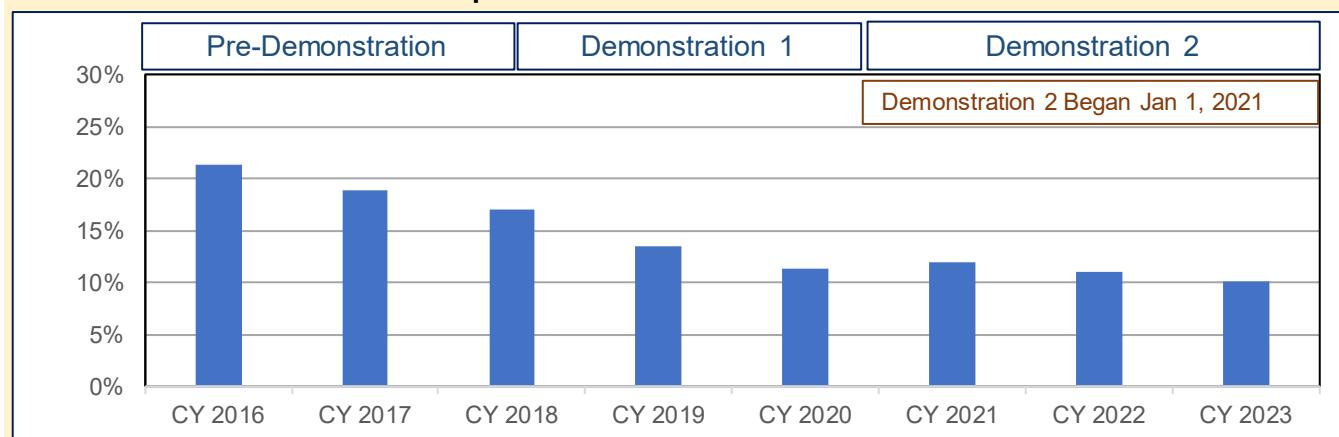
Is the rate of drug overdose deaths in Indiana impacted by the demonstration?

Measure(s) Used to Answer Question:

Concurrent Use of Opioids and Benzodiazepines

Measure Steward: National Quality Forum #3389 [CMS Monitoring Metric #21]

Results for the Demonstration Population



Desired Trend:
CY2018-2019 average
CY2022-2023 average
Change

Decrease
15.3%
10.5%
-31.1%

Statistical Review:
Probability:
Finding:

Chi-Square
<.0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change 2022-23 Avg		Pct Change 2022-23 Avg
Model	-30.1%	10.7% Northwest Region	-30.4% 14.2%
OUD	-28.8%	14.3% North Central Region	-44.8% 9.7%
Dual Eligible	-46.5%	4.4% Northeast Region	-27.6% 4.2%
Pregnant Women	34.2%	4.7% West Central Region	-34.8% 10.4%
Criminally Involved	low sample	Central Region	-37.7% 8.3%
MRO	-26.0%	13.4% East Central Region	-28.0% 10.3%
		Southwest Region	-23.9% 15.4%
		Southeast Region	-21.8% 11.7%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration
Color coding is inverted for this measure because the desired trend is a decrease, not an increase.

Point change more than 5 points below	Point change is 2 to 5 points above
Point change is 2 to 5 points below	Point change is more than 5 points above
Point change is 2 points below to 2 above	Sample is too small to report on (n < 50 obs)

The concurrent use of opioids and benzodiazepines decreased 31.1 percent during the demonstration, from a pre-demonstration average of 15.3 percent to a demonstration average of 10.5 percent.

Improvement was seen in all subpopulations and regions (the sample for criminally involved was too small to report on). Three regions had an absolute rate above the statewide average during the demonstration.

The highest absolute rates during the demonstration were observed among the OUD and MRO subpopulations.

Exhibit 60. Results from CMS Metric #23: ED Visits for SUD Per 1,000 Medicaid Beneficiaries

Research Question:

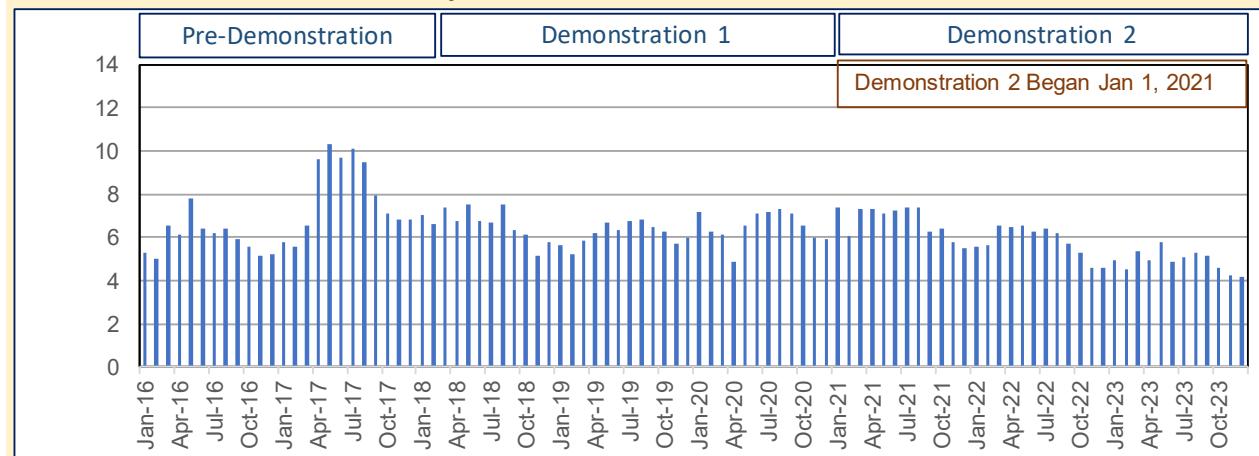
Does the rate of emergency department visits for SUD per 1,000 Medicaid beneficiaries decrease during the demonstration period?

Measure(s) Used to Answer Question: ED Visits for SUD Per 1,000 Medicaid Beneficiaries

Measure Steward: CMS [CMS Monitoring Metric #23]

Data Source: State claims/encounters and enrollment data

Results for the Demonstration Population



Desired Trend:

Decrease

Statistical Review:

Interrupted Time Series

Estimate

P-Value

Significant

Post-intervention trend compared to pre-intervention trend

-0.0471

0.0434

Yes

Pre-intervention trend

-0.0238

0.1434

No

Post-intervention trend

-0.0709

<.0001

Yes

Trend Analyzed: 25-mo avg pre-Demonstration against 25-mo avg during Demonstration

Result for Demonstration: decrease of 16.0%

Results for Subpopulations within the Demonstration:

Model	-26.7%	Northwest Region	-1.7%
OUD	-19.1%	North Central Region	8.4%
Dual Eligible	24.8%	Northeast Region	-26.4%
Pregnant Women	-19.1%	West Central Region	-8.6%
Criminally Involved	246.6%	Central Region	-23.4%
MRO	-15.8%	East Central Region	-29.6%
		Southwest Region	-43.2%
		Southeast Region	-40.0%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Color coding is inverted for this measure because the desired trend is a decrease, not an increase.

Point change more than 5 points below

Point change is 2 to 5 points above

Point change is 2 to 5 points below

Point change is more than 5 points above

Point change is 2 points below to 2 above

Average ED utilization for SUD in the demonstration period was 5.4 visits per 1,000 Medicaid beneficiaries compared to 6.4 visits per 1,000 during the pre-demonstration period, a decrease of 16.0 percent. Each cohort population also saw a decrease in ED utilization per 1,000 for SUD with the exceptions of the criminally involved and dual eligibles. All regions showed a decrease in ED visits, except for the North Central region. The post-intervention trend compared to the pre-intervention trend is significant and now the post-intervention trend is also significant with the desired trend.

State SUD Implementation Plan

Two of the three items in the Implementation Protocol related to treatment and prevention strategies for opioid abuse have been completed. These relate to emergency responder reimbursement of naloxone and expanded coverage of peer recovery coaches, crisis intervention, and intensive outpatient treatment. The expanded use of INSPECT (Indiana's prescription drug monitoring program) across all hospitals in the State is still in process.

Exhibit 61. Tracking Completion of Action Items in the SUD Implementation Plan for CMS Milestone 5

Action Item Description	Intended Completion Date	Current Status
28 Consider options for emergency responder reimbursement of naloxone	Early 2018	Completed
29 Integrate all Indiana hospitals with INSPECT (the State's prescription drug monitoring program)	Within 3 years	Open. In process; 152 of 171 (88.4%) hospitals integrated as of 05/31/2024.
30 Expand coverage of peer recovery coaches	No specific date	Completed

Stakeholder Feedback

As found in Exhibit 62, beneficiaries offered feedback to the FSSA on modes of communication to offer better awareness of the Medicaid SUD benefit to consumers. Both providers and MCEs offered recommendations on modes of communication to them regarding FSSA policies, billing, and authorization requirements.

Exhibit 62. Stakeholder Feedback Related to CMS Milestone 5

Topic	From Whom	Type of Feedback	Feedback	
1	MCEs	Critique	<i>While the MCEs were largely complimentary of FSSAs guidance and communication, they felt more could have been done during unwinding of PHE policies.</i> Specifically, the end of the PHE caused confusion among providers regarding the PHE 21-day authorization period when it reverted to pre-PHE policy.	
	MCEs	Recommendation	<i>The MCEs recommended improved guidance related to SUD demonstration efforts.</i> Actions most frequently mentioned include increased guidance and training for providers on: individualized treatment planning with SMART goals rather than standard documentation; and quality standards and monitoring processes to assist providers with improving compliance and care quality.	
	Providers	Critique	<i>Guidance from FSSA has been helpful but has been lacking since the unwinding of the PHE.</i> Providers noted that there was significant communication from FSSA prior to and during the COVID-19 pandemic. With the conclusion of the PHE, communication has been lacking and resulted in confusion and inconsistencies within the provider network regarding the delivery of SUD services.	
2	Systems-related readiness	Providers	Compliment	<i>Most providers have attended the ASAM trainings.</i> The majority (34 of 48) of providers responded that they have attended, or had staff attend, the ASAM trainings. Almost all providers (96%) responding indicated that the trainings sponsored by FSSA were helpful.
3	Written communications from FSSA to providers	Providers	Compliment	<i>FSSA bulletins and meetings are helpful in supporting participation and provision of SUD services.</i> In general, providers find the guidance in bulletins to be helpful. Additionally, providers note that having direct contact with case managers, and the standing meeting hosted by FSSA, are helpful and encourage participation and provision of SUD services.
		Providers	Recommendation	<i>Providers recommend SUD focused communications.</i> While providers do find the FSSA bulletins to be helpful, some feedback was provided to make them better. Feedback included needing bulletins to be specific to one topic at a time, and having follow-up Q&A sessions where providers can discuss newly released bulletins with FSSA.

62. Stakeholder Feedback Related to CMS Milestone 5 – continued

		From	Type of	
4	Other modes of communication	Providers	Recommendation	<i>The majority of providers (28 of 48) would like a dedicated contact person at FSSA and the MCEs to call with clarifying questions.</i>
		Beneficiaries	Recommendation	<i>Beneficiaries suggested targeted outreach to those seeking treatment and where to get help. Beneficiaries note that social media outreach (12 of 22), Alcoholics Anonymous and Narcotics Anonymous meetings (12 of 22), and healthcare providers (11 of 22) are the best outreach methods to help themselves or others who are seeking treatment get connected to providers who can help them.</i>
5	FSSA initiatives	MCEs	Compliment	<i>All of the MCEs characterized the guidance provided by the state for the Pregnancy Promise Program as helpful. They note a supply of consistent messaging materials which ensured that all MCEs communicated the same information to providers and members. Additionally, the MCEs are impressed with the growth of the Pregnancy Promise Program overall.</i>
6	Effects of the demonstration	MCEs	Recommendation	<i>Dedicated training on the 1115 demonstration would be helpful. The MCEs continue to suggest that dedicated training for new and existing providers on the 1115 SUD demonstration and SUD specific policies would be beneficial. Specific examples mentioned include: rule changes; individualized care planning; facility requirements; and additional support and resources to help providers understand the ASAM levels of care.</i>
		Providers	Compliment	<i>Access has improved, specifically in MAT, OTP, telehealth, and supportive housing. Providers noted various improvements in the delivery of treatment for SUD in 2023, compared to 2021. Most frequently, providers commented on improvements around the increased support of MAT, OTP, telehealth, the expansion of supportive housing and transportation.</i>
		Providers	Critique	<i>Providers commented that understanding processes, coverage, rates and staffing have gotten worse and are areas for improvement. Providers commented that some items have worsened over the past year. Most commonly, providers mentioned a worsening of administrative burden including authorizations, funding, billing requirements and discrepancies. Additionally, providers mentioned an increase in information discrepancies between websites (FSSA and MCEs) and provider service representatives, which has resulted in confusion and slowing of service delivery. Lastly, some providers mentioned that they felt there were too many ASAM 3.5 facilities.</i>
		Providers	Recommendation	<i>Improve consistency between state intentions and actual practice. Providers had multiple recommendations related to the delivery of treatment for SUD including care coordination that emphasizes coordination, increased housing and transportation supports, availability of ASAM 3.7, and improved billing and coverage processes with a specific mention of IOP.</i>

Milestone #6: Improved Care Coordination and Transitions Between Levels of Care

Evaluation Measures

Fifteen measures were examined to assess improvement in care coordination and transitions between levels of care. In Exhibit 63 below, it shows that the desired outcome was met in fourteen out of the fifteen measures. A test for statistical significance was conducted on ten of the fifteen measures. Among these ten measures, the desired

outcomes were found to be statistically significant in all ten measures. More detailed information can be found on each measure in the pages that follow.

Exhibit 63. Summary of Findings for Metrics Mapped to CMS Milestone 6

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Initiation of Alcohol and Other Drug Dependence Treatment, Total AOD Population	Increase	Yes	Chi-square	Yes	<.0001
2	Initiation of Alcohol and Other Drug Dependence Treatment, Alcohol Abuse Only	Increase	Yes	Chi-square	Yes	<.0001
3	Initiation of Alcohol and Other Drug Dependence Treatment, Opioid Abuse Only	Increase	Yes	Chi-square	Yes	<.0001
4	Initiation of Alcohol and Other Drug Dependence Treatment, Abuse Other than Alcohol or Opioid	Increase	Yes	Chi-square	Yes	<.0001
5	Engagement of Alcohol and Other Drug Dependence Treatment, Total AOD Population	Increase	Yes	Chi-square	Yes	<.0001
6	Engagement of Alcohol and Other Drug Dependence Treatment, Alcohol Abuse Only	Increase	Yes	Chi-square	Yes	<.0001
7	Engagement of Alcohol and Other Drug Dependence Treatment, Opioid Abuse Only	Increase	Yes	Chi-square	Yes	<.0001
8	Engagement of Alcohol and Other Drug Dependence Treatment, Abuse Other than Alcohol or Opioid	Increase	Yes	Chi-square	Yes	<.0001
9	Follow-up After ED Visit for Alcohol or Other Drug Dependence, 7 days	Increase	Yes	Chi-square	Yes	<.0001
10	Follow-up After ED Visit for Alcohol or Other Drug Dependence, 30 days	Increase	Yes	Chi-square	Yes	<.0001
11	Percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries which were followed by a SUD treatment in 7 days	Increase	Yes	no test run	N/A	N/A
12	Percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries which were followed by a SUD treatment in 14 days.	Increase	Yes	no test run	N/A	N/A
13	Percentage of discharges from inpatient or residential treatment for SUD that readmit for inpatient or residential within 180 days of initial discharge	Decrease	No	no test run	N/A	N/A
14	Care coordination rate at MCEs over time	Increase	Yes	no test run	N/A	N/A
15	Rate of Transition to ASAM Level 1 and 2 Services After Receiving ASAM Level 3 or 4 Service	Increase	Yes	no test run	N/A	N/A

Exhibit 64. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Initiation, Alcohol Abuse only

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

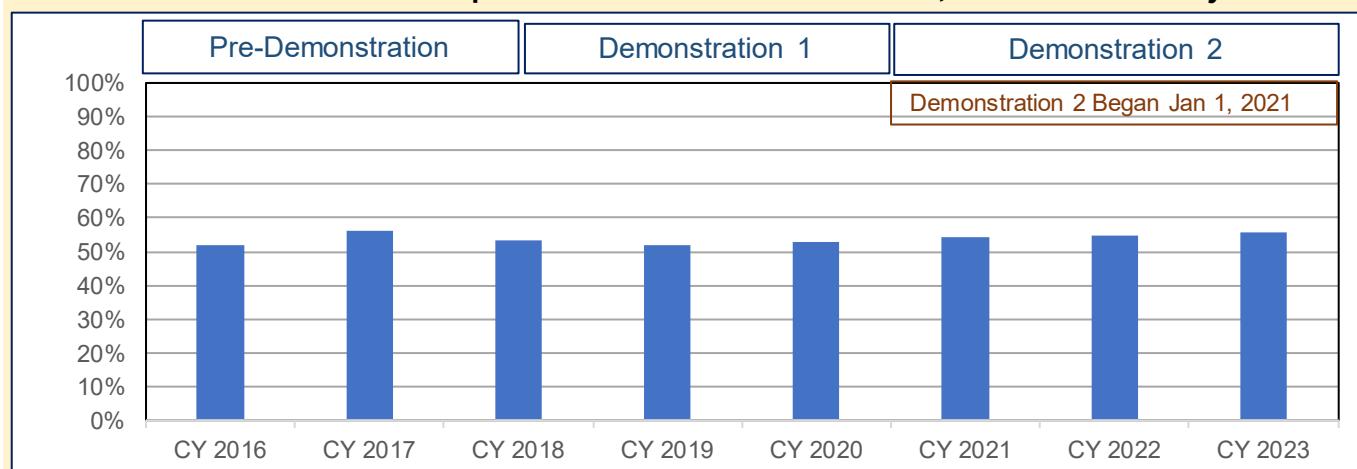
Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Initiation, Alcohol Abuse only



Desired Trend:

CY2018-2019 average
CY2022-2023 average
Change

Increase

52.7%
55.3%
5.0%

Statistical Review:

Probability:
Finding:

Chi-Square
<.0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change 2022-23 Avg		Pct Change 2022-23 Avg	
Model	9.8%	56.3% Northwest Region	15.7%	57.9%
OUD	10.0%	71.8% North Central Region	6.7%	55.8%
Dual Eligible	-12.8%	49.6% Northeast Region	3.9%	59.7%
Pregnant Women	-0.6%	54.9% West Central Region	-3.4%	53.5%
Criminally Involved	8.8%	64.7% Central Region	11.7%	55.7%
MRO	0.1%	58.2% East Central Region	-9.2%	51.6%
		Southwest Region	4.3%	53.3%
		Southeast Region	0.3%	51.6%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of initiation of treatment for the population specific to alcohol abuse increased 5.0 percent during the demonstration, from a pre-demonstration average of 52.7 percent to a demonstration average of 55.3 percent. The dual eligible and the pregnant women subpopulations were the only subpopulations to decrease in CY 2022-2023. All regions except the West Central and East Central increased when comparing the post intervention to the pre intervention period.

Exhibit 65. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Initiation, Opioid Abuse only

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Initiation, Opioid Abuse only



Desired Trend:

CY2018-2019 average

Increase

62.0%

Statistical Review:

Chi-Square

<.0001

CY2022-2023 average

66.9%

Probability:

Significant

Change

7.9%

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	11.5%	75.5% Northwest Region	6.5%	68.7%
OUD	7.9%	66.9% North Central Region	4.0%	69.9%
Dual Eligible	-22.3%	37.5% Northeast Region	22.1%	74.0%
Pregnant Women	9.1%	80.9% West Central Region	8.0%	65.9%
Criminally Involved	12.5%	82.8% Central Region	7.9%	64.8%
MRO	6.6%	69.6% East Central Region	15.8%	68.2%
		Southwest Region	3.5%	69.1%
		Southeast Region	11.4%	63.3%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above

Point change is 2 to 5 points below

Point change is 2 to 5 points above

Point change is more than 5 points below

Point change is 2 points above to 2 below

Sample is too small to report on (n < 50 obs)

The rate of initiation of treatment for the population specific to opioid abuse increased 7.9 percent during the demonstration, from a pre-demonstration average of 62.1 percent to a demonstration average of 66.9 percent. The greatest improvement was seen among the population enrolled in criminally involved, model (managed care) and pregnant women subpopulations. All regions saw improvement in the initiation rate during the demonstration. All regions saw improvement, with the Northeast and East Central regions experiencing the most improvement during the demonstration.

Exhibit 66. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Initiation, Abuse other than Alcohol or Opioid only

Research Question:

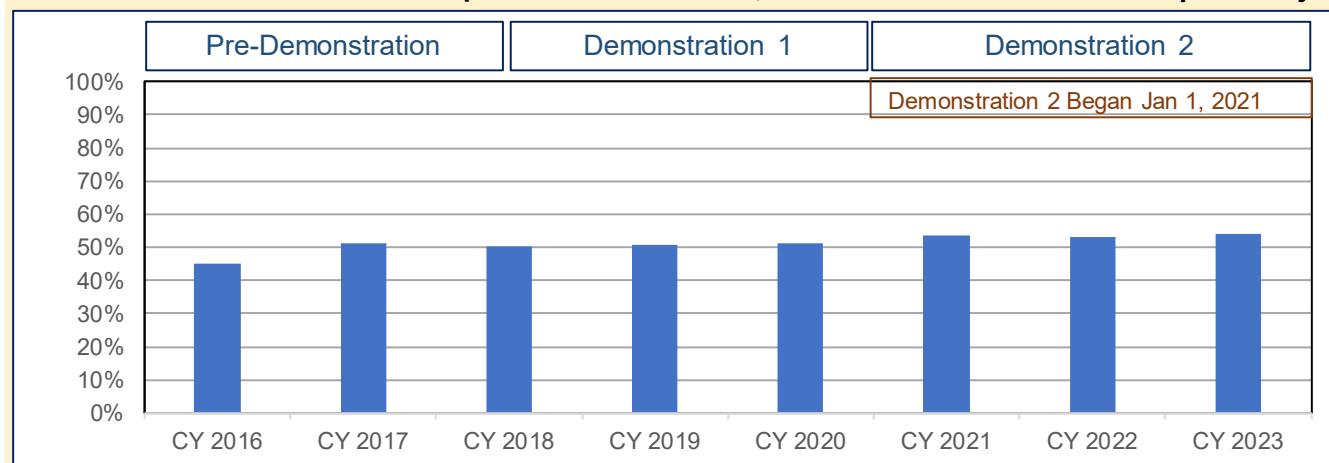
Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population *Initiation, Abuse other than Alcohol or Opioid only*



Desired Trend:	Increase	Statistical Review:	Chi-Square
CY2018-2019 average	50.4%	Probability:	<.0001
CY2022-2023 average	53.8%	Finding:	Significant
Change	6.7%		

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	9.9%	54.9% Northwest Region	20.7%	58.8%
OUD	5.9%	65.5% North Central Region	8.7%	57.0%
Dual Eligible	-11.3%	45.3% Northeast Region	14.6%	60.8%
Pregnant Women	-2.4%	52.4% West Central Region	-7.5%	51.6%
Criminally Involved	6.3%	61.0% Central Region	12.5%	52.8%
MRO	0.7%	56.7% East Central Region	-0.1%	53.9%
		Southwest Region	5.3%	50.8%
		Southeast Region	0.1%	48.7%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

	Point change more than 5 points above		Point change is 2 to 5 points below
	Point change is 2 to 5 points above		Point change is more than 5 points below
	Point change is 2 points above to 2 below		Sample is too small to report on (n < 50 obs)

The rate of initiation of treatment for the population specific to abuse other than alcohol or opioids increased 6.7 percent during the demonstration, from a pre-demonstration average of 50.4 percent to a demonstration average of 53.8 percent. The greatest improvement is seen in the Northwest and Northeast regions. These regions, along with the Central and North Central regions, had the highest initiation rates compared to the statewide average by region. All subpopulations except pregnant women have average rates above the statewide average in the current demonstration period.

Exhibit 67. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Initiation, Total AOD Population

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Initiation, Total AOD Population



Desired Trend:

CY2018-2019 average

Increase

53.5%

Statistical Review:

Chi-Square

CY2022-2023 average

56.2%

Change

5.1%

Probability:

<.0001

Finding:

Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	8.8%	58.9% Northwest Region	13.4%	59.0%
OUD	6.7%	68.1% North Central Region	6.3%	57.0%
Dual Eligible	-14.5%	43.7% Northeast Region	12.1%	62.7%
Pregnant Women	-0.5%	58.2% West Central Region	-5.5%	53.5%
Criminally Involved	11.4%	70.0% Central Region	9.9%	55.3%
MRO	0.3%	58.9% East Central Region	0.4%	56.4%
		Southwest Region	3.9%	54.9%
		Southeast Region	1.7%	53.5%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of initiation of treatment for the total AOD population increased 5.1 percent during the demonstration, from a pre-demonstration average of 53.5 percent to a demonstration average of 56.2 percent. Improvement was seen in all subpopulations with the exception of dual eligibles and pregnant women. The West Central region was the only region that did not show improvement during the demonstration. The actual rate of initiation was highest for the criminally involved and OUD subpopulations during the demonstration.

Exhibit 68. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Engagement, Alcohol Abuse only

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

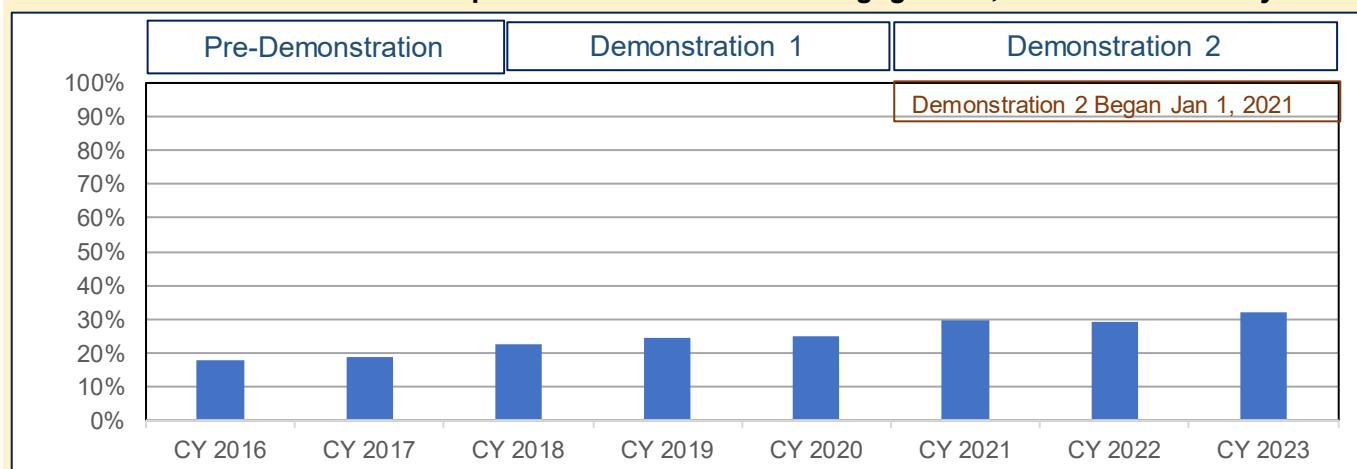
Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Engagement, Alcohol Abuse only



Desired Trend:

CY2018-2019 average

Increase

23.7%

Statistical Review:

Chi-Square

CY2022-2023 average

30.7%

Probability:

<.0001

Change

29.8%

Finding:

Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change 2022-23 Avg		Pct Change 2022-23 Avg
Model	27.0%	33.1% Northwest Region	18.1% 30.0%
OUD	58.7%	48.0% North Central Region	26.6% 28.2%
Dual Eligible	23.3%	20.4% Northeast Region	47.9% 32.0%
Pregnant Women	8.6%	36.2% West Central Region	42.0% 31.9%
Criminally Involved	70.7%	43.1% Central Region	26.9% 29.9%
MRO	6.2%	49.0% East Central Region	46.1% 31.1%
		Southwest Region	18.2% 33.0%
		Southeast Region	56.2% 32.4%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of engagement in treatment for the population specific to alcohol abuse increased 29.8 percent during the demonstration, from a pre-demonstration average of 23.7 percent to a demonstration average of 30.7 percent. There was improvement seen among all subpopulations and regions examined. Five of the regions were above the statewide average. The greatest improvement in engagement was seen among the criminally involved and OUD subpopulations.

Exhibit 69. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Engagement, Opioid Abuse only

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Engagement, Opioid Abuse only



Desired Trend:

CY2018-2019 average

Increase

45.9%

Statistical Review:

Chi-Square

<.0001

CY2022-2023 average

58.1%

Probability:

Significant

Change

26.7%

Finding:

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	21.2%	63.2% Northwest Region	4.5%	51.0%
OUD	26.7%	58.1% North Central Region	38.0%	51.9%
Dual Eligible	12.5%	22.4% Northeast Region	61.0%	56.6%
Pregnant Women	17.1%	65.3% West Central Region	63.9%	64.3%
Criminally Involved	27.5%	72.3% Central Region	28.3%	56.8%
MRO	11.2%	68.2% East Central Region	37.1%	61.9%
		Southwest Region	9.0%	61.8%
		Southeast Region	20.6%	60.9%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above

Point change is 2 to 5 points below

Point change is 2 to 5 points above

Point change is more than 5 points below

Point change is 2 points above to 2 below

Sample is too small to report on (n < 50 obs)

The rate of engagement in treatment for the population specific to opioid abuse increased 26.7 percent during the demonstration, from a pre-demonstration average of 45.9 percent to a demonstration average of 58.1 percent. All subpopulations and regions examined saw improvement during the demonstration, but the greatest improvement was seen among the criminally involved and OUD subpopulations. The West Central and Northeast regions had the largest improvement during the demonstration. The criminally involved and OUD subpopulations had the greatest rates of improvement in engagement during the demonstration.

Exhibit 70. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Engagement, Abuse other than Alcohol or Opioid only

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

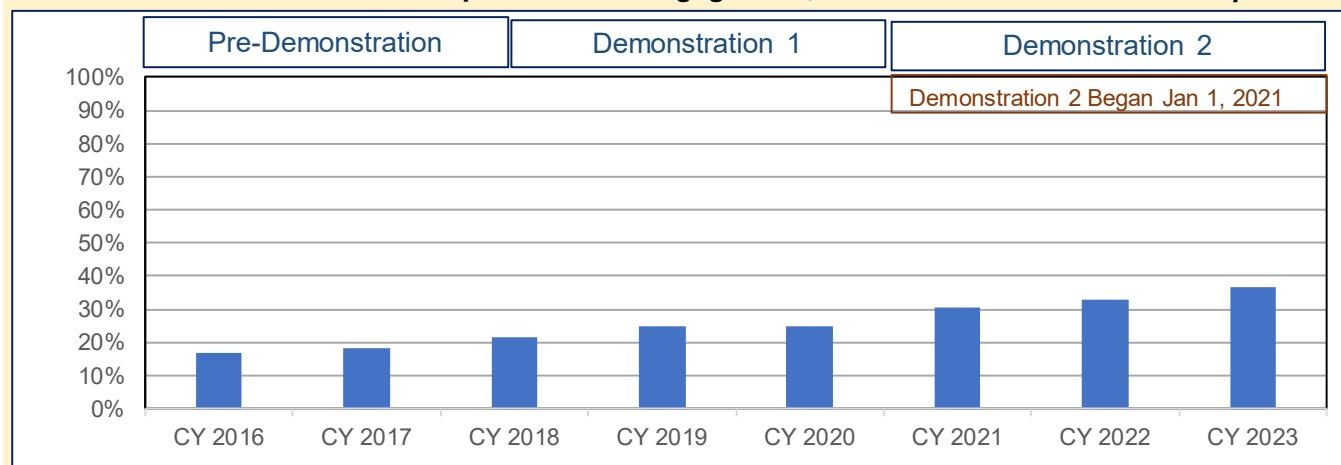
Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Engagement, Abuse other than Alcohol or Opioid only



Desired Trend:

CY2018-2019 average
CY2022-2023 average
Change

Increase

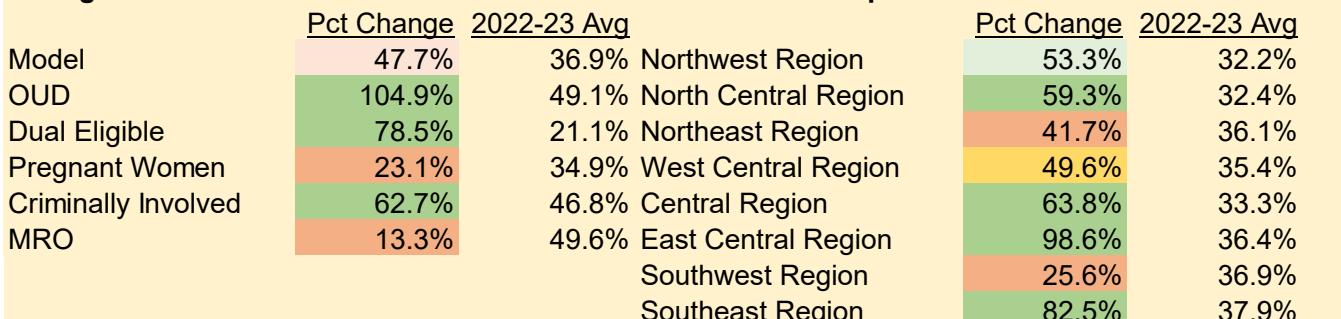
23.2%
34.7%
50.0%

Statistical Review:

Probability: Finding:

Chi-Square
<.0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations



Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of engagement in treatment for the population specific to abuse other than alcohol or opioids increased 50.0 percent during the demonstration, from a pre-demonstration average of 23.2 percent to a demonstration average of 34.7 percent. All subpopulations and regions of the state saw an increase during the demonstration but the greatest improvement was seen in OUD, dual eligible and criminally involved subpopulations. The actual rate of engagement was under 40 percent for dual eligibles, pregnant women and the model (managed care) subpopulations during the demonstration.

Exhibit 71. Results from CMS Metric #15: Initiation and Engagement of Alcohol and Other Drug Dependence Treatment Engagement, Total AOD Population

Research Question:

Does the level and trend of initiation and engagement in treatment increase in the SUD population in the demonstration period?

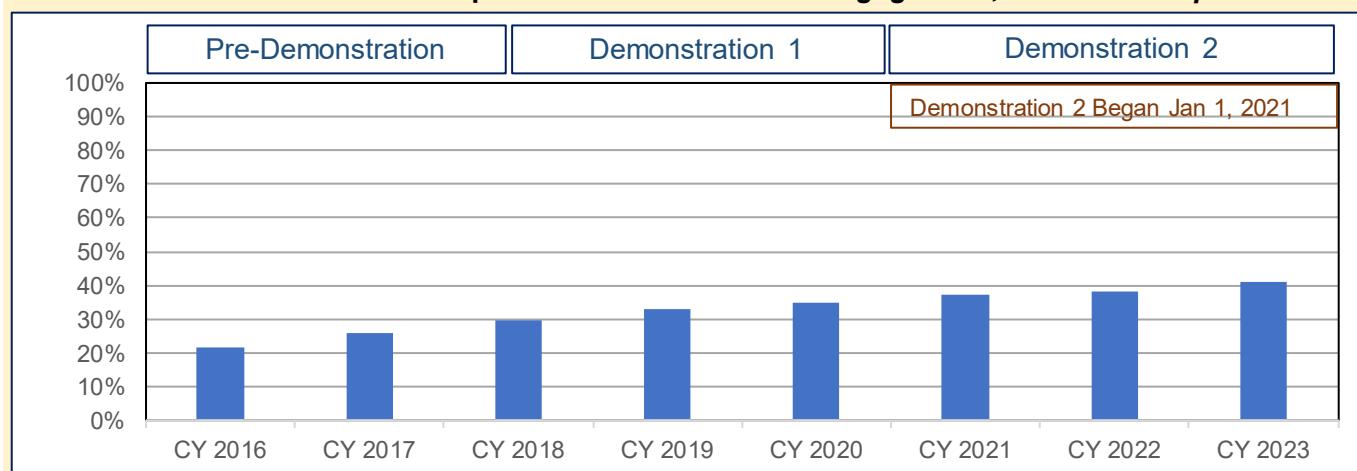
Measure(s) Used to Answer Question:

Initiation and Engagement of Alcohol and Other Drug Dependence Treatment

Measure Steward: NCQA, National Quality Forum #0004 [CMS Monitoring Metric #15]

Results for the Demonstration Population

Engagement, Total AOD Population



Desired Trend:

CY2018-2019 average
CY2022-2023 average
Change

Increase

31.5%
39.5%
25.2%

Statistical Review:

Probability:
Finding:

Chi-Square
<.0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change 2022-23 Avg		Pct Change 2022-23 Avg	
Model	21.8%	42.7% Northwest Region	10.8%	34.7%
OUD	27.2%	58.5% North Central Region	35.3%	34.5%
Dual Eligible	24.2%	21.9% Northeast Region	52.1%	39.9%
Pregnant Women	15.3%	43.3% West Central Region	40.9%	39.9%
Criminally Involved	33.1%	57.1% Central Region	21.0%	38.4%
MRO	6.1%	53.9% East Central Region	42.4%	43.2%
		Southwest Region	16.1%	42.3%
		Southeast Region	31.0%	45.1%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of engagement in treatment for the total AOD population increased 25.2 percent during the demonstration, from a pre-demonstration average of 31.5 percent to a demonstration average of 39.5 percent. Improvement was seen in all subpopulations and regions. Similar to the rate of initiation, the actual rate of engagement was highest for the OUD, criminally involved, and MRO subpopulations during the demonstration.

Exhibit 72. Results from CMS Metric #17a: Follow-up After ED Visit for Alcohol or Other Drug Dependence, 7 days

Research Question:

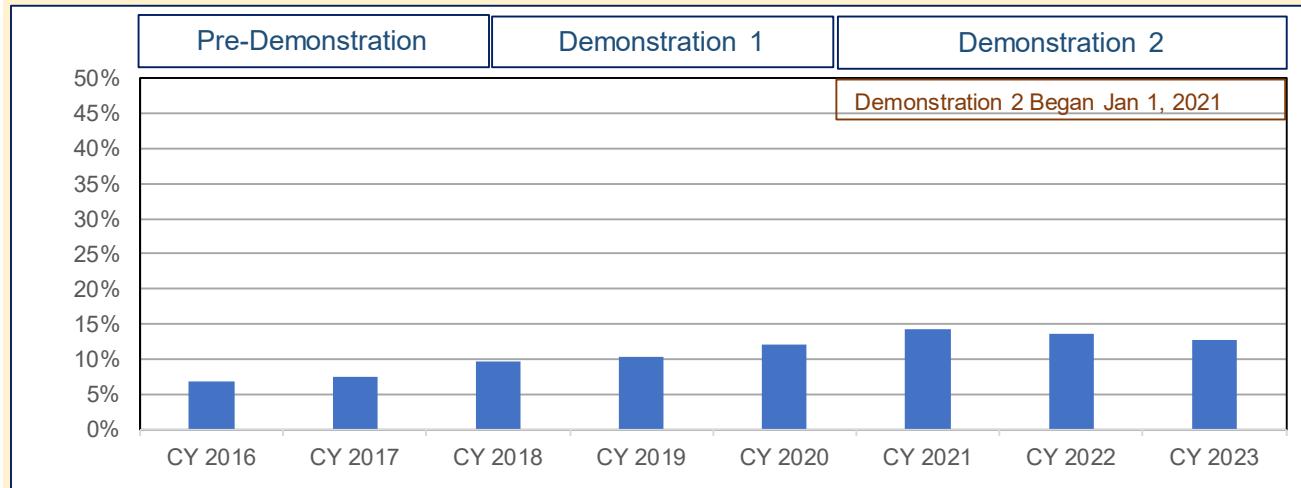
Does the level and trend of follow-up after discharge from the Emergency Department for Alcohol or Other Drug Dependence increase among the SUD population in the demonstration period?

Measure(s) Used to Answer Question:

Follow-up After ED Visit for Alcohol or Other Drug Dependence, 7 days

Measure Steward: NCQA, National Quality Forum #3488 [CMS Monitoring Metric #17(1)]

Results for the Demonstration Population



Desired Trend:
CY2018-2019 average
CY2022-2023 average
Change

Increase
10.0%
13.2%
32.0%

Statistical Review:
Probability:
Finding:

Chi-Square
<.0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	33.9%	12.9% Northwest Region	-26.7%	9.4%
OUD	32.2%	22.1% North Central Region	9.8%	7.2%
Dual Eligible	24.3%	8.8% Northeast Region	45.0%	10.3%
Pregnant Women	73.0%	13.8% West Central Region	-16.3%	11.5%
Criminally Involved	low sample	Central Region	70.4%	15.0%
MRO	28.0%	19.9% East Central Region	104.9%	16.1%
		Southwest Region	21.4%	15.5%
		Southeast Region	30.4%	13.8%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of follow-up within 7 days after an ED visit for alcohol or drug dependence among the SUD beneficiaries increased 32.0 percent during the demonstration, from a pre-demonstration average of 10.0 percent to a demonstration average of 13.2 percent. There was improvement seen among all subpopulations and regions, except for the Northwest and West Central regions. The highest rate of follow-up was found to be 22.1 percent for the OUD subpopulation and 19.9 percent for the MRO subpopulation. All other cohort populations had a rate below 17 percent.

Exhibit 73. Results from CMS Metric #17a: Follow-up After ED Visit for Alcohol or Other Drug Dependence, 30 days

Research Question:

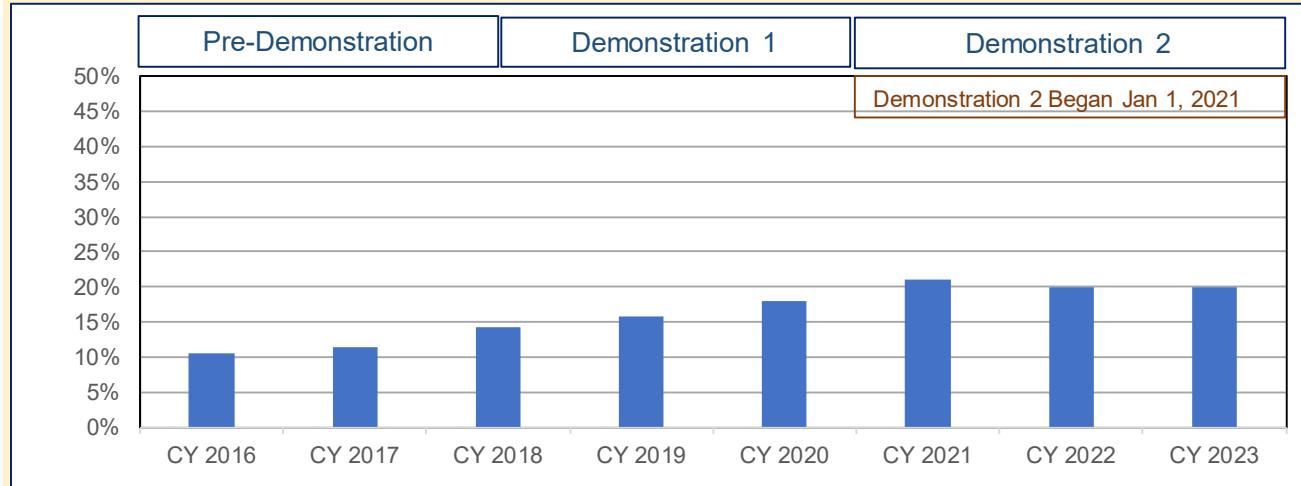
Does the level and trend of follow-up after discharge from the Emergency Department for Alcohol or Other Drug Dependence increase among the SUD population in the demonstration period?

Measure(s) Used to Answer Question:

Follow-up After ED Visit for Alcohol or Other Drug Dependence, 30 days

Measure Steward: NCQA, National Quality Forum #3488 [CMS Monitoring Metric #17(2)]

Results for the Demonstration Population



Desired Trend:
CY2018-2019 average
CY2022-2023 average
Change

Increase
15.0%
20.0%
33.3%

Statistical Review:
Probability:
Finding:

Chi-Square
<.0001
Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change	2022-23 Avg	Pct Change	2022-23 Avg
Model	32.1%	20.0%	Northwest Region	-8.8%
OUD	33.7%	35.3%	North Central Region	23.8%
Dual Eligible	49.9%	14.5%	Northeast Region	60.7%
Pregnant Women	13.0%	23.1%	West Central Region	3.0%
Criminally Involved	low sample		Central Region	56.3%
MRO	13.6%	31.7%	East Central Region	87.0%
			Southwest Region	26.3%
			Southeast Region	15.8%
				22.0%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

	Point change more than 5 points above		Point change is 2 to 5 points below
	Point change is 2 to 5 points above		Point change is more than 5 points below
	Point change is 2 points above to 2 below		Sample is too small to report on (n < 50 obs)

The rate of follow-up within 30 days after an ED visit for alcohol or drug dependence among the SUD beneficiaries increased 33.3 percent during the demonstration, from a pre-demonstration average of 15.0 percent to a demonstration average of 20.0 percent. There was improvement seen among all subpopulations and regions examined, with the exception of the Northwest region. However, the highest rate of follow-up was found to be 35.3 percent for the OUD and 31.7 percent for the MRO subpopulation. All other cohort populations had a rate below 25 percent.

Exhibit 74. Percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries which were followed by a SUD treatment

Research Question:

Does the demonstration improve transitions between ASAM levels of care?

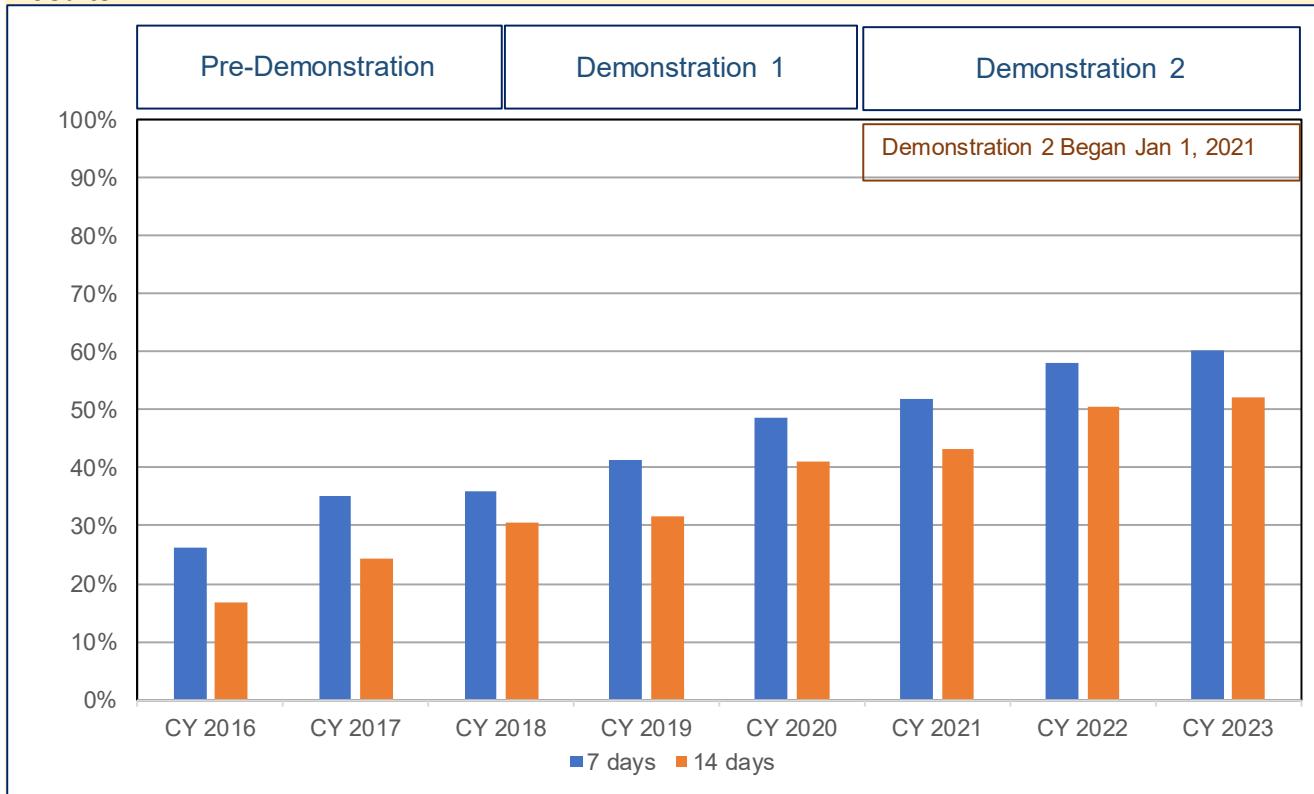
Measure(s) Used to Answer Question:

Percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries age 18-64 which were followed by a SUD treatment within 7 days and 14 days in a 12 month period.

Measure Steward: RTI, NQF #3590

Data Source: FSSA data warehouse of claims and encounters; enrollment data

Results



Desired Trend: Increase in SUD treatment within 7 and 14 days of inpatient or residential treatment

	7 Days	14 Days
CY2018-2019 average	38.7%	31.0%
CY2022-2023 average	59.1%	51.3%
Change	53.0%	65.2%

Statistical Review: No statistical tests were run on this measure

Finding: Increase in both

The percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries that were followed by a SUD treatment within 7 days and 14 days increased in each year since the initial demonstration period. Follow-up occurring within 7 days of the discharge increased by 53.0 percent from the CY 2018-2019 average of 38.7 percent to 59.1 percent on average in CY 2022-2023. A similar pattern was observed within 14 days of discharge which increased by 65.2 percent from the CY 2018-2019 average of 31.0 percent to 51.3 percent on average in CY 2022-2023.

Exhibit 75. Results from HMA-Burns Metric: Percentage of discharges from inpatient or residential treatment for SUD that readmit for inpatient or residential within 180 days of initial discharge**Research Question:**

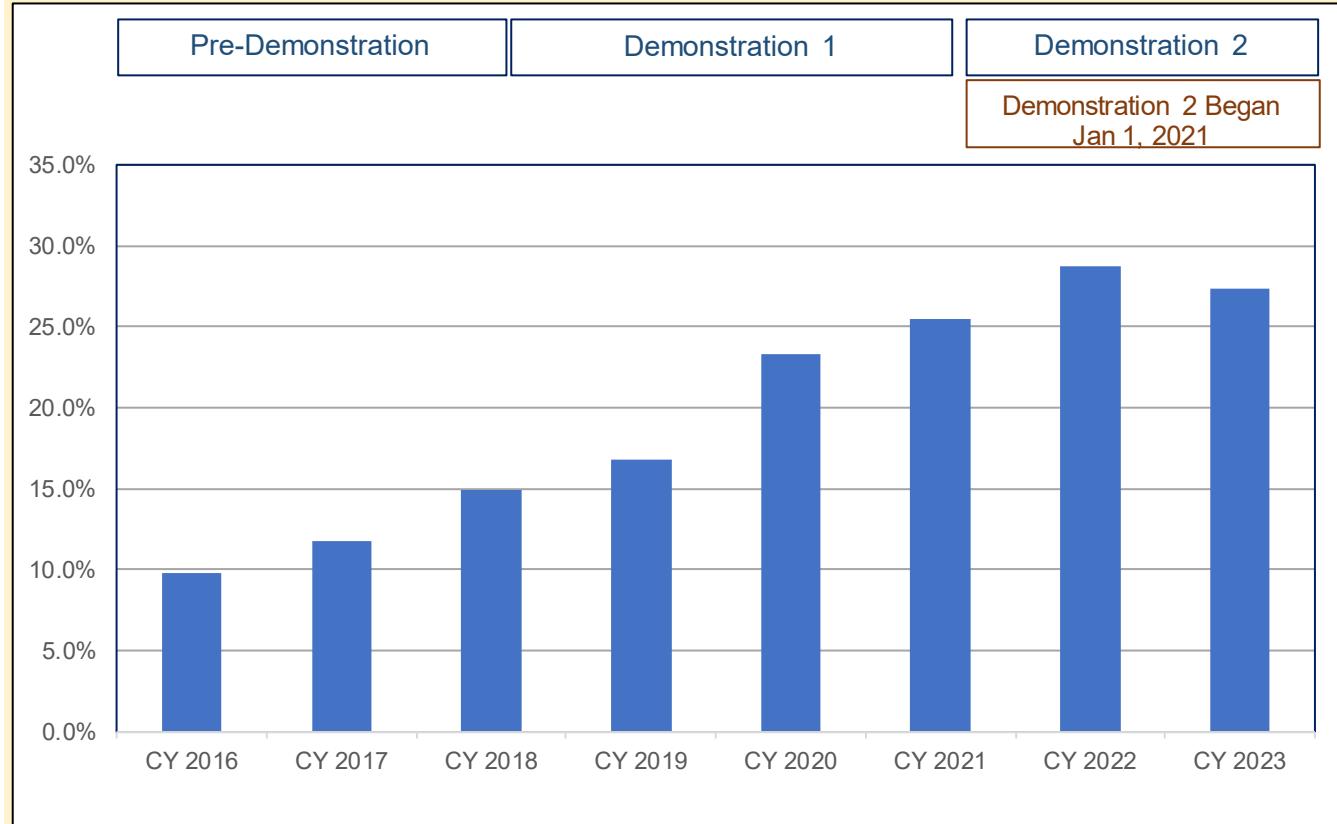
Does the demonstration improve transitions between ASAM levels of care?

Measure(s) Used to Answer Question:

Percentage of discharges from inpatient or residential treatment for SUD that readmit for inpatient or residential within 180 days of initial discharge for Medicaid beneficiaries age 18-64.

Measure Steward: HMA-Burns

Data Source: FSSA data warehouse of claims and encounters; enrollment data

Results

Desired Trend: Decrease percentage of readmissions within 180 days

CY2018-2019 average 15.8%

CY2022-2023 average 28.0%

Change 77.1%

Finding: Increase

Statistical Review: No statistical tests were run on this measure

The percentage of discharges from inpatient or residential treatment for SUD that readmit for inpatient or residential treatment within 180 days of initial discharge for Medicaid beneficiaries age 18-64 increased from the pre-demonstration period to the current demonstration period by 77.1 percent.

Exhibit 76. Results from HMA-Burns Metric: Rate of Medicaid beneficiaries enrolled in managed care and actively engaged in case or care management with their MCE

Research Question:

Does the demonstration improve transitions between ASAM levels of care?

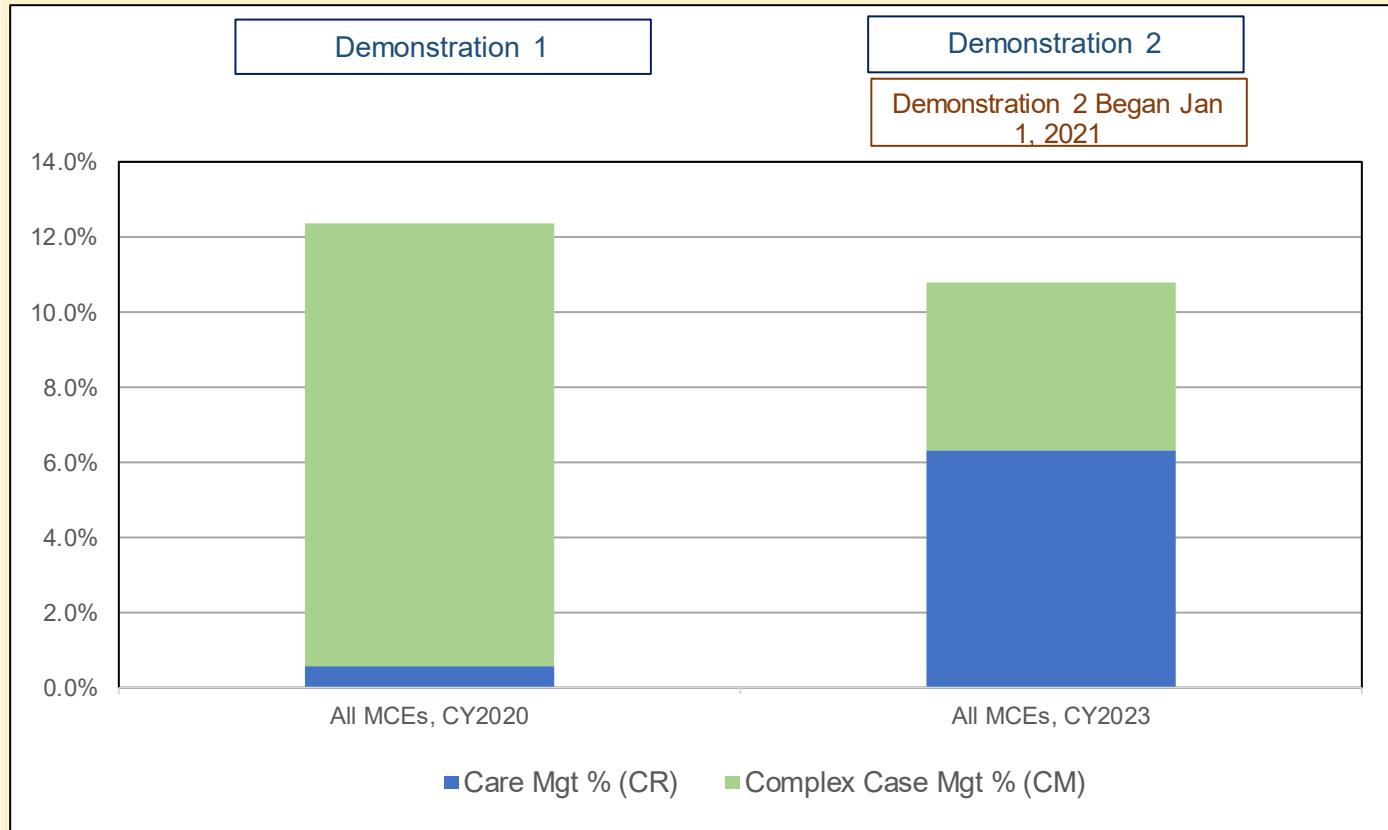
Measure(s) Used to Answer Question:

Rate of Medicaid beneficiaries enrolled in managed care for a minimum of 90 days and actively engaged in care or case management with their MCE. Rates computed separately for complex case management and care management.

Measure Steward: HMA-Burns

Data Source: FSSA data warehouse of claims and encounters; enrollment data; and MCE submitted data

Results



Desired Trend: Increase

Finding: Increase

Statistical Review: No statistical tests were run on this measure

HMA-Burns requested from each MCE the rosters of all members enrolled in complex case or care management at any time in CY 2020 and CY 2023. These rosters were cross tabulated to claims and encounter data for individuals identified as having an inpatient or residential treatment anchor event from January through June 2020 or January through June 2023. Medicaid members identified as being enrolled in care management increased from 0.6 percent in CY 2020 to 6.3 percent in CY 2023, while enrollment in complex case management declined from 11.8 to 4.5 percent during this same time period.

Exhibit 77. Results from HMA-Burns Metric: Rate of Transition to ASAM Level 1 and 2 Services After receiving ASAM Level 3 or 4 Service

Research Question:

Does the demonstration improve transitions between ASAM levels of care?

Measure(s) Used to Answer Question:

Rate of Transition to ASAM Level 1 and 2 Services After receiving ASAM Level 3 or 4 Service

Measure Steward: HMA-Burns **Data Source:** State claims/encounters and enrollment data

Results Percentages in each column indicate the percentage of total clients who received the service

	Anchor Service July - Dec 2021		Anchor Service Jan - June 2023	
	Pre-Admission	Post-Discharge	Pre-Admission	Post-Discharge
Inpatient Hospital Stay, Primary Diagnosis SUD	14%	3%	8%	2%
Emergency Dept Visit	33%	17%	27%	15%
Community-based Services				
Withdrawal Management	24%	9%	25%	9%
Intensive Outpatient or Partial Hospitalization	5%	13%	5%	15%
Medication Assisted Treatment	24%	42%	24%	43%
Other Community-based Services	27%	29%	29%	28%
Pharmacy Scripts	40%	56%	37%	56%

Indicates a positive trend in utilization after discharge from inpatient hospital or residential treatment SUD stay

Desired Trend: Increase in use of lower level ASAM services and decrease in use of higher level ASAM services in the post-discharge period

Finding: Increase for most services post-discharge from higher ASAM level of care

Statistical Review: No statistical tests were run on this measure

HMA-Burns conducted two studies to determine how Indiana Medicaid beneficiaries with SUD step down to community-based treatment services after they had an anchor event. The anchor event is defined as an inpatient hospital stay for SUD (ASAM Level 4) or a residential treatment stay for SUD (ASAM Level 3). Two time periods were examined. The first time period was anchor events during July through December 2021. The second time period was anchor events during January through June 2023.

The services shown above were examined for each beneficiary for the 12-week period prior to admission to their anchor event (the pre-admission period) and for the 12-week period after their discharge from the anchor event (the post-discharge period).

Beneficiaries with an anchor event had a sizeable reduction in hospital ED visits during the post-discharge period in both studies. MAT services also increased, but more in the 2023 study than in the 2021 study. Inpatient hospital stays for SUD and withdrawal management decreased in both studies, a positive sign for less relapse. Intensive outpatient or partial hospitalization services were low in both studies for both the pre-admission and post-discharge periods. The use for pharmacy (other than MAT) was more in the 2023 study group when compared to 2021 study group post anchor event.

State SUD Implementation Plan

One activity was included in the protocol related to expanding MCE case management services for individuals transitioning from residential treatment facilities and it has been completed.

Exhibit 78. Tracking Completion of Action Items in the SUD Implementation Plan for CMS Milestone 6

Action Item Description	Intended Completion Date	Current Status
31 Extend MCE case management to individuals transitioning from residential treatment facilities	No specific date	Completed.

Stakeholder Feedback

There was mixed feedback from providers on their interactions with the FSSA's managed care entities on client care coordination as found in Exhibit 79. Both the MCEs and providers expressed the need for education and a common understanding around care coordination.

Exhibit 79. Stakeholder Feedback Related to CMS Milestone 6

Topic	From Whom	Type of Feedback	Feedback
1 Care coordination activities with MCEs	Providers	Critique	<i>Providers experiences were variable on their interactions with the MCEs on care coordination. Many providers (26 of 48) regarded their interactions with MCEs regarding care coordination as easy or neutral but indicated there is room for improvement. Areas suggested for improvement include increased availability and appropriateness of resources for clients, and increased outreach by care coordinators to providers. Most providers (27 of 48) stated that there has been no change in these interactions compared to last year.</i>
	MCEs	Recommendation	<i>There are opportunities to improve care coordination with providers. While the MCEs did not provide detailed experiences with providers regarding care coordination, they note there is room for improvement in the process and understanding among all parties involved.</i>
2 Housing options	Providers	Neutral	<i>Supportive housing has improved but there are still opportunities to improve. Providers commented that while supportive housing has expanded in the past year, there is still significant room for increased access to supportive housing,</i>

Other SUD-Related Metrics in the Evaluation Plan Design

Twelve additional measures were examined as part of the evaluation design plan. In Exhibit 80 below, it shows that the desired outcome was met in eight measures. A statistical significance test was conducted on six of the measures, with two found to be statistically significant. Refer to the pages that follow for more information on each measure.

Exhibit 80. Summary of Findings for Other Metrics Not Mapped to a CMS Milestone – Total Demonstration

Tests for statistical significance were conducted at a significance level of alpha = 0.05

	Measure Examined	Desired Outcome	Outcome Met?	Statistical Test	Statistically Significant?	P-Value
1	Rate of per capita expenditures for SUD services among the SUD population	Increase	Yes	Interrupted Time Series	No	0.1621
2	Rate of per capita expenditures for SUD services in IMDs among the SUD population	Decrease	No	Interrupted Time Series	No	0.1861
3	Proportion of per capita expenditures for SUD services across ASAM levels of care	More spread across levels	Yes	no test run	N/A	N/A
4	Rate of per capita expenditures for all services among the SUD population	Increase	Yes	Interrupted Time Series	No	0.128
5	Rate of per capita expenditures for all services except SUD services among the SUD pop.	Increase	Yes	Interrupted Time Series	No	0.0944
6	Rate of inpatient hospital readmissions among beneficiaries with SUD	Decrease	No	Chi-square	Yes	<.0001
7	Rate of access to preventive health services for adult Medicaid beneficiaries with SUD	Increase	Yes	Chi-square	Yes	<.0001
8	Grievances related to SUD treatment services	Decrease	Yes	no test run	N/A	N/A
9	Appeals related to SUD treatment services	Increase	No	no test run	N/A	N/A
10	Prescribers Accessing Indiana's INSPECT	Increase	Yes	no test run	N/A	N/A
11	Patient Requests Made Into Indiana's INSPECT	Increase	No	no test run	N/A	N/A
12	Hospitals that have Integrated with Indiana's INSPECT	Increase	Yes	no test run	N/A	N/A

Exhibit 81. Results from CMS Metric #30: Per Capita SUD Spending

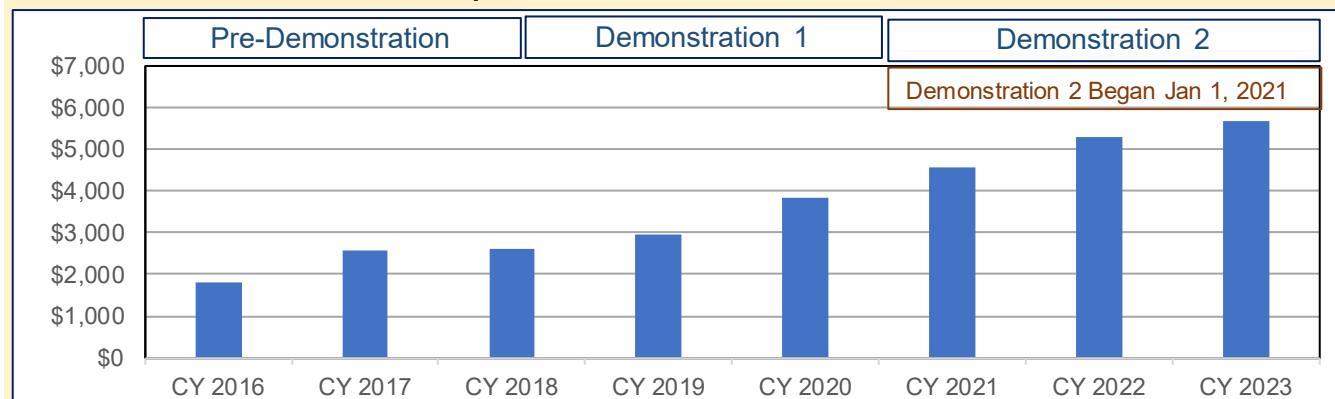
Research Question:

Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

Measure(s) Used to Answer Question: Per Capita SUD Spending

Measure Steward: CMS [CMS Monitoring Metric #30]

Data Source: State claims/encounters and enrollment data

Results for the Demonstration Population


Desired Trend:	Increase	Statistical Review:	Interrupted Time Series		
			<u>Estimate</u>	<u>P-Value</u>	<u>Significant</u>
Post-intervention trend compared to pre-intervention trend			1.9735	0.1621	No
Pre-intervention trend			0.3343	0.7351	No
Post-intervention trend			2.3078	0.0188	Yes

The interrupted time series test was run using the CMS-defined denominator and monthly values from January 2016 to December 2023. The average per capita payment for SUD services for the 25 months pre-demonstration (January 2016 - January 2018) was compared to the average for the 25 months post-demonstration (December 2021 - December 2023). Per capita expenditures for SUD services has increased from the pre-demonstration period through the initial and current demonstration. Expenditures increased 23.5 percent in the current demonstration, from \$4,574 in CY 2021 to \$5,650 in CY 2023.

Exhibit 82. Results from CMS Metric #31: Per Capita SUD Spending with IMDs

Research Question:

Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

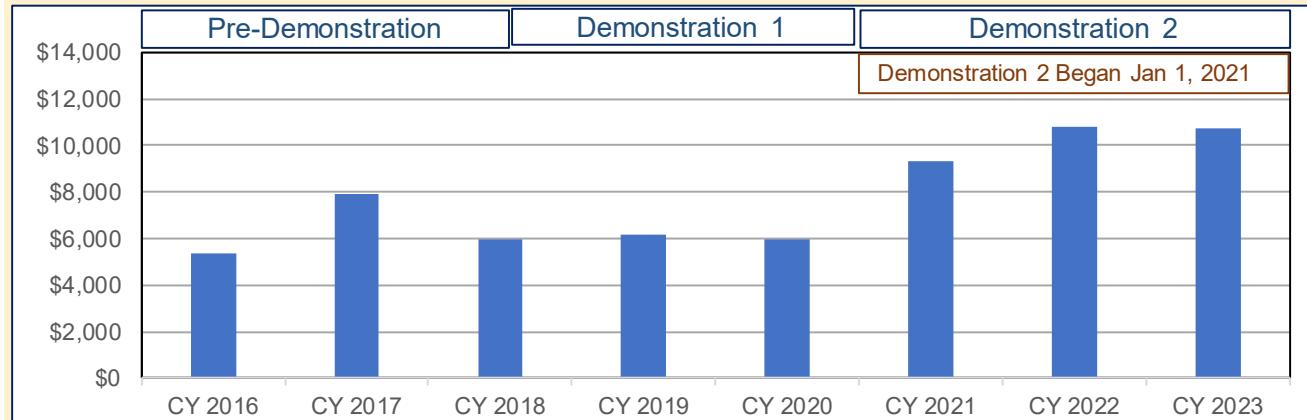
Measure(s) Used to Answer Question: Per Capita SUD Spending within IMDs

Measure Steward: CMS [CMS Monitoring Metric #31]

Data Source: State claims/encounters and enrollment data

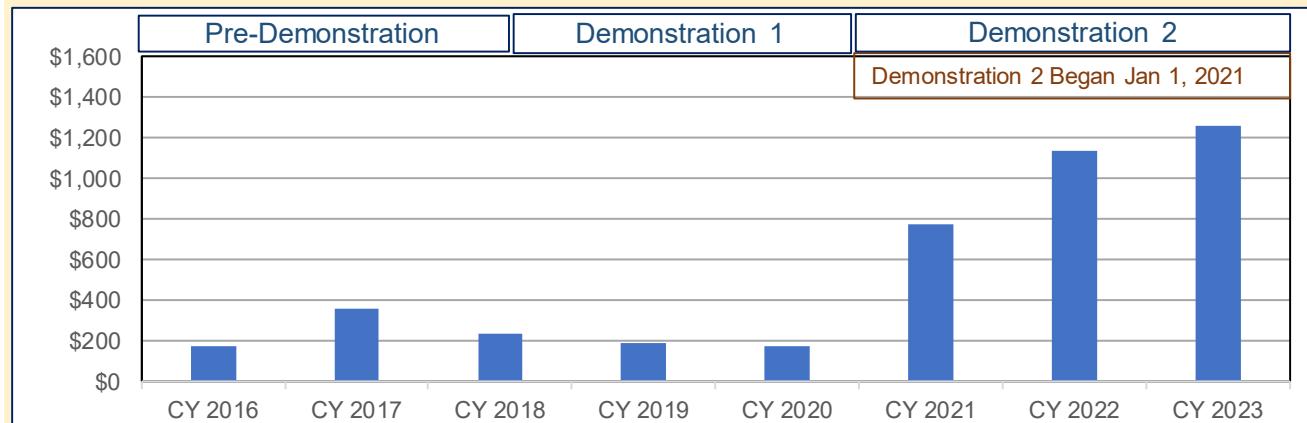
Results for the Demonstration Population

CMS denominator: Number of individuals with IMD stay



Results for the Demonstration Population

HMA-Burns denominator: Total individuals with SUD Dx



Desired Trend:

Decrease

Statistical Review:

Interrupted Time Series

Estimate P-Value Significant

Post-intervention trend compared to pre-intervention trend

-56.4722

0.1861

No

Pre-intervention trend

59.3947

0.0518

No

Post-intervention trend

2.9225

0.9217

No

The interrupted time series test was run using the CMS-defined denominator and monthly values from January 2016 to December 2023. The average per capita payment for the 25 months pre-demonstration (January 2016 - January 2018) was compared to the average for the 25 months post-demonstration (December 2021 - December 2023) among IMD users. Whether viewed using the CMS denominator (IMD users) or the HMA-Burns denominator (total individuals with SUD diagnosis), the per capita payment experienced a decline through the initial demonstration period but has increased steadily during the current demonstration period, with a decline in CY 2023 of 0.7 percent from CY 2022.

Exhibit 83. Results from HMA-Burns Metric: Distribution of Per Capita SUD Spending

Research Question:

Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

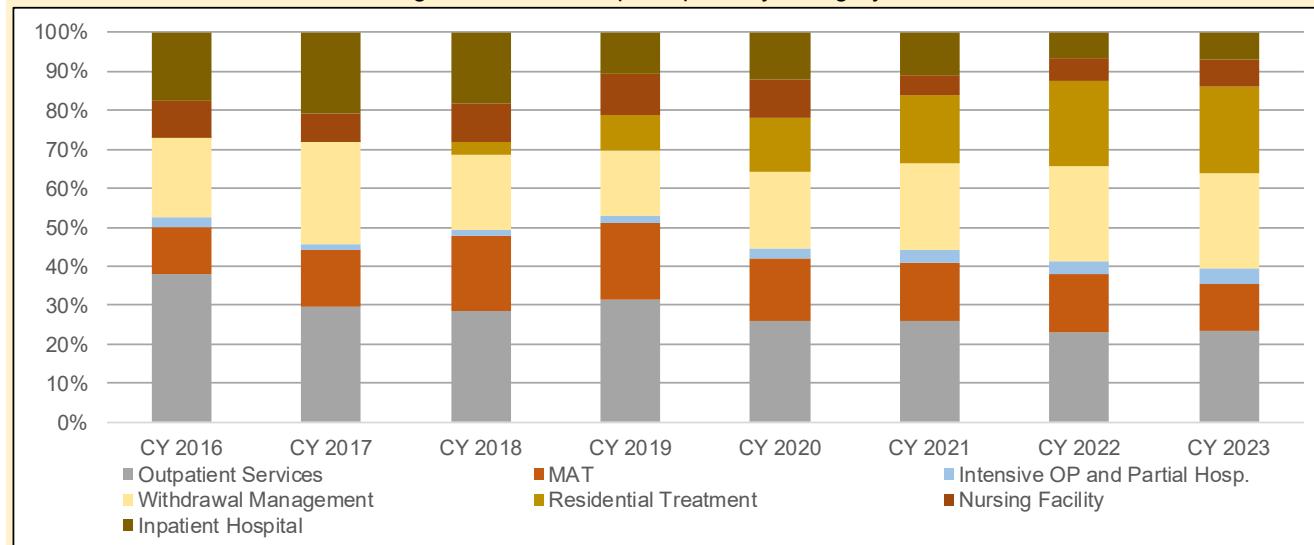
Measure(s) Used to Answer Question: Distribution of Per Capita SUD Spending

Measure Steward: HMA-Burns

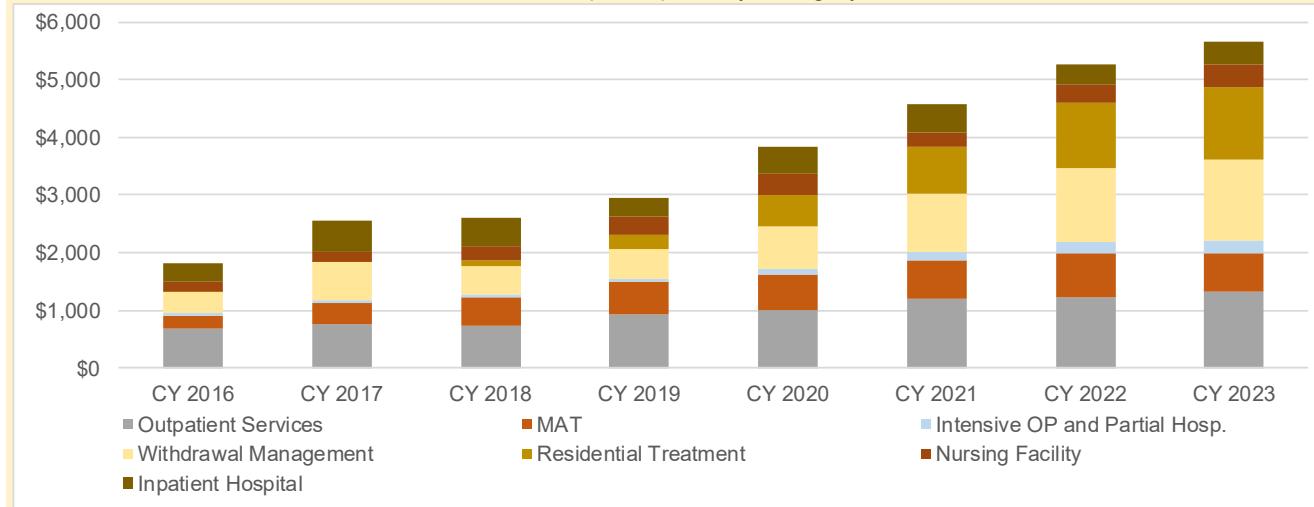
Data Source: State claims/encounters and enrollment data

Results

Distribution of Per Capita SUD Spending Percentage of SUD Per Capita Spend by Category of Service



Dollars of SUD Per Capital Spend by Category of Service


Desired Trend: More even spread in per capita SUD spending across ASAM levels

Statistical Review: No statistical tests were run on this measure

Per capita spending on SUD services for individuals with SUD increased from \$1,814 in CY2016 to \$3,843 in CY2020 and \$5,649 in CY2023. The per capita expenditures for inpatient hospital remained steady, while expenditures continued to move to community-based services including residential treatment. Additionally, the per capita expenditures for outpatient services, medication assisted treatment, and withdrawal management all increased during the demonstration. Per capita spending on intensive outpatient and partial hospitalization services remains relatively low although it has begun to increase during the current demonstration period.

Exhibit 84. Results from HMA-Burns Metric: Per Capita Total Spending for Beneficiaries with SUD

Research Question:

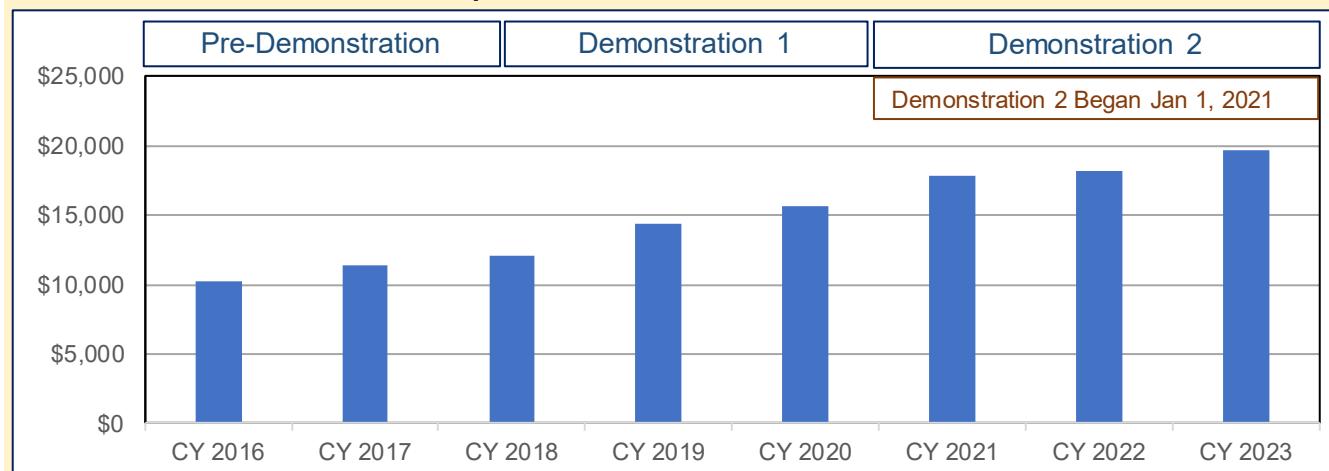
Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

Measure(s) Used to Answer Question: Per Capita Total Spending for Beneficiaries with SUD

Measure Steward: HMA-Burns

Data Source: State claims/encounters and enrollment data

Results for the Demonstration Population



Desired Trend:

Increase

Statistical Review:

Interrupted Time Series

	Estimate	P-Value	Significant
Post-intervention trend compared to pre-intervention trend	-4.4055	0.128	No
Pre-intervention trend	12.9249	<.0001	Yes
Post-intervention trend	8.5194	<.0001	Yes

The interrupted time series test was run on the demonstration population using monthly values from January 2016 to December 2023. The average per capita total spending for the 25 months pre-demonstration (February 2018 - February 2020) was compared to the average for the 25 months post-demonstration (December 2021 - December 2023) for beneficiaries with SUD. HMA-Burns used the beneficiaries defined in CMS Metric #4 to define beneficiaries with SUD. Then, the payments for all of their utilization was summed to compute a per capita total service expenditure per month for the ITS study period.

Total per capita expenditures for individuals with SUD increased during the demonstration compared to the pre-demonstration period. These expenditures increased each year of the demonstration, from \$17,852 in CY 2021 to \$19,709 in CY 2023, a 10.4 percent increase during the current demonstration period. Although the post-intervention trend compared to the pre-intervention trend is not significant, the post-intervention trend continues to be significant with the desired trend similar to the pre-intervention trend.

Exhibit 85. Results from HMA-Burns Metric: Per Capita Total Spending minus SUD Spending for Beneficiaries with SUD

Research Question:

Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

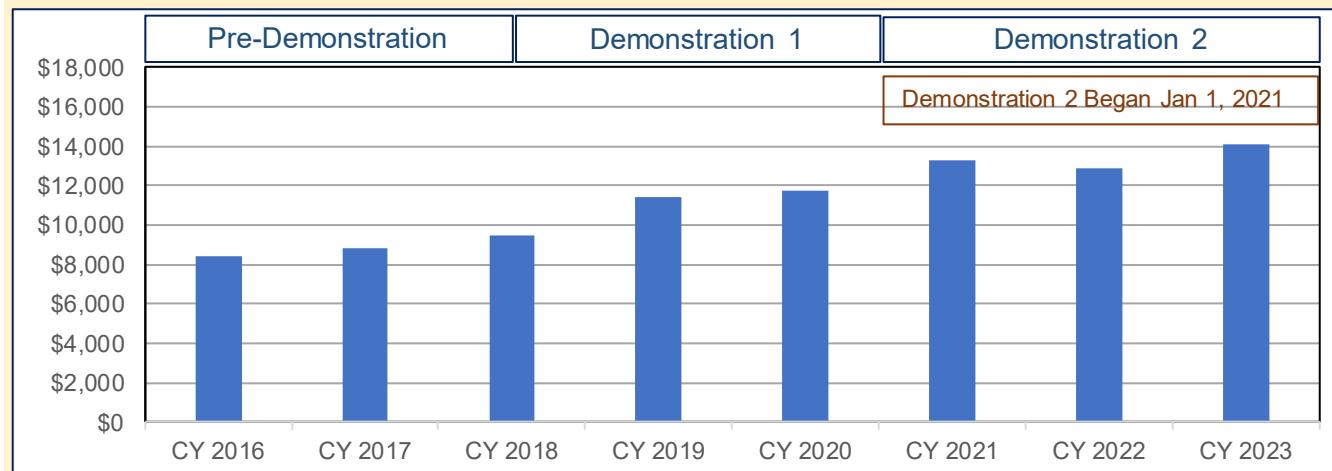
Measure(s) Used to Answer Question:

Per Capita Total Spending minus SUD Spending for Beneficiaries with SUD

Measure Steward: HMA-Burns

Data Source: State claims/encounters and enrollment data

Results for the Demonstration Population



Desired Trend:

Increase

Statistical Review:

Interrupted Time Series

Estimate

P-Value

Significant

Post-intervention trend compared to pre-intervention trend

-4.1192

0.0944

No

Pre-intervention trend

10.3308

<.0001

Yes

Post-intervention trend

6.2116

0.0003

Yes

The interrupted time series test was run on the demonstration population using monthly values from January 2016 to December 2023. HMA-Burns used the beneficiaries defined in CMS Metric #4 to define beneficiaries with SUD. Then, the payments for all of their utilization was summed to compute a per capita total service expenditure per month for the ITS study period. The non-SUD average per capita total spending for the 25 months pre-demonstration (February 2018 - February 2020) was compared to the average for the 25 months post-demonstration (December 2021 - December 2023) for beneficiaries with SUD. HMA-Burns used its definition of SUD expenditures shown in CMS Metric #30 and subtracted this from the total per capita expenditures to derive a per capita expenditure value excluding SUD services.

Total per capita expenditures excluding SUD services for individuals with SUD increased in almost all years since the beginning of the demonstration (CY 2018) through December 2023. The only exception is a 3.1 percent decrease between CY 2021 to CY 2022. Overall, expenditures increased 5.9 percent during the current demonstration period from \$13,278 in CY 2021 to \$14,059 in CY 2023. Although the post-intervention trend compared to the pre-intervention trend is not significant, the post-intervention trend continues to be significant with the desired trend similar to the pre-intervention trend.

Exhibit 86. Results from CMS Metric #25: Readmissions Among Beneficiaries with SUD

Research Question:

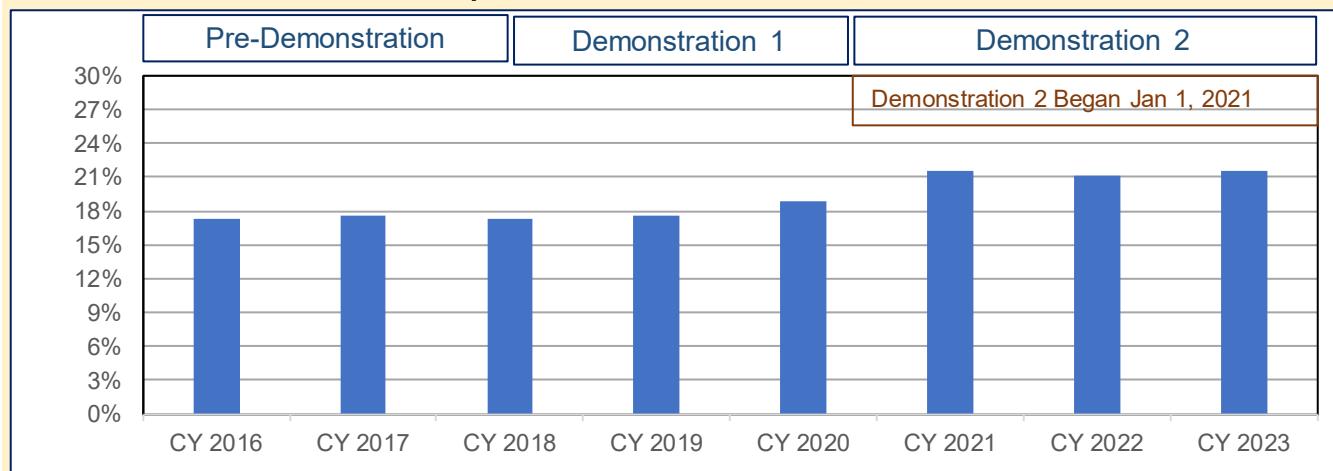
Does the rate of inpatient hospital readmissions among beneficiaries with SUD decrease during the demonstration period?

Measure(s) Used to Answer Question: Readmissions Among Beneficiaries with SUD

Measure Steward: CMS [CMS Monitoring Metric #25]

Data Source: State claims/encounters and enrollment data

Results for the Demonstration Population



Desired Trend:

CY2016-2017 average

Decrease

17.5%

CY2022-2023 average

21.4%

Change

22.3%

Statistical Review:

Probability:

Chi-Square

<.0001

Finding:

Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change 2022-23 Avg		Pct Change 2022-23 Avg	
Model	11.7%	19.6% Northwest Region	21.9%	21.2%
OUD	30.7%	24.7% North Central Region	20.5%	18.6%
Dual Eligible	78.4%	28.0% Northeast Region	6.1%	24.0%
Pregnant Women	34.7%	12.9% West Central Region	25.2%	22.8%
Criminally Involved	25.6%	20.5% Central Region	19.8%	22.0%
MRO	25.5%	23.7% East Central Region	19.5%	19.7%
		Southwest Region	15.1%	20.6%
		Southeast Region	6.3%	18.9%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration. Color coding is inverted for this measure because the desired trend is a decrease, not an increase.

Point change more than 5 points below

Point change is 2 to 5 points above

Point change is 2 to 5 points below

Point change is more than 5 points above

Point change is 2 points below to 2 above

The rate of hospital readmissions among beneficiaries with SUD increased to 22.3 percent between the pre-demonstration and demonstration period. During the demonstration, there was a 30.7 percent increase for the OUD subpopulation with an absolute rate of 24.7 percent. At the region level, all regions had increases in the demonstration period.

Exhibit 87. Results from CMS Metric #32: Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD

Research Question:

Does the rate of access to preventive/ambulatory health services for adult Medicaid beneficiaries with SUD increase during the demonstration period?

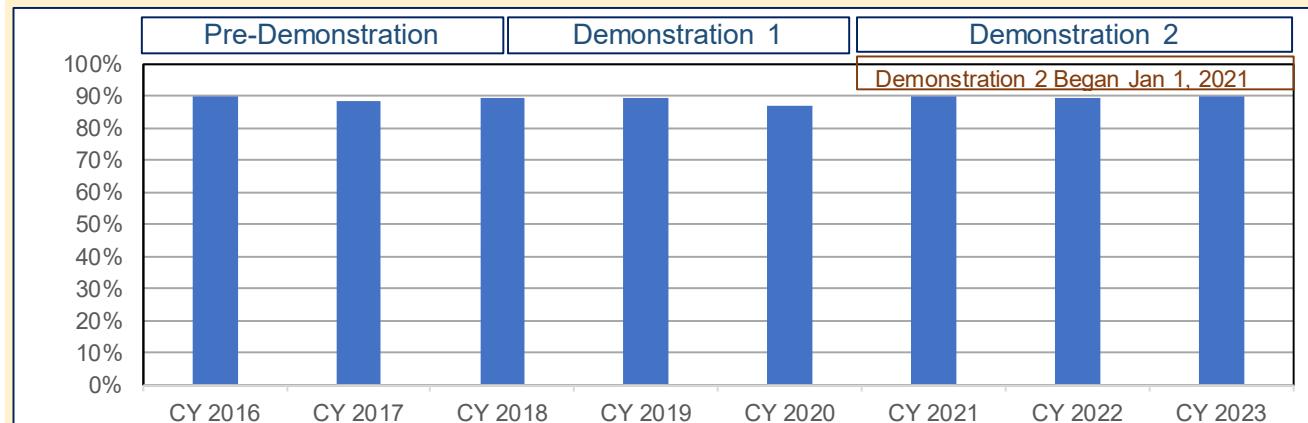
Measure(s) Used to Answer Question:

Access to Preventive/Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD

Measure Steward: CMS [CMS Monitoring Metric #32]

Data Source: State claims/encounters and enrollment data

Results for the Demonstration Population



Desired Trend:

CY2018-2019 average
CY2022-2023 average
Change

Increase

89.2%
89.9%
0.7%

Statistical Review:

Probability: <.0001
Finding: Significant

Change from Pre-Intervention to Post-Intervention for Other Populations

	Pct Change 2022-23 Avg	Pct Change 2022-23 Avg	
Model	0.7%	88.9% Northwest Region	0.0% 92.0%
OUD	2.0%	92.3% North Central Region	-2.2% 87.3%
Dual Eligible	1.5%	95.3% Northeast Region	0.2% 89.1%
Pregnant Women	2.5%	93.3% West Central Region	-1.8% 90.7%
Criminally Involved	7.1%	79.8% Central Region	1.5% 88.7%
MRO	0.2%	93.9% East Central Region	2.7% 90.5%
		Southwest Region	0.2% 91.3%
		Southeast Region	1.0% 90.9%

Legend indicates the percentage point change for a subpopulation compared to the overall Demonstration

Point change more than 5 points above	Point change is 2 to 5 points below
Point change is 2 to 5 points above	Point change is more than 5 points below
Point change is 2 points above to 2 below	Sample is too small to report on (n < 50 obs)

The rate of access on this measure increased 0.7 percent between the pre-demonstration and demonstration period at an average rate of 89.9 percent. There was also little percentage change observed among all of the subpopulations and regions analyzed. The absolute rate of access was higher in the demonstration for the criminally involved, pregnant women, OUD, and the dual eligibles population than the statewide population. All regions have an absolute rate within three percentage points of the statewide average.

Exhibit 88. Results from CMS Metric #33 and #34: Number of SUD-Related Grievances and Appeals per 1,000 Beneficiaries with an SUD

Research Question:

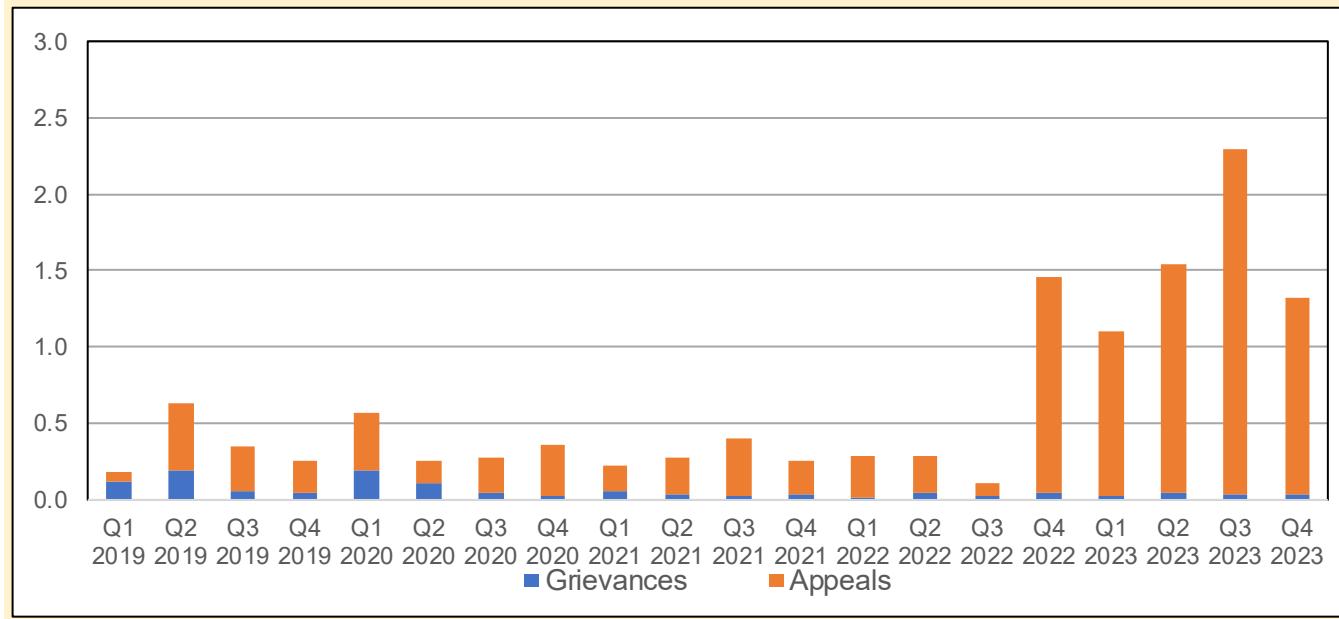
Do the number of grievances and appeals related to SUD treatment services decrease during the demonstration period?

Measure(s) Used to Answer Question: Number of SUD-Related Grievances and Appeals per 1,000 Beneficiaries with an SUD

Measure Steward: CMS [Grievances is CMS Monitoring Metric #33, Appeals is CMS Metric #34]

Data Source: Data reported by managed care entities to the FSSA quarterly

Results for Grievances and Appeals per 1,000 Beneficiaries with an SUD



Desired Trend: Decrease number of grievances and appeals on a per 1,000 basis

Finding: Appeals increased while Grievances declined

Statistical Review: No statistical tests were run on this measure

The FSSA started requiring its managed care entities (MCEs) to track grievances and appeals discretely for the SUD population starting in January 2020. The value shown above represents all MCEs combined for each quarter. Although the number of grievances have fluctuated by quarter historically, the number of appeals greatly increased beginning in the fourth quarter of 2022 and through CY 2023, likely resulting from modifications made to the MCE reporting instructions provided by the State. On a per 1,000 basis for members with an SUD, the average grievance rate per 1,000 declined from the initial demonstration from 0.10 to 0.03. During this same time period, appeals on a per 1,000 basis increased from 0.26 to 0.76.

Exhibit 89. Statistics on Use of Indiana's Prescription Drug Monitoring Program Database INSPECT

Research Questions:

Is the rate of drug overdose deaths in Indiana impacted by the demonstration?

Measure(s) Used to Answer Question:

Number of prescribers accessing INSPECT

Number of patient requests made into INSPECT

Number of hospitals that have integrated INSPECT into their health care system's electronic health record

Data Source: Indiana Professional Licensing Agency's prescription drug monitoring database (named INSPECT)

Desired Trend: Increase in number of prescribers using INSPECT

Finding: Increased

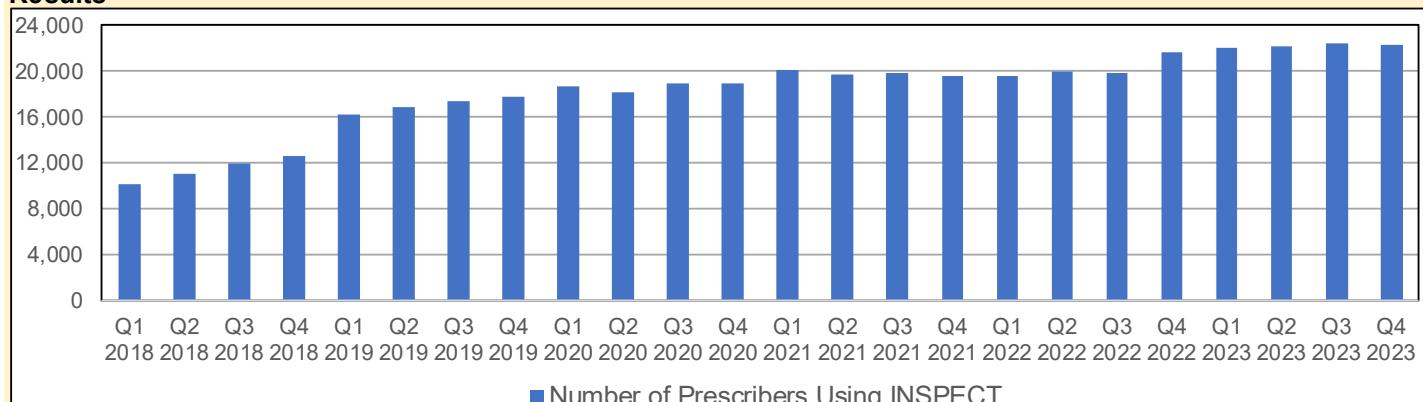
Desired Trend: Increase in number of requests made using INSPECT

Finding: Mixed

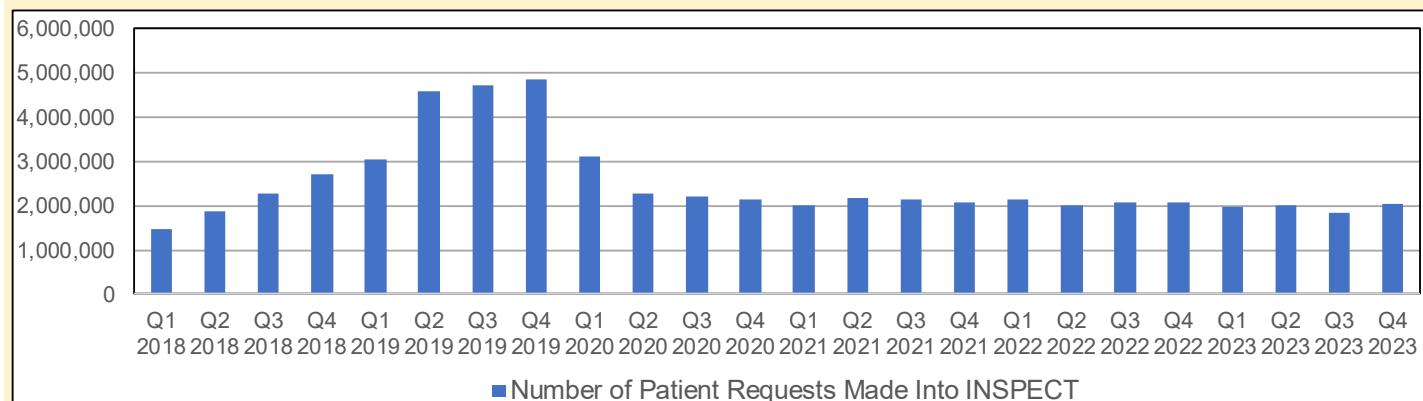
Desired Trend: Increase in number of hospitals integrating INSPECT

Finding: Increased

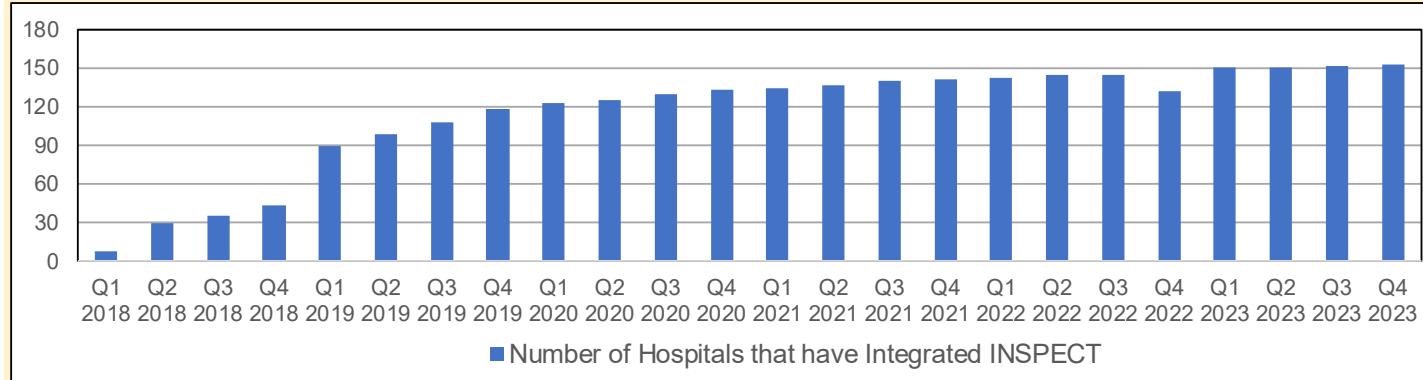
Results



■ Number of Prescribers Using INSPECT



■ Number of Patient Requests Made Into INSPECT



■ Number of Hospitals that have Integrated INSPECT

SECTION G: Conclusions

Assessment of the Effectiveness of the Demonstration

When considering the Logic Model shown in the Evaluation Design Plan, Indiana met the specific aim to reduce the rate of overdose deaths during the current demonstration period. While the number and rate of overdose deaths among Indiana Medicaid beneficiaries increased during the initial demonstration period, since CY 2021, the rate and number of overdose deaths have declined. The rate was at its peak in CY 2020 at 0.94 beneficiaries per 1,000 and at its lowest rate at 0.29 beneficiaries per 1,000 in CY 2023.

Another key finding is related to the progress made with CMS Metric #23, Emergency Department Visits for SUD Per 1,000 Medicaid Beneficiaries. The ITS test comparing the post-intervention trend with the pre-intervention trend was significant with the post-intervention trend now highly significant with a p-value <.0001. The ITS estimate for the post-intervention trend (-0.0709) is 2.98 times the pre-intervention trend (-0.0238). These results can be interpreted that Emergency Department Visits for SUD Per 1,000 Medicaid Beneficiaries are decreasing at approximately three times the rate in the second demonstration period (post-intervention period) compared to the initial demonstration (pre-intervention period) and there is a significant difference between the two intervention trends.

When considering the CMS Milestones, Indiana saw success in each milestone over what was observed in the Summative Evaluation. Exhibit 90, which appears on the next page, summarizes the measures where Indiana achieved the desired outcome. Among 55 measures reviewed, there were 46 where the desired outcome was met, and 25 measures had an outcome that was statistically significant.

The FSSA was also successful in large part in the activities it set out to do in its SUD Implementation Plan. Among the 31 activities identified, 24 were completed in full. The remainder are in progress with only one item being abandoned. There were implementation activities completed that were targeted for each of the CMS Milestones.

Some key success factors contributed to the positive trends observed in the Interim Evaluation:

- Beneficiaries receiving any SUD service on a monthly basis grew 20 percent during the demonstration period.
- The proportion of SUD providers in the state that accept Medicaid grew during the demonstration period.
- There was continual expansion in the offering of residential treatment services over the demonstration period, both in licensed locations and licensed beds.
- State-sponsored ASAM training continues to be proved helpful to new and existing Medicaid providers.
- There is lower emergency department use after transitioning from ASAM level 4 or ASAM level 3 care.

Exhibit 90. Summary of Metrics and Implementation Activities by CMS Milestone

TOTAL	Milestone 1	Milestone 2	Milestone 3	Milestone 4	Milestone 5	Milestone 6	Other
All Measures Combined	Access to Critical Levels of Care for SUD Treatment	Use of Evidence-Based, SUD-specific Patient Placement Criteria	Use of Nationally Recognized SUD-specific Program Standards for Residential Treatment	Sufficient Provider Capacity at Critical Levels of Care	Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse	Improved Care Coordination and Transitions Between Levels of Care	
Measures							
Number of Measures Examined	55	13	3	2	5	5	15
Number of Measures Where Desired Outcome Was Met	46	11	2	2	5	4	14
Number of Measures Where Outcome Was Statistically Significant	25	8	none tested	none tested	none tested	5	10
Implementation Activities							
Number of Activities Identified in the State's SUD Implementation Plan	31	17	4	2	4	3	1
Number of Activities Completed	24	12	4	1	4	2	1
Number of Activities Abandoned	1	1	0	0	0	0	0

Assessment of Opportunities for Improvement

Indiana saw significant progress towards its aim to reduce overdose deaths among its Medicaid population through the second demonstration period. With the expansion of coverage for new services across the ASAM continuum and a concentrated effort to increase access to services that had previously been covered, there remain opportunities for continued improvement as the FSSA enters the latter half of its second SUD demonstration period ending December 31, 2025. The HMA-Burns evaluation team has identified the opportunities below for the FSSA to continue to build upon the strong foundation it established in the initial SUD demonstration period.

CMS Milestone #1: Access to Critical Levels of Care for SUD Treatment

1. The FSSA is encouraged to work with its MCEs on the approach to authorizing intensive outpatient and partial hospitalization services statewide. Providers who have the capacity to deliver these services communicated to the evaluators that they forego delivering this service due to what are perceived as tight requirements for authorization approvals. (M1)
2. There appears to be a lack of awareness of early intervention services among the provider community interviewed by the evaluators, with the MCEs noting low uptake. The FSSA is encouraged to understand the root cause for this, whether it is because the service is not being delivered or it is being billed under another service definition. Guidance to providers on the provision and billing of early intervention services is strongly suggested, including a potential webinar or in-service education conducted by MCE Provider Relations staff. (M1)

CMS Milestone #2: Use of Evidence-Based SUD-specific Patient Placement Criteria

3. The FSSA should consider a uniform method for providers to upload service authorization requests to the MCEs for inpatient hospital, residential treatment, intensive outpatient, and partial hospitalization services in an electronic format. The method would include required fields to ensure that relevant data is captured for completeness. It would also assist providers in the education process for what is required for SUD service authorization submissions and would streamline the submission requirements across the contracted MCEs. (M2)
4. The FSSA is encouraged to strengthen its oversight of the MCEs related to SUD service authorizations. In particular, an analysis of authorization approvals and denials at different ASAM levels of care. Additionally, there may be interest in understanding the trend in authorizations for SUD beneficiaries by type of SUD (e.g., alcohol, opioid, other). (M2)
5. The FSSA may want to consider another round of ASAM training focusing on level of care requirements and training on performing ASAM interviews from a clinical perspective. (M2)

CMS Milestone #3: Use of Nationally-Recognized SUD-specific Program Standards for Residential Treatment

6. The FSSA should consider adding licensure for residential providers at the ASAM 3.7 level, particularly for 3.7- withdrawal management. This may disincentivize requests for placements in a hospital setting for withdrawal management, particularly for opioid addiction. (M3)

CMS Milestone #4: Sufficient Provider Capacity at Critical Levels of Care

7. There appears to be a need for additional residential treatment services in the northern counties of the state at all ASAM levels. There has been little growth in licensed providers or bed capacity in this region of the state when compared to the central and southern regions. One option would be for the FSSA to build incentives within the existing residential provider network or providers new to Medicaid to enhance capacity for residential services in this region. (M4)
8. Feedback from providers, MCEs, and beneficiaries indicated that there is a greater need for intensive outpatient services, ASAM 3.1, 3.5 and 3.7 residential and supportive housing/sober living options. The FSSA awarded \$4.7 million in one-time funding to eight community organizations for recovery residences

and 206 beds are expected to be added as a result. Over the remainder of the demonstration, the FSSA is encouraged to continue to its discussions with its existing provider base to monitor and expand their service array into identified modalities as well as to build the capacity from new providers as well. (M4)

9. Current state law limits the number of opioid treatment providers in the state. Absent a repeal of this law, the FSSA is encouraged to work with providers currently eligible to deliver MAT as per the legislation to expand this service particularly in rural portions of the state. Separately, the FSSA may consider ways to expand delivery of services of alternative MAT treatment. (M4)

CMS Milestone #5: Implementation of Comprehensive Treatment and Prevention Strategies to Address Opioid Abuse

10. The evaluators recommend that the FSSA create a dedicated training for MCEs, providers and beneficiaries on the 1115 demonstration and its expectations to assist stakeholders with reorientation to pre-PHE policies and procedures. (M5)

CMS Milestone #6: Improved Care Coordination and Transition Between Levels of Care

11. The FSSA is encouraged to strengthen its oversight of the MCEs related to the provision of care coordination or case management among SUD beneficiaries. (M6)
12. The evaluators recommend that the FSSA create a SUD-specific Provider Manual with service requirements, authorization expectations, care coordination and HIPAA privacy, and billing guidance. This manual may also include examples of tools used by providers in the field today that are considered best practice for conducting SUD assessments. This could be a useful 'one-stop' method as a reference in lieu of compiling individual provider bulletins that have been released. (M6)

SECTION H: Interpretations, Policy Implications, and Interactions with Other State Initiatives

Policy Implications

The evaluators observed that some policies adopted by the FSSA may have influenced provider behavior in considering expanding into or eliminating specific services in the ASAM continuum. Additionally, some procedures may have had a similar effect. HMA-Burns has identified specific items that appear to have influenced provider behavior more than others. HMA-Burns offered recommendations to the FSSA on each of these policies in Section G.

1. The current lack of an option in DMHA's current licensure rule for ASAM 3.7 may be unintentionally directing more service requests at ASAM 4.0. Another complication is the rate of payment for ASAM 3.1. Many providers communicate that the low rate of reimbursement is a barrier to entry at this residential level.
2. Current state law which limits the number of opioid treatment sites in the state may be infringing on access to this service, particularly in rural portions of the state.
3. The FSSA made an increase in the rate of payment for intensive outpatient services during the demonstration period. Although this was appreciated by providers, many providers indicated that the unintended consequence of this change was greater scrutiny by the MCEs to authorize units of service. Existing providers commented that this has resulted in either an elimination of this service offering or a barrier to entry to start offering it.
4. Understandably, the public health emergency required states to amend existing policies and procedures in order to ensure that services were continually rendered when needed to Medicaid beneficiaries. The FSSA relaxed its requirements for service authorizations for SUD inpatient hospital and residential treatment during the PHE; specifically, a minimum number of days were auto-approved in each setting without the required documentation to prove medical necessity. These policies inherently showed an improvement in the authorization approval rate during the PHE. With these short-term policies now rescinded, there could be an uptick in the authorization denial rate for some providers as they become reacclimated to what had previously been standard operating procedure.

Interactions with Other State Initiatives

During the current SUD demonstration period, the FSSA undertook other initiatives that had a direct impact on the demonstration. As it continues in its demonstration renewal, the FSSA will be mindful of these initiatives as well as new initiatives as they relate to the provisions of SUD services.

1. In addition to authorities related to the provision of SUD services in an IMD, Indiana was also given authorities for the services to persons with serious mental illness (SMI) in an IMD. To the extent that many Medicaid beneficiaries have co-occurring conditions for SUD and SMI, the utilization and expenditure trends for IMD services may be impacted by the authorities granted by CMS under both provisions.
2. The DMHA released proposed changes to its regulations regarding residential ASAM level offerings and made requests for public comment prior to the start of the PHE. The final changes to regulations have yet to be released. Decisions on final changes to DMHA regulations may have an impact on who delivers SUD services and how.
3. During this demonstration, the DMHA developed a plan to strengthen the use of Certified Community Behavioral Health Clinics (CCBHCs) statewide and applied for participating in the expansion of community mental health services demonstration program. Indiana was recently notified that it is one of ten states selected to participate in the Certified Community Behavioral Health Clinics Medicaid Demonstration, and it has selected eight CCBHC demonstration pilot sites. Additionally, fifteen Community Mental Health Center

Clinics across the state received Substance Abuse and Mental Health Services Administration designated grants in 2023 to allow them to provide additional SUD-specific services that are allowed at CCBHCs.

4. As stated above, the FSSA enacted many short-term policies at the start of the PHE and continued them into the current demonstration to help ensure continuity of care to Medicaid beneficiaries. Trends in access and utilization to services fundamentally changed not just because of the PHE, but then due to the short-term policies put into effect. With the subsequent unwinding of the PHE policies, there will be additional changes to utilization trends manifested by the policy changes as well as shifts in beneficiary eligibility.
5. During the demonstration period, the FSSA re-procured its contracts with managed care entities for the Hoosier Care Connect program and, in a separate procurement, the Hoosier Healthwise and Healthy Indiana Plan 2.0 programs. The results of the procurement were no changes to MCE contractors for Hoosier Healthwise and Healthy Indiana Plan 2.0. For Hoosier Care Connect, one new vendor (United Healthcare) was added. This continuity of vendors should enable the strengthening of the existing SUD provider network and mitigate operational changes required with the new managed care contracts.
6. The FSSA procured a managed care contractor to deliver services under its new managed long-term services and supports program serving the dual eligible population. The procurement gives the FSSA opportunities to strengthen the delivery of SUD services to seniors who will be enrolled in this program. The results of the procurement were two existing (Anthem and MHS) and one new (Humana) MCEs were selected. Contractor. This relative continuity of vendors should enable the strengthening of the existing SUD provider network and mitigate operational changes required with the new managed care contracts.
7. The FSSA awarded a total of \$4.7 million in one-time funding to support capital expenditures for recovery residences in the State of Indiana. Using the National Opioid Settlement Fund allotted to the State, grants were awarded to qualified community organizations to purchase, build, renovate, or otherwise sustainably acquire a suitable structure for a DMHA-certified recovery residence. The DMHA received 44 proposals requesting a total of \$25 million in response to the grant. A total of 206 beds are expected to be added as a result of the grant.

State of Indiana Interpretations from the Evaluation Findings

Indiana Medicaid is largely not surprised by the findings of this evaluation, particularly in relation to the following points:

- *Prior Authorization Processes for IOP and PHP: During the PHE, FSSA relaxed prior authorization requirements to ensure services were continually rendered.* With the unwinding of the PHE, FSSA worked closely with its MCE partners, providers and other stakeholders to provide regular communication and will evaluate the need for further education, and potential policy and process adjustments during CY 2024.
- *Conduct Root Cause Analysis of Low Early Intervention Billing:* During the PHE, FSSA adopted policies and procedures to encourage utilization of services. Indiana, not unlike other states, experienced disrupted utilization patterns. As the PHE unwinding activities phase down, FSSA will evaluate the need for further education, and potential policy and process adjustments during CY 2024, including ongoing provider education and bulletins to promote early intervention services.
- *Consider Uniform Method to Upload Prior Authorization Requests to the MCEs:* During the PHE, FSSA relaxed prior authorization requirements to ensure services were continually rendered. With the unwinding of the PHE, OMPP worked closely with its MCE partners, providers and other stakeholders to provide regular communication, and is using 2024 to evaluate the need for further education and process adjustments.
- *Strengthen Oversight of MCE SUD Service Authorizations:* During the PHE, FSSA relaxed prior authorization requirements to ensure services were continually rendered. With the unwinding of the PHE, OMPP worked closely with its MCE partners, providers and other stakeholders to provide regular

communication, and is using 2024 to evaluate the need for further education, and potential policy and process adjustments.

- *Additional ASAM Trainings:* DMHA has held ASAM trainings every year since 2018. As ASAM recently came out with the Fourth Edition of The ASAM Criteria, live trainings were held in the Summer of 2024.
- *Need for 3.7 ASAM Level of Care Designation:* Indiana Medicaid is aware of the confusion surrounding the 3.7 level of ASAM, particularly that there is currently no designation process through DMHA to designate this level of care among addiction treatment services providers. DMHA and OMPP have both discussed the importance of establishing the designation/certification of this next level of care within the behavioral health care continuum in light of the release of The ASAM Criteria Fourth Edition, Volume One – Adults.
- *Residential Treatment Services in Northern Counties:* OMPP and DMHA will explore the residential capacities in the northern counties in 2024.
- *3.1 and 3.5 ASAM Level of Care Combined Units:* The DMHA and OMPP have discussed and continue to consider options for providers to obtain dual designation for multiple ASAM residential levels of care, particularly if the provider can demonstrate a separation of the programs both physically and programmatically even if they are on the same campus. As of the date of this report, Indiana has five combined units with 170 beds.
- *Limits on Opioid Treatment Programs:* As of July 2023, OMPP has aligned itself with Medicare by end-dating the per diem OTP code and adopting the G-codes that are being used by Medicare. The SPA allowing Indiana to adopt the new OTP codes was approved in June 2023. In 2024, DMHA will be certifying one more OTP provider. With this additional certification, the threshold for certified OTP providers will be met.
- *Dedicated Training Regarding 1115 to Assist with Transitioning out of the PHE:* OMPP updates the MCEs twice per week on new provider bulletins and conducts callouts for urgent updates with the MCEs. OMPP started an MCE PHE Unwind Q&A document and sent it out to MCEs on a weekly basis when there were updates and/or additions beginning January 27, 2023. Questions were collected directly from MCEs, during bi-weekly PHE Unwind meetings (which include MCEs, State staff from various divisions and sections, and systems contractors), stakeholder engagement meetings, and via email. OMPP held monthly Stakeholder engagement meetings to share information, progress, and updates regarding redetermination processes, the State's plans and timelines for PHE Unwind activities, and other related topics as appropriate, and to direct stakeholders to useful tools and resources available on the Indiana Medicaid website.
- *Strengthen Oversight of MCE Care Coordination:* Indiana's MCEs are contractually required to track and coordinate the care of members receiving care in an IMD. This includes anticipating and planning for a member's successful discharge upon a member's entry into an IMD and coordination of physical and behavioral health care. To monitor the participation in and the effectiveness of the MCEs case management intervention activities, the OMPP requires that the MCEs submit a quarterly Care and Complex Case Management Report. This report allows the OMPP to monitor MCE outreach to beneficiaries with SUD for participation. In addition, a process for review of MCE Clinical Operations is being put into place to review data reported by the MCEs to OMPP on a quarterly basis.
- *A SUD Provider Specific Manual:* Indiana Medicaid has heard provider confusion around IHCP behavioral health policies and is in the final stages of sharing an updated version of the Behavioral Health Reference Module.

However, there is one point that continues to be alarming to Indiana Medicaid:

- *Few beneficiaries with SUD who were discharged from an inpatient hospital or residential treatment setting for SUD were enrolled in the MCE's care or case management program.*

- This continues to be disheartening, given that the MCEs are contractually obligated to provide case management and care coordination to IHCP members. Indiana Medicaid needs to understand where this breakdown is occurring and what each MCE's criteria is for enrolling members into its case management program.

Besides those points, the results of this demonstration are largely positive and enlightening. It is encouraging that Indiana continues to make progress in the demonstration and that the proportion of measures where the desired outcome was met and statistically significant have grown since the Summative Evaluation.

SECTION I: Lessons Learned and Recommendations

Lessons Learned

As it worked to implement many new initiatives in its demonstration in a short turnaround time period, Indiana's FSSA learned some lessons early on in its demonstration that it is mindful of moving forward.

1. There is a balance in communicating program changes to stakeholders, particularly with new service coverage, policies, or operational requirements such as billing changes. Over-communication can cause as much confusion as under-communication, particularly if all policy and procedure considerations have been fully considered. In the haste to implement new benefits in a short turnaround time after the demonstration was approved, the FSSA issued guidance that was incomplete in some cases and future guidance then contradicted what had been released previously. This caused confusion from both providers and managed care entities. Further, the dissemination of information in small pieces rather than from a centralized location (e.g., a dedicated website or online provider manual) brought into question from stakeholders which documents were the source of truth.
2. Feedback is helpful from managed care entities on policies, billing, and interpretations introduced by the Medicaid agency to ensure consistency when implemented with the provider base. This avoids "back-tracking" later on in the process after changes have been made that are not implemented consistently across managed care entities.
3. Continual education on the use and interpretation of ASAM criteria is required, particularly with new providers coming online and staff turnover at tenured providers.

Recommendations

Indiana's FSSA offers the following recommendations to other states who are implementing SUD demonstrations or are considering seeking authority under this demonstration.

1. Indiana recommends to other states to convene its providers and managed care entities on a regular basis to communicate what is happening "on the ground," particularly at the introduction of new services or expansion of existing services. In addition to providing a forum for multiple viewpoints to successfully implement demonstration activities, these meetings foster collaboration between stakeholders and offer the state the ability to share its vision for SUD service implementation to all stakeholders.
2. Related to this, providers and managed care entities need education on the ASAM service continuum and the six dimensions of assessment. States are encouraged to convene stakeholders to educate them about ASAM. Indiana sponsored training from ASAM professionals to deliver this training at no charge to its providers and MCEs. This is an important tool to help achieve a better understanding not only on best practices related to assessment, but also supporting service authorization requests and determining appropriate transitions of care for SUD beneficiaries.
3. State Medicaid Agencies are encouraged to take an active approach in reviewing authorization determinations by its managed care contracted entities. This includes assessing who is doing the authorization reviews, what is the trend in authorization dispositions (approvals and denials), what is the rationale for denials by the MCEs, what patterns are found among SUD providers in authorization denials (i.e., is more education required for some providers), and what services are found to have the greatest rate of authorization denials and why. Gaining a solid understanding of what is happening in the field related to service authorization requests may help to mitigate tension between providers and MCEs.

APPENDIX A: APPROVED EVALUATION DESIGN PLAN

**EVALUATION DESIGN PLAN
FOR INDIANA'S 1115 SUBSTANCE USE
DISORDER DEMONSTRATION WAIVER
EFFECTIVE JAN. 1, 2021 – DEC. 31, 2025**



**FINAL VERSION
DECEMBER 29, 2022**

HEALTH MANAGEMENT ASSOCIATES

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Abbreviations List

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Abbreviation	Meaning	Abbreviation	Meaning
AOD	Alcohol or Other Drug	ISDH	Indiana State Department of Health
ASAM	American Society for Addiction Medicine	ITS	Single Segment Interrupted Time Series
B&A	Burns & Associates, Inc.	MAT	Medication-Assisted Treatment
CMS	Centers for Medicare and Medicaid Services	MCE	Managed Care Entity
CY	Calendar Year	MMIS	Medicaid Management Information System
DMHA	Division of Mental Health and Addiction	NCQA	National Committee for Quality Assurance
DOS	Date of Service	NQF	National Quality Forum
DR	Desk Review	OMPP	Office of Medicaid Policy and Planning
DS	Descriptive Statistics	OR	Onsite Reviews
ED	Emergency Department	OUD	Opioid Use Disorder
EDW	Enterprise Data Warehouse	PHE	Public Health Emergency
FFS	Fee-For-Service	PDMP	Prescription Drug Monitoring Program
FQHC	Federally Qualified Health Center	PQA	Pharmacy Quality Assurance
FSSA	Indiana Family and Social Services Administration	RCT	Randomized Control Trials
FI	Facilitated Interviews	RHC	Rural Health Clinic
HIP	Healthy Indiana Plan	SAS	Statistical Analysis System
HMA-Burns	Burns & Associates, a Division of Health Management Associates	ST	Statistical Tests
IDOC	Indiana Department of Corrections	STC	Special Terms and Conditions
IMD	Institution for Mental Disease	SUD	Substance Use Disorder
IPLA	Indiana Professional Licensing Agency		

SECTION I: GENERAL BACKGROUND INFORMATION

I.A Waiver Demonstration Information

The State of Indiana received authority in its Medicaid Section 1115 demonstration waiver to expand services for substance use disorder (SUD) effective February 1, 2018 through December 31, 2020. The waiver authority was selected as the means to ensure that a broad continuum of care is available to Indiana Medicaid beneficiaries with a SUD, including services that had previously not been available to Medicaid beneficiaries as well as services that are delivered in an Institution for Mental Disease (IMD) for which federal matching funds were not available absent the waiver authority.

The State applied for, and received, approval to extend its SUD waiver for an additional five years effective January 1, 2021¹. This evaluation design plan covers the five-year renewal period shown below.

Name: Healthy Indiana Plan (HIP)

Project Number: 11-W-00296/5

Approval Date: October 26, 2020

Time Period Covered by Evaluation: January 1, 2021 through December 31, 2025

I.B Waiver Demonstration Goals

Indiana identified its primary goals for the SUD component of its waiver demonstration in its SUD Implementation Plan which was approved February 1, 2018. As per the SUD waiver renewal, the original SUD Implementation Plan is still in effect. Indiana chose to use the goals as outlined by the Centers for Medicare and Medicaid Services (CMS) as follows:

1. Increased rates of identification, initiation, and engagement in treatment;
2. Increased adherence to and retention in treatment;
3. Reductions in overdose deaths, particularly those due to opioids;
4. Reduced utilization of emergency department and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services;
5. Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate; and
6. Improved access to care for physical health conditions among beneficiaries.

I.C Brief Description and History of Implementation

On February 1, 2018, Indiana received approval of its SUD Implementation Plan Protocol as required by special terms and conditions (STC) X.10 of the state's section 1115 Healthy Indiana Plan (HIP) demonstration for its initial SUD waiver covering the period February 1, 2018 – December 31, 2020. This SUD Implementation Plan also remains in effect for the SUD waiver renewal period from January 1, 2021

¹ [in-healthy-indiana-plan-support-20-ca-01012021.pdf \(medicaid.gov\)](https://in-healthy-indiana-plan-support-20-ca-01012021.pdf) CMS Approval- Extension Request, Indiana. October 26, 2020

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– December 31, 2025.² In its, SUD Implementation Plan Protocol, Indiana is focusing on the following areas to support its waiver demonstration goals:³

- Expanded SUD treatment options for as many of its members as possible;
- Stronger, evidence-based certification standards for its SUD providers, particularly its residential addiction providers; and
- Consistency with prior authorization criteria and determinations among its health plans.

In support of these focus areas, Indiana Medicaid and CMS identified six key milestones, as described in their Protocol, which include:⁴

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

The Family and Social Services Administration's (FSSA's) Office of Medicaid Policy and Planning (OMPP) has responsibility for the administration and oversight of Indiana's Medicaid program under waiver and state authorities. Since the initial SUD waiver implementation began in early 2018, the OMPP has worked closely with the FSSA's Division of Mental Health and Addiction (DMHA) to implement the activities specified in the SUD Implementation Plan Protocol. In addition to the FSSA, the Indiana State Department of Health (ISDH), the Indiana Department of Corrections (IDOC), and the Indiana Professional Licensing Agency (IPLA) have all contributed to aspects of SUD waiver implementation activities.

The OMPP contracts with four managed care entities (MCEs) that are responsible for the delivery of services to most beneficiaries that are identified with SUD in Indiana's Medicaid program.

Exhibit 1 on the next page summarizes key implementation activities during the first SUD waiver period.

² Ibid. Special Terms and Conditions, Section X, Item 3, page 34 of 173.

³ Ibid. Attachment C. Indiana 1115 SUD Waiver Implementation Plan, Updated January 2018, page 4.

⁴ Ibid. Attachment C, pages 4 – 30.

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Exhibit 1. Key Activities Implemented by Indiana in its SUD Implementation Protocol During Waiver Period 1, February 2018 – December 2020

Milestone	Implementation Activity	Implementation
Access to Critical Levels of Care for SUD Treatment	<p>Pursued Indiana Administrative Code changes to expand coverage and reimbursement.</p> <p>Made systems changes to enroll and pay residential treatment facilities.</p> <p>Established criteria for authorizing inpatient detox.</p>	2017 into 2018 Spring 2018 May 2018
Use of evidence-based SUD-specific patient placement criteria	<p>Conducted provider education on ASAM criteria.</p> <p>Developed standard prior authorization form for SUD treatment across managed care plans.</p> <p>Issued draft level of care guidelines.</p>	May 2018, Fall 2019, Spring 2020 (virtual) March 2019 January 2020
Use of nationally recognized SUD-specific program standards to set provider qualifications for residential treatment facilities	<p>Finalized process for provisional ASAM designation for providers.</p> <p>Final designations became effective July 1, 2018.</p> <p><i>As of July 1, 2021, there are now 322 ASAM 3.1 beds, 1,429 ASAM 3.3 beds, and 125 dually-licensed 3.1/3.5 beds in service.</i></p>	March 2018
Sufficient provider capacity at critical levels of care, including medication assisted treatment for OUD	<p>Training materials to providers and Medicaid managed care plans on new waiver services.</p> <p>Create new provider specialty for residential treatment facilities in state's MMIS.</p> <p>Began partnership linking Open Beds with Indiana 211.</p> <p>Added midlevel practitioners to those who qualify to bill for services in and FQHC or RHC.</p> <p>Added licensed behavioral health professionals to eligible provider group.</p>	January 2018 and throughout year March 2018 March 2018 October 2020 November 2020
Implementation of comprehensive treatment and prevention strategies to address opioid abuse and OUD	<p>Implemented a reimbursement system for emergency responders who use naloxone.</p> <p>Built short-term strategies to ensure continued access to services during the public health emergency and long-term strategies to continue after the PHE.</p>	July 2020 March 2020 – ongoing
Improved care coordination and transition between levels of care	<p>Extend case management delivered by managed residential treatment facilities</p> <p>Created/maintain a cross-Divisional SUD work group to address ongoing implementation tasks.</p>	Feb-18 December 29, 2022 Sept 2018 - ongoing

I.D Population Groups Impacted

Overdose deaths nationally increased to a new record in Calendar Year (CY) 2020 to 93,331, an increase of 29.4 percent from the CY 2019 total of 72,151.⁵ In Indiana, the year-over-year increase was 33.1 percent, from 1,704 in CY 2019 to 2,268 in CY 2020. This placed Indiana 15th highest among states for overdose deaths in 2020. Indiana has also been adversely impacted by drug overdose using other measures, including the following:

- Over the five-year period from December 2015 to December 2020, Indiana has also outpaced overdose deaths nationwide with an increase of 84.1 percent compared to the U.S. average increase of 77.4 percent.⁶
- Using CY 2019 data, Indiana ranked 18th highest among states on a per 100,000 resident basis for drug overdose mortality.⁷
- In 2017, the drug overdose death rate was 29.4 deaths per 100,000 in Indiana compared to motor vehicle traffic-related deaths of 12.9 per 100,000.⁸

For the Summative Evaluation of Indiana's first SUD demonstration period, the evaluators used CMS's specifications for SUD Metric #3 (Medicaid Beneficiaries with SUD Diagnosis) to assess the trend in the Medicaid population most likely to be impacted by the demonstration. Exhibit 2, which appears on the next page, shows the trend on this measure on a quarterly basis from Q1-2016 to Q4-2020. This period is roughly the two-year period prior to the start of the initial demonstration and the three years during the SUD demonstration.

Medicaid beneficiaries with a SUD diagnosis grew consistently during the five-year period examined, from 43,063 in Q1-2016 to 114,317 as of Q4-2020. Over the course of the demonstration, the population of beneficiaries with SUD grew 23 percent (92,642 in Q1-2018 to 114,317 in Q4-2020).

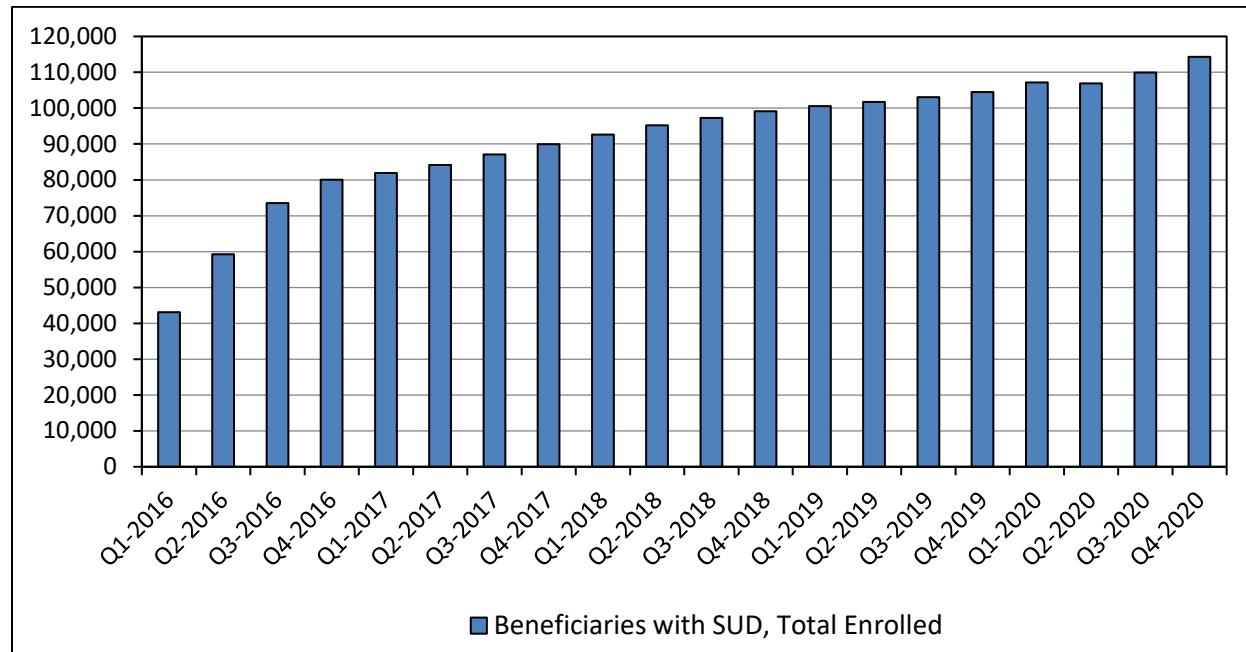
⁵ <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm> National Vital Statistics System, information retrieved July 20, 2021

⁶ Ibid.

⁷ https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm Data is age-adjusted by state, information retrieved July 20, 2021

⁸ [2017-SER.pdf \(in.gov\)](https://www.cdc.gov/nchs/special-reports/2017-SER.pdf) Special Emphasis Report: Drug Overdose Deaths 1999-2017, retrieved July 20, 2021

Exhibit 2. Count of Indiana Medicaid Members Meeting CMS Metric #3 Criteria, CY 2016 – CY 2020



Overall, Medicaid members with a SUD diagnosis represented 6.2 percent of the total Medicaid population at the start of the demonstration in February 2018. By the end of the first SUD demonstration period in December 2020, these members represented 6.5 percent of total enrollees.

Exhibit 3 on the next page compares the percent of total enrollees with SUD against the overall Medicaid population across a number of subpopulations. As expected, non-elderly adults represent approximately half of total Medicaid enrollment, but more than 12 percent of non-elderly adults have a SUD diagnosis.

Dual eligibles, the criminally involved, and beneficiaries enrolled in the Medicaid Rehabilitation Option (MRO) benefit are also over-represented within the total population with SUD compared to their proportional enrollment in Medicaid overall (i.e., each subpopulation has a higher percentage of its members with SUD than the statewide percentage shown at the top of the exhibit).

The FSSA maps each of Indiana's 92 counties into one of eight regions shown in the exhibit. There has been modest change over the demonstration period of the percentage of the Medicaid population with SUD at the region level, but all regions did see an increase. Medicaid enrollees in the East Central, Southwest, and Southeast regions are over-represented in the percentage with SUD compared to the statewide average.

Exhibit 3. Comparison of Medicaid Members with SUD Diagnosis to Total Enrollment at the Start and End of the Initial Demonstration Period

Category	February 2018 start of demonstration period			December 2020 end of demonstration period		
	Total Enrollment	Percent of Total Enrolled	Percent of Total Enrolled with SUD	Total Enrollment	Percent of Total Enrolled	Percent of Total Enrolled with SUD
Total Demonstration Population	1,479,615	100.0%	6.2%	1,768,040	100.0%	6.5%
By Age Group						
Age Less than 18	682,021	46.1%	0.5%	744,466	42.1%	0.3%
Age 18 to 64	693,346	46.9%	12.4%	899,695	50.9%	12.0%
Age 65 and Over	104,248	7.0%	2.8%	123,879	7.0%	3.7%
By Cohort Population						
Dual Eligible	139,958	9.5%	7.0%	154,786	8.8%	7.6%
Pregnant	30,615	2.1%	5.5%	50,000	2.8%	6.4%
Criminally Involved	6,597	0.4%	7.7%	4,780	0.3%	7.2%
MRO	41,290	2.8%	16.6%	45,242	2.6%	19.0%
By FSSA Region						
Northwest	192,804	13.0%	5.0%	222,042	12.6%	5.1%
North Central	129,899	8.8%	2.9%	152,652	8.6%	2.8%
Northeast	162,746	11.0%	5.7%	197,275	11.2%	5.9%
West Central	110,129	7.4%	5.7%	130,064	7.4%	6.3%
Central	473,723	32.0%	5.6%	575,984	32.6%	5.9%
East Central	132,971	9.0%	7.2%	156,655	8.9%	8.4%
Southwest	147,762	10.0%	8.5%	177,387	10.0%	8.8%
Southeast	128,810	8.7%	10.3%	155,742	8.8%	10.4%

SECTION II: EVALUATION QUESTIONS AND HYPOTHESES

II.A Translating Demonstration Goals into Quantifiable Targets for Improvement

The Burns & Associates division of Health Management Associates (HMA-Burns)⁹, the independent evaluator of Indiana's SUD demonstration waiver, examined the relationships among the State's (and CMS's) SUD demonstration goals to develop hypotheses related to Indiana's SUD waiver renewal. Given the experience of the HMA-Burns team with evaluating Indiana's first SUD waiver along with our understanding of the specific items identified and carried out in the State's SUD implementation plan since the initial waiver was approved, the approach by the HMA-Burns team for Indiana's second SUD waiver is to evaluate the pace of improvement in the access, utilization and delivery of SUD treatment services to Medicaid beneficiaries that builds on the foundation established in the first SUD waiver period.

Although Indiana's initial SUD waiver period was short in duration (35 months instead of a typical 60 months), the State undertook significant steps to expand SUD treatment coverage immediately upon waiver initiation. It should be recognized, however, that the delivery of community-based SUD treatment in Indiana's Medicaid program at a broad statewide level is still a relatively new undertaking.

II.B Defining Relationships: Waiver Policy, Short-term and Longer-term Outcomes

The HMA-Burns team constructed a logic model with the long-term outcome being a reduction in overdose deaths in Indiana. The logic model appears as Exhibit 4 on the next page. Based on key actions taken by the State either at the start of the initial SUD waiver demonstration or since the demonstration's initiation, eight short-term outcomes have been identified.

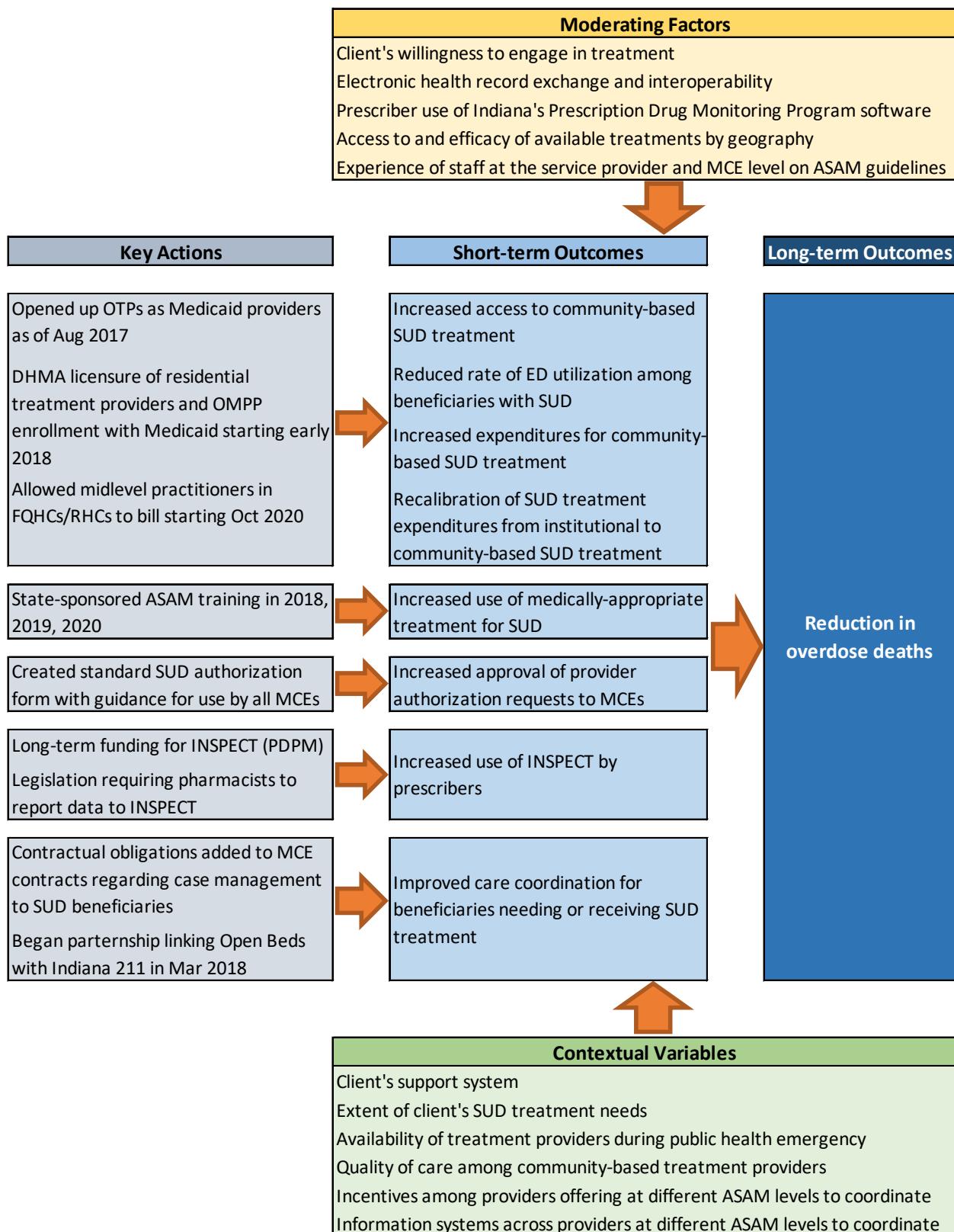
The short-term outcomes all tie to eight hypotheses and eight research questions which are introduced in Section II.C.

There is recognition that the success of short-term and long-term outcomes may be moderated by factors such as the client's willingness to engage in SUD treatment, the access to and efficacy of available treatments for SUD throughout Indiana, the experience of the staff among MCEs and service providers on ASAM guidelines, and the availability and use of technology by providers and service coordinators to effectively coordinate SUD treatment.

Contextual variables to the success of short-term and long-term outcomes include the extent of need by each client and where the client is located in the state, the client's support system to initiate or continue engagement in treatment, and incentives or disincentives for providers at different ASAM levels to coordinate the transition of care from one ASAM level to another.

⁹ Burns & Associates, Inc. (B&A) was engaged by Indiana's Family and Social Services Administration to conduct the evaluation of Indiana's initial SUD waiver. B&A was acquired by Health Management Associates effective September 1, 2020. The initial B&A team that worked on the initial SUD waiver evaluation continues this work at HMA. This same team will also serve as the evaluation team of Indiana's second SUD waiver evaluation.

Exhibit 4. Logic Model for Indiana's SUD Demonstration: Reduce Overdose Deaths



II.C Hypotheses and Research Questions

Exhibit 5 identifies the hypotheses developed for Indiana's SUD waiver demonstration renewal and the research questions associated with each hypothesis. A full listing of the measures associated with each hypothesis and research question appears in Section III.G of the Methodology section. For each hypothesis, a reference is made to compare against either the initial demonstration period (February 2018 to December 2020) or prior to the initial demonstration period (prior to February 2018). When statistically significant improvement was reported in the Summative Evaluation between the initial demonstration period and the pre-demonstration period on measures tied to hypotheses, then the comparison period is the initial demonstration period. When statistically significant improvement was not reported in the Summative Evaluation, then the comparison period is the pre-demonstration period.

Exhibit 5. Hypotheses and Research Questions Developed for the Evaluation of Indiana's SUD Waiver Demonstration Renewal

Hypothesis (H)	Research Question (RQ)
H1 The demonstration will decrease the rate of overdose deaths in Indiana since prior to the initial demonstration period.	RQ1 Is the rate of drug overdose deaths in Indiana impacted by the demonstration?
H2 The demonstration will increase the percentage of Medicaid beneficiaries who initiate and engage in treatment for OUD and other SUDs since the initial demonstration period.	RQ2 Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?
H3 The demonstration will decrease the rate of emergency department visits among Medicaid beneficiaries with SUD since the initial demonstration period.	RQ3 Does the demonstration decrease the rate of emergency department visits among Medicaid beneficiaries with SUD?
H4 The demonstration will decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD since prior to the initial demonstration period.	RQ4 Does the demonstration decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD?
H5 The demonstration will increase the percentage of Medicaid beneficiaries who receive care for comorbid conditions since prior to the initial demonstration period.	RQ5 Does the demonstration increase the percentage of Medicaid beneficiaries with SUD who receive care for comorbid conditions?
H6 The demonstration will improve access to community-based services for SUD treatment since the initial demonstration period.	RQ6 Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?
H7 Care coordination and transitions between ASAM levels of care will improve during the demonstration period.	RQ7 Does the demonstration improve transitions between ASAM levels of care?
H8 The demonstration will further rebalance Medicaid expenditures for treatment of SUD more toward community-based care since the initial demonstration period.	RQ8 Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

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The number of hypotheses and research questions shown in Exhibit 5 was reduced from the number included in the initial demonstration period for a variety of reasons:

1. Some hypotheses and research questions were specifically targeted towards aspect of implementation of a new program which is not relevant to the renewal demonstration period. One example is research questions related to the enrollment of residential treatment providers.
2. Some hypotheses and research questions in the initial demonstration were specifically focused on implementation tasks that were intended to occur but were never implemented. One example is the universal adoption of the Child and Adolescent Needs and Strengths (CANS) and Adult Needs and Strengths Assessment (ANSA) to place beneficiaries in ASAM levels of care.
3. Measures that were utilized to answer many research questions during the initial demonstration period will continue to be examined in the new demonstration period, but these measures are now mapped to a more general research question in this evaluation design. Specific examples pertain to care coordination and transitions of care research questions in the initial demonstration evaluation design that have been subsumed under Research Question #7 in this evaluation design.

II.D Alignment with Demonstration Goals

To ensure that the evaluation hypotheses and research questions are responsive to the CMS guidance in the approved waiver standard terms and conditions, HMA-Burns has mapped the hypotheses to the waiver demonstration goals. Each hypothesis addresses at least one demonstration goal and, in many cases, map to multiple goals. Exhibit 6 presents a visualization of this mapping.

Exhibit 6. Alignment of Hypotheses with Demonstration Goals

	Waiver Goal					
	1	2	3	4	5	6
Hypothesis						
H1 Decrease the rate of overdose deaths			X			
H2 Increase the percentage of initiation and engagement in treatment	X					
H3 Decrease the rate of emergency department visits				X		
H4 Decrease the rate of hospital readmissions					X	
H5 Increase the rate of beneficiaries who receive care for comorbid						X
H6 Improve access to community-based services for SUD treatment		X				
H7 Improve care coordination and transitions between ASAM levels		X				
H8 Rebalance Medicaid expenditures toward community-based care	X					

SECTION III: METHODOLOGY

III.A Evaluation Design

The evaluation design is a mixed-methods approach, drawing from a range of data sources, measures, and analytics to best produce relevant and actionable study findings. The HMA-Burns team tailored the approach for each of the eight research questions described in Section II, Evaluation Questions and Hypotheses. The evaluation plan reflects a range of data sources, measures, and perspectives.

Indiana's Medicaid population with a SUD diagnosis is the predominant population examined in the evaluation but, at times, the entire adult Medicaid population will be used as a comparison. Within the Medicaid population with SUD, a number of study sub-populations will also be examined and tested against the overall SUD population. These are identified in Section III.B.

The five analytic methods proposed for use across the eight hypotheses and eight research questions include:

1. Chi-square (Chi),
2. Interrupted Time Series (ITS),
3. Onsite reviews (OR)
4. Desk reviews (DR) and,
5. Facilitated interviews (FI).

Exhibit 7 on the next page presents a chart displaying which method(s) are used for each hypothesis. The five methods are ordered and abbreviated as described above.

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Exhibit 7. Summary of Five Analytic Methods by Hypothesis

Hypothesis (H)	Method					Data Sources
	Chi	ITS	OR	DR	FI	
H1 The demonstration will decrease the rate of overdose deaths in Indiana since prior to the initial demonstration period.	X			X		Claims data, vital statistics, PDMP stats
H2 The demonstration will increase the percentage of Medicaid beneficiaries who initiate and engage in treatment for OUD and other SUDs since the initial demonstration period.	X	X		X	X	Claims data, enrollment data
H3 The demonstration will decrease the rate of emergency department visits among Medicaid beneficiaries with SUD since the initial demonstration period.		X		X		Claims data, enrollment data
H4 The demonstration will decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD since prior to the initial demonstration period.	X			X		Claims data, enrollment data
H5 The demonstration will increase the percentage of Medicaid beneficiaries who receive care for comorbid conditions since prior to the initial demonstration period.		X		X		Claims data, enrollment data
H6 The demonstration will improve access to community-based services for SUD treatment since the initial demonstration period.			X	X	X	Claims data, enrollment data, MCE data files, MCE case files
H7 Care coordination and transitions between ASAM levels of care will improve during the demonstration period.			X	X	X	Claims data, enrollment data, MCE data files, MCE case files
H8 The demonstration will further rebalance Medicaid expenditures for treatment of SUD more toward community-based care since the initial demonstration period.		X		X		Claims data, enrollment data

Chi = Chi-square; ITS = Interrupted Time Series; OR = Onsite Reviews; DR = Desk Reviews; FI = Facilitated Interviews

III.B Target Population and Comparison Groups

Target Population

The target population is any Indiana Medicaid beneficiary with a diagnosis of SUD in the study period. HMA-Burns will use the specification described in the CMS-approved Monitoring Plan for identification of beneficiaries with SUD to flag individuals as an indicator of those most likely to have exposure to the changes in the waiver.

While the key study population is the overall SUD population, a standardized set of sub-populations will be identified and examined. HMA-Burns will sub-set the SUD population, at minimum, by common demographic groups such as by age (adolescent, non-elderly adults, elderly), by delivery system (i.e., managed care or fee-for-service), and by eight geographic regions (mapping each of Indiana's 92 counties to one of the eight regions defined). In addition, there are nuances in the 1115 waiver changes which warrant identification and stratification of the data into a number of sub-populations such as the following:

- ASAM Levels: It is possible that outcomes may differ among the SUD population based on their access to services. HMA-Burns will examine the outcomes by those accessing a particular level of care for differences in health outcomes or cost in the post-waiver period compared to the pre-waiver period.
- Opioid Use Disorder (OUD): It is likely that beneficiaries with OUD, compared to those with other types of SUD, may have different health outcomes and access a different mix of services. Therefore, it is possible that the waiver impacts these populations differently. HMA-Burns will identify OUD beneficiaries (using the CMS-defined specification) to examine these individuals as a separate sub-population.
- New Member/COVID: Beneficiaries who became newly eligible for Medicaid due to the financial impact of the pandemic will be separately identified. A combination of aid category and time of enrollment will be used to identify this population.

Comparison Groups

As described in III.C below, HMA-Burns will create groups of Medicaid beneficiaries with SUD across four time periods in order to compare outcomes. In addition, a sensitivity analysis will be conducted on selected measures using enrollment duration as the control group. Refer to Section III.F for more details.

III.C Evaluation Period

Monthly Measures

For measures which are computed on a monthly basis, statistical testing using Interrupted Time Series (ITS) will be applied. HMA-Burns will consider four different time periods when conducting ITS. Each time period will contain 25 observations (months). While the initial demonstration evaluation design intended for 2015 data to be included in the pre-demonstration period, the independent evaluators did not include it as the conversion from ICD-9 to ICD-10 took place during this year. An examination of the mapping of ICD-9 to ICD-10 codes found that only 45% of the ICD-10 SUD Value Set codes had a 1:1

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conversion to ICD-9. The remaining 55% of the ICD-10 codes mostly matched to multiple ICD-9 codes, with one code having no match at all.

- Time Period #1: Pre-Demonstration. This is the period just prior to the approval of Indiana's first SUD demonstration, from January 2016 through January 2018.
- Time Period #2: Demonstration 1 period. This is the first 25 months of Indiana's initial SUD demonstration, from February 2018 through March 2020. Indiana's initial SUD demonstration ended in December 2020. The first 25 months of the demonstration are included in the analysis instead of the last 25 months of the demonstration because the last nine months of Indiana's truncated 35-month demonstration period were during the onset of the public health emergency (PHE).
- Time Period #3: Demonstration 2 initial period. This is the 25-month period from December 2021 through December 2023. Time Period #3 will be compared to either Time Period #1 or Time Period #2 when ITS testing is conducted for reporting in the Interim Evaluation.
- Time Period #4: Demonstration 2 later period. This is the 25-month period from December 2023 through December 2025. Time Period #4 will be compared to either Time Period #1 or Time Period #2 when ITS testing is conducted for reporting in the Summative Evaluation.

The determination of whether Time Periods #3 and #4 are tested against either Time Period #1 or Time Period #2 are based on the results that HMA-Burns found in its Summative Evaluation of Indiana's first SUD demonstration.

- If it was found in the Summative Evaluation of the first demonstration period when ITS was run that there was not a statistically significant finding for a given measure, then HMA-Burns will run ITS on that measure using Time Period #3 (for Interim Evaluation) or Time Period #4 (for Summative Evaluation) against Time Period #1.
- If it was found in the Summative Evaluation of the first demonstration period when ITS was run that there was a statistically significant finding for a given measure, then HMA-Burns will run ITS on that measure using Time Period #3 (for Interim Evaluation) or Time Period #4 (for Summative Evaluation) against Time Period #2. Since it was already established in the first demonstration evaluation that statistically significant improvement was found, for the second demonstration evaluation HMA-Burns will assess if improvement continued and if the pace of this improvement was statistically significant compared to the findings from the first demonstration period.

Annual Measures

For measures which are computed on an annual basis, statistical testing using chi-square will be applied. HMA-Burns will consider four different time periods when conducting chi-square. While the initial demonstration evaluation design intended for calendar year 2015 data to be included in the pre-demonstration period, the independent evaluators did not include it as the conversion from ICD-9 to ICD-10 took place during this year. An examination of the mapping of ICD-9 to ICD-10 codes found that only 45% of the ICD-10 SUD Value Set codes had a 1:1 conversion to ICD-9. The remaining 55% of the ICD-10 codes mostly matched to multiple ICD-9 codes, with one code having no match at all.

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- Time Period #1: Pre-Demonstration. This will include the average results for Calendar Years 2016 and 2017.
- Time Period #2: Demonstration 1 period. This will include the average results for Calendar Years 2018 and 2019.
- Time Period #3: Demonstration 2 initial period. This will include the average results for Calendar Years 2022 and 2023.
- Time Period #4: Demonstration 2 later period. This will include the average results for Calendar Years 2024 and 2025.

Similar to the approach that will be used for monthly measures, the determination of whether Time Periods #3 and #4 are tested against either Time Period #1 or Time Period #2 are based on the results that HMA-Burns found in its Summative Evaluation of Indiana's first SUD demonstration.

- If it was found in the Summative Evaluation of the first demonstration period when chi-square was run that there was not a statistically significant finding for a given measure, then HMA-Burns will run chi-square on that measure using Time Period #3 (for Interim Evaluation) or Time Period #4 (for Summative Evaluation) against Time Period #1.
- If it was found in the Summative Evaluation of the first demonstration period when chi-square was run that there was a statistically significant finding for a given measure, then HMA-Burns will run chi-square on that measure using Time Period #3 (for Interim Evaluation) or Time Period #4 (for Summative Evaluation) against Time Period #2.

III.D Evaluation Measures

The HMA-Burns team identified 32 measures in the evaluation design plan that directly relate to the outcomes described the logic model shown in Section II, the overall demonstration goals, and the research questions developed for this demonstration evaluation. The measures include those with national measure stewards, those specified by CMS, and evaluator-derived measures. Of the total 32 measures, 23 of them are currently SUD monitoring measures required by CMS for SUD waiver reporting by states. The CMS-defined metrics will be computed monthly and/or annually as deemed appropriate to each measure specification and will use the CMS technical specifications for computation.

Exhibit 8 on the next two pages summarizes the list of measures included in the evaluation design plan. Each measure is mapped to a hypothesis and research question. There is an indicator whether ITS or chi-square will be used as the basis for statistical testing on the measure. Additionally, there is an indicator if the measure will be subject to sensitivity analysis. The statistical tests using ITS or chi-square will be completed on each measure shown and reported in both the Interim and Summative Evaluations.

A comprehensive list of measures as well as a description of numerators and denominators can be found in the detailed matrices shown in Section III.G.

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Exhibit 8. Summary of Measures and Steward, by Research Question

H = Hypothesis

H	Research Question (RQ)	Measure Steward	CMS Metric	Interrupted Time Series Test	Sensitivity to ITS Tested	Chi-square Test
	Measures Associated with Each RQ					
H1	RQ1 Is the rate of drug overdose deaths in Indiana impacted by the demonstration?					
	1 Rate of overdose deaths	HMA	#26			
	2 Use of opioids at high dosage in persons without cancer	NCQA, NQF #2940	#18			X
	3 Use of opioids from multiple providers in persons w/o cancer	PQA, NQF #2950	#19			X
	4 Concurrent use of opioids and benzodiazepines	PQA, NQF #3389	#21			X
	5 Number of prescribers accessing INSPECT	HMA	n/a			
H2	RQ2 Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?					
	6 Initiation of AOD Dependence Treatment, Total Population	NCQA, NQF #0004	#15			X
	7 Initiation of AOD Dependence Treatment, Alcohol Abuse Only	NCQA, NQF #0004	#15			X
	8 Initiation of AOD Dependence Treatment, Opioid Abuse Only	NCQA, NQF #0004	#15			X
	9 Initiation of AOD Dependence Treatment, Abuse Other than Alcohol or Opioid	NCQA, NQF #0004	#15			X
	10 Engagement of AOD Dependence Treatment, Total Population	NCQA, NQF #0004	#15			X
	11 Engagement of AOD Dependence Treatment, Alcohol Abuse Only	NCQA, NQF #0004	#15			X
	12 Engagement of AOD Dependence Treatment, Opioid Abuse Only	NCQA, NQF #0004	#15			X
	13 Engagement of AOD Dependence Treatment, Abuse Other than Alcohol/Opioid	NCQA, NQF #0004	#15			X
	14 Follow-up After ED Visits for AOD Dependence, 7 days	NCQA, NQF #3488	#17			X
	15 Continuity of Pharmacotherapy for Opioid Use Disorder	USC, NQF #3175	#22			X
	16 Rate of Medicaid beneficiaries receiving outpatient services	CMS	#8	X	X	
	17 Rate of Medicaid beneficiaries receiving intensive outpatient or partial hosp	CMS	#9	X	X	
	18 Rate of Medicaid beneficiaries receiving residential or hospital treatment	CMS	#10	X	X	
	19 Rate of Medicaid beneficiaries receiving withdrawal management	CMS	#11	X	X	
	20 Rate of Medicaid beneficiaries receiving medication assisted treatment	CMS	#12	X	X	

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H = Hypothesis

H	Research Question (RQ)	Measure Steward	CMS Metric	Interrupted Time Series Test	Sensitivity to ITS Tested	Chi-square Test
	Measures Associated with Each RQ					
H3	RQ3 Does the demonstration decrease the rate of emergency department visits among Medicaid beneficiaries with SUD?					
	21 ED utilization per 1,000 among beneficiaries with SUD	CMS	#23	X	X	
H4	RQ4 Does the demonstration decrease the rate of hospital readmissions among benefic. with SUD?					
	22 Readmissions among beneficiaries with SUD	CMS	#25			X
H5	RQ5 Does the demonstration increase the percentage of beneficiaries with SUD who receive care for comorbid conditions?					
	23 Access to Preventive Health for Adult Beneficiaries with SUD	NCQA, AAP	#32	X	X	
H6	RQ6 Does the demonstration increase the level of access to community-based SUD treatment for beneficiaries with SUD?					
	24 ASAM 3.x bed capacity for Medicaid beneficiaries	HMA	n/a			
	25 MAT prescribers in Indiana accepting Medicaid clients	HMA	n/a			
	26 Authorized residential treatment days as percent of total requested	HMA	n/a			
	27 Average distance travelled by Medicaid beneficiaries seeking residential Tx	HMA	n/a			
H7	RQ7 Does the demonstration improve transitions between ASAM levels of care?					
	28 Pct of discharges from inpatient/residential treatment for SUD which were followed by SUD treatment	RTI, NQF #3590	n/a			
	29 Pct of discharges from inpatient/residential treatment for SUD that readmit for inpt/resid within 180 days of initial discharge	HMA	n/a			
	30 Pct of beneficiaries enrolled in managed care and actively engaged in case or care management with their MCE	HMA	n/a			
H8	RQ8 Does the demonstration rebalance Medicaid expenditures for treatment of SUD away from institutional care toward community-based care?					
	31 PMPM costs, beneficiaries with SUD, all services	CMS	n/a	X	X	
	32 PMPM costs, beneficiaries with SUD, for SUD services	CMS	#25	X	X	

III.E Data Sources

As described in Section III.A, Evaluation Design, HMA-Burns will use existing secondary data sources as well as collect primary data. The evaluation design relies most heavily on the use of Indiana Medicaid administrative data, such as enrollment, claims, and encounter data. Supplemental administrative data, such as service authorization approvals and denials, will also be incorporated. Primary data will be limited and include data created by desk review and facilitated interview instruments. A brief description of these data and their strengths and weaknesses appears below.

Indiana Medicaid Administrative Data

Claims and encounters with dates of service (DOS) from January 1, 2016 and ongoing will be collected from the FSSA Enterprise Data Warehouse (EDW), facilitated by FSSA's EDW vendor, Gainwell Technologies. Managed care encounter data has the same record layout as fee-for-service claims in the EDW and includes variables such as charges and payments at the header and line level. Payment data for MCE encounters represents actual payments made to providers by the MCEs. In total, four MCEs will have encounter data in the dataset.

Because the HMA-Burns team already has built a relationship with the FSSA Data Analytics team and with Gainwell, the HMA-Burns team currently receives monthly tables from the EDW representing member enrollment and demographic information, provider enrollment and demographic information, and claims and encounter data at the detail claim line level. Data has already been received, validated, and used by HMA-Burns for the pre-waiver period. On an ongoing basis today and throughout the second demonstration period, the HMA-Burns team will continue to receive these files on a monthly basis from the EDW. The evaluation team will read in, validate, and append new data to the existing Indiana SUD evaluation database that has already been developed.

The last query of the EDW will occur at the end of December 2026 to allow for a 12-month submission lag for services rendered up until the end of the demonstration on December 31, 2025. All data delivered to HMA-Burns from the FSSA will come directly from the EDW. HMA-Burns will leverage all data validation techniques used by Gainwell before the data is submitted to the EDW. HMA-Burns will also conduct its own validations upon receipt of each monthly file from the EDW to ensure accuracy and completeness when creating our multi-year historical database.

When additional data is deemed necessary for the evaluation, HMA-Burns will outreach directly to the MCEs when they are determined to be the primary source. HMA-Burns will build data validation techniques specific to the data received from ad hoc requests made to the MCEs.

Additional data from the MCEs and the State will be collected on prior authorizations (approvals, denials, and denial reason codes) as well as data on care coordination activities. There could be some data validity or quality issues with these sources as they are not as rigorously collected as claims and encounters data. We will provide detailed specifications and reporting tools to the MCEs and the State to minimize potential for differences in reporting of the requested ad-hoc data. That being said, we will use a standard quality review and data cleaning protocol in order to validate these data upon receipt.

Indiana Vital Statistic Data

In collaboration with FSSA, vital statistics cause of death data will be transferred from the Department of Health to the evaluators for purposes of calculating overdose rates. This is currently underway for the first SUD demonstration evaluation and will continue in this second demonstration evaluation. More information on vital statistics can be found at: <https://www.in.gov/health/vital-records/death-information/death-information/>

Prescription Drug Monitoring Program (PDMP) Data

In accordance with state guidelines, the states PDMP (named INSPECT) collects information on queries and unique users which will be provided by the Indiana Professional Licensing Agency in collaboration from FSSA. Where possible, data available in the public domain via quarterly reports will be collected and used. Information on the Indiana's PDMP can be found at: <https://www.in.gov/pla/inspect/>

Facilitated Interview Data

HMA-Burns will construct facilitated interview guide instruments as a means to collect primary data for the focus studies planned in this evaluation related to service authorizations, care coordination, and transitions to care. The types of respondents that the evaluators propose to interview include the MCEs, SUD providers and SUD beneficiaries. Where focused interviews are used to collect data, HMA-Burns will use semi-structured interview protocols that are intended to be standardized within the population being interviewed. The interview protocols will vary, however, for each population interviewed due to the type of information that is intended to be collected. Although semi-structured in nature, each stakeholder will have the opportunity to convey additional information that he/she would like to convey to the evaluators in an open-ended format at the conclusion of each interview.

III.F Analytic Methods

Exhibit 7 depicted the five analytic methods to be used in the analysis. A detailed discussion of each method is described below. It should be noted that whether the statistical test that is applied is ITS or chi-square, for every measure HMA-Burns will also compile descriptive statistics to assess overall longitudinal trends. The descriptive statistics will be performed on the overall demonstration population as well as the subpopulations described in III.B.

Method 1: Chi-square

A chi-square test will be used for measures that are computed annually. Measures where chi-square testing is used will utilize two calendar year time periods, as defined in III.C. The evaluators will consider results significant at a level of probability of $p < .05$. A test statistic will be generated in the SAS® statistical program.

The chi-square test for goodness of fit would determine if the observed frequencies were different than expected; in other words, whether the difference in the pre- and post-outcomes were significantly different statistically than what would have been expected given the pre-period. The null hypothesis, therefore, is that the expected frequency distribution of all wards is the same. Rejecting the null would indicate the differences were statistically significant (i.e., exceeded difference than would be expected at a given confidence level).

The assumptions of the chi-square are:

- Simple random sample
- Sample size. Small samples subject to Type II error.
- Expected cell count. Recommended 5-10 expected counts.
- Independence. Evaluation of the appropriateness of a McNemar's test may be warranted.

Method 2: Interrupted Time Series (ITS)

Per CMS technical guidance, ITS is the preferred alternative approach to randomized control trials in the absence of an available, adequate comparison group for conducting cost-related evaluation analyses.

An ITS analysis relies on a continuous sequence of observations on a population taken at equal intervals over time in which an underlying trend is “interrupted” by an intervention. In this evaluation, the waiver is the intervention and it occurs at a known point in time. The trend in the post-waiver is compared against the expected trend in the absence of the intervention.

A reliability threshold of having a denominator of a minimum number of 100 observations at the monthly level will be used to determine if ITS analysis will ultimately be used. The current evaluation design contemplates using ITS on measures where a minimum denominator of 100 does not appear to be an issue. For all measures where ITS will be applied, descriptive statistics (e.g., mean, median, minimum, maximum, standard deviation) will be inspected for identification of anomalies and trends prior to conducting the test. Scatter plots of each measure will be created and examined to determine any seasonal trends or outliers. Moreover, each outcome will undergo bivariate comparisons; a Pearson correlation coefficient will be produced for each measure compared to the others as well as each measure in the pre- and post- periods.

Regression Analysis

Wagner et al. described the single segmented regression equation as¹⁰:

$$\hat{Y}_t = \beta_0 + \beta_1 * \text{time}_t + \beta_2 * \text{intervention}_t + \beta_3 * \text{time_after_intervention}_t + e_t$$

- Y_t is the outcome
- time indicates the number of months or quarters from the start of the series
- intervention is a dummy variable taking the values 0 in the pre-intervention segment and 1 in the post-intervention segment
- $\text{time_after_intervention}$ is 0 in the pre-intervention segment and counts the quarters in the post-intervention segment at time t
- β_0 estimates the base level of the outcome at the beginning of the series
- β_1 estimates the base trend, i.e. the change in outcome in the pre-intervention segment
- β_2 estimates the change in level from the pre- to post-intervention segment
- β_3 estimates the change in trend in the post-intervention segment
- e_t estimates the error

¹⁰ Wagner AK, Soumerai SB, Zhang F, Ross-Degnan D. Segmented regression analysis of interrupted time series studies in medication use research. J Clin Pharm Ther 2002;27:299-309.

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Each outcome will be assessed through visualization for one of the following types of relationships in the pre- and post-waiver period: (a) Level change; (b) Slope change; (c) Level and slope change; (d) Slope change following a lag; (e) Temporary level change; (f) Temporary slope change leading to a level change.

Seasonality and Autocorrelation

One strength of the ITS approach is that it is less sensitive to typical confounding variables which remain fairly constant, such as population age or socio-economic status, as these changes relatively slowly over time. However, ITS may be sensitive to seasonality. To account for seasonality in the data, the same time period, measured in months or quarters, will be used in the pre- and post-waiver period. Should it be necessary, a dummy variable can be added to the model to account for the month or quarter of each observation to control for the seasonal impact.

An assumption of linear regression is that errors are independent. When errors are not independent, as is often the case for time series data, alternative methods may be warranted. To test for the independence, the evaluators will review a residual time series plot and/or autocorrelation plots of the residuals. In addition, a Durbin-Watson test will be constructed to detect the presence of autocorrelation. If the Durbin-Watson test statistic value is well below 1.0 or well above 3.0, there is an indication of serial correlation. If autocorrelation is detected, an autoregressive regression model, like the Cochrane-Orcutt model, will be used in lieu of simple linear regression.

Other assumptions of linear regression are that data are linear and that there is constant variance in the errors versus time. Heteroscedasticity will be diagnosed by examining a plot of residuals versus predicted values. If the points are not symmetrically distributed around a horizontal line, with roughly constant variance, then the data may be nonlinear and transformation of the dependent variable may be warranted. Heteroscedasticity often arises in time series models due to the effects of inflation and/or real compound growth. Some combination of logging and/or deflating may be necessary to stabilize the variance in this case.

For these reasons and in accordance with CMS technical guidance specific to models with cost-based outcomes, the evaluators will use log costs rather than untransformed costs, as costs are often not normally distributed. For example, many person-months may have zero healthcare spending and other months very large values. To address these issues, HMA-Burns will use a two-part model that includes zero costs (logit model) and non-zero costs (generalized linear model).

Controls and Stratification

As described in Section III.B, for some of the monthly measures, the ITS will be run both on the entire SUD target population as well as by a sub-population of the SUD target population that was continuously enrolled for at least 12 months within the 25-month study period examined. Results from the ITS under each scenario will be compared to determine the sensitivity of the findings using the entire SUD population.

Method #3: Onsite Reviews

In order to fill gaps and address questions for which claims-based data and other sources are insufficient, onsite reviews are proposed to gain insight on nuanced differences in approach, use and

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effectiveness of different MCE and FSSA approaches to two topics—(1) care coordination and case management and (2) SUD service authorizations.

The onsite reviews will be conducted at each MCE office. Reviews will include both a standardized set of interview questions that will capture information on process and documentation as well as a review of beneficiary-level records. A sampling approach will be developed from a desk review conducted prior to the onsite review whereby a limited number of beneficiaries are selected based on a set of criteria. Internal records specific to those beneficiaries stored at each MCE will be reviewed. The criteria for sampling will be developed to reflect the representativeness of the demonstration population or sub-population served by each MCE. The same team of reviewers will be used for each MCE onsite review to strengthen inter-reliability.

Method #4: Desk Reviews

To supplement the care coordination/case management and SUD service authorization focus studies mentioned above, desk reviews will also be conducted. HMA-Burns will provide to each MCE a data reporting template where individual records—such as beneficiary records for case management or individual service authorization requests for the SUD authorization study—will be requested from each MCE for a defined time period.

Once the data is delivered to HMA-Burns by the MCEs, the evaluation team will compile and analyze the data first to ensure face validity. Later, measures will be computed to ensure consistency, accuracy, and completeness of the data across MCEs (e.g., service authorization requests for 1,000 SUD members). Statistics will be tabulated on process measures (e.g., average duration enrolled in case management, turnaround time for service authorization decisions) and compared across the MCEs. The information tabulated in the desk review will be used to develop the sample of records reviewed while at onsite at the MCE offices.

Another focus study related to transitions of care will be completed as a desk review only. HMA-Burns will use encounters submitted by the MCEs for this study. Using a defined anchor event such as an ASAM level 3 or 4 treatment stay, services utilized by each SUD client will be examined for a 12-week period prior to the anchor event (admission to residential treatment or a hospital) and for a 12-week period after discharge. Trends will be examined on changes in utilization patterns in the pre- and post-anchor event period to determine not only if appropriate transitions occurred post-discharge but also the effectiveness of the residential treatment on patient outcomes (e.g., reduction in hospital emergency department use after the anchor event). HMA-Burns will request case and care management rosters from each MCE to assess the transitions of members after the anchor event discharge date for those enrolled in case/care management with the MCE against those who are not enrolled in case/care management.

Method #5 Facilitated and/or Focus Group Interviews

HMA-Burns will construct facilitated interview guide instruments as a means to collect qualitative information from stakeholders. Intended respondents will include the MCEs, SUD providers and SUD beneficiaries. Where focused interviews are used to collect data, HMA-Burns will use semi-structured interview protocols that are intended to be standardized within the population being interviewed. The interview protocols will vary, however, for each population interviewed due to the type of information that is intended to be collected. Although semi-structured in nature, each stakeholder will have the

opportunity to convey additional information that he/she would like to convey to the evaluators in an open-ended format at the conclusion of each interview.

The approach to obtain qualitative feedback is as follows:

- *Interviews with the MCEs.* Interviews will be conducted with members of each MCE staff individually as part of the onsite reviews related to care coordination/case management and SUD service authorizations. These interviews will be with subject matter experts related to each topic. Additionally, interviews will be conducted with representatives from leadership from all MCEs in a joint setting to discuss the effectiveness of the demonstration as well as opportunities to strengthen the delivery of SUD services in Indiana's Medicaid program.
- *Interviews with providers.* Interviews will be conducted through a web-based tool for groups of providers in a small focus group as well as 1:1 with individual providers either in person or via web-based tool. HMA-Burns aims to conduct at least three focus groups with providers before submission of the Interim Evaluation and three focus groups before submission of the Summative Evaluation. The representation in each focus group will be centered on the primary service offered by the providers (e.g., MAT, intensive outpatient, or residential treatment). Additionally, HMA-Burns aims to conduct at least ten 1:1 interviews with individual providers across the ASAM continuum of services prior to the Interim Evaluation and another 10 prior to the Summative Evaluation.
- *Interviews with beneficiaries.* Interviews will be conducted either at provider locations or via a web-based tool. HMA-Burns aims to conduct at least three focus groups with members as well as a minimum of 15 1:1 interviews prior to the Interim Evaluation and the same number prior to the Summative Evaluation. For the focus groups, HMA-Burns will stratify the groups into populations with similar characteristics (e.g., pregnant women, adolescents, adult women, adult men, geographic considerations). The 1:1 interviews will ensure representation from beneficiaries who received SUD services from Medicaid providers across the ASAM continuum. As a means to incentive participation by beneficiaries, HMA-Burns will offer gift cards from Wal-Mart or Target as a gesture of thanks. The gift cards will be distributed immediately after the focus group or interview concludes.

III.G Other Additions

Beginning on the next page, Exhibit 9 provides information on each measure selected for use in the evaluation. The measures are mapped to their associated hypothesis and research question.

Exhibit 9. Summary of Evaluation Questions, Evaluation Hypotheses, Data Sources, and Analytic Approaches

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #1: Is the rate of drug overdose deaths in Indiana impacted by the demonstration?					
Demonstration Goal: Reduction in overdose deaths, particularly those due to opioids.					
Evaluation Hypothesis #1: The demonstration will decrease the rate of overdose deaths in Indiana since prior to the demonstration period.					
Rate of overdose deaths, specifically overdose deaths due to any opioid	HMA-Burns, CMS SUD Monitoring Metric #27	Number of overdose deaths per month and per year	Total number of beneficiary member months (result of this formula then expressed as per 1,000 member months)	Vital statistics, claims data	Descriptive statistics (frequencies and percentages)
Use of opioids at high dosage in persons without cancer	PQA, NQF #2940, CMS SUD Monitoring Metric #18	Number of beneficiaries with opioid prescription claims where the morphine equivalent dose for 90 consecutive days or longer is greater than 120 mg	Number of beneficiaries with two or more prescription claims for opioids filled on at least two separate dates, for which the sum of the days' supply is greater than or equal to 15	Claims and enrollment data	Descriptive statistics, chi-square tests
Use of opioids from multiple providers in persons without cancer	PQA, NQF #2950, CMS SUD Monitoring Metric #19	Number of beneficiaries >=18 who received prescriptions for opioids from >=4 prescribers and >=4 pharmacies within 180 days	Number of Medicaid beneficiaries >=18 that are not excluded due to cancer diagnosis	Claims and enrollment data	Descriptive statistics, chi-square tests
Concurrent use of opioids and benzodiazepines	PQA, NQF #3389, CMS SUD Monitoring Metric #21	Number of beneficiaries with concurrent use of prescription opioids and benzodiazepines	Number of Medicaid beneficiaries >=18 with two or more prescription claims for opioids filled on two or more separate days, for which the sum of the supply is 15 or more days	Claims and enrollment data	Descriptive statistics, chi-square tests
Number of clinicians accessing the PDMP	HMA-Burns	Number of clinicians accessing the PDMP monthly	N/A	PDMP data	Descriptive statistics (frequencies and percentages)

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #2: Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?					
Demonstration Goal: Increased rates of identification, initiation, and engagement in treatment for OUD and other SUDs.					
Evaluation Hypothesis #2: The demonstration will increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs since the initial demonstration period.					
Initiation and engagement of alcohol and other drug dependence treatment	NCQA, NQF #0004, CMS SUD Monitoring Metric #15	Initiation: Number of patients who began initiation of treatment within 14 days of the index episode start date.	Patients who were diagnosed with a new episode of alcohol or drug dependency during the first 10 and ½ months of the measurement year.	Claims data	<p>For both measures: Analysis will be conducted on all 4 sub-populations (total, alcohol only, opioid only, other than alcohol or opioid).</p> <p>Descriptive statistics, chi-square tests.</p>
Initiation and engagement of alcohol and other drug dependence treatment	NCQA, NQF #0004, CMS SUD Monitoring Metric #15	Engagement: Initiation of treatment and two or more defined SUD visits within 30 days after the date of the initiation encounter.	Patients who were diagnosed with a new episode of alcohol or drug dependency during the first 10 and ½ months of the measurement year.	Claims data	
Follow-Up After Discharge from the Emergency Department for Alcohol or Other Drug (AOD) Dependence	NCQA, CMS SUD Monitoring Metric #17(1)	1. Members who had a follow-up visit to an ED visit with a SUD indicator within 7 days of discharge within the previous rolling 12 months.	Individuals with an ED visit (with SUD indicator) within the previous rolling 12 months.	Claims data	<p>For both measures: Descriptive statistics, chi-square tests</p>
	NCQA, Monitoring Metric #17(2)	2. Same as above for members who had a follow-up visit within 30 days.	Individuals with an ED visit (with SUD indicator) within the previous rolling 12 months.	Claims data	
Continuity of pharmacotherapy for OUD	USC, NQF #3175, CMS SUD Monitoring Metric #22	Number of participants who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days.	Individuals who had a diagnosis of OUD and at least one claim for an OUD medication.	Claims data	Descriptive statistics, chi-square tests

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #2: Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?					
Rate of Medicaid beneficiaries receiving intensive outpatient tx	CMS SUD Monitoring Metric #8	Number of unique beneficiaries who received outpatient treatment during the measurement period.	Individuals identified with a SUD diagnosis using CMS Metric #3.	Claims and enrollment data	ITS, including sensitivity analysis
Rate of Medicaid beneficiaries receiving intensive outpatient tx	CMS SUD Monitoring Metric #9	Number of unique beneficiaries who received intensive outpatient or partial hospitalization during the measurement period.	Individuals identified with a SUD diagnosis using CMS Metric #3.	Claims and enrollment data	ITS, including sensitivity analysis
Rate of Medicaid beneficiaries receiving residential treatment	CMS SUD Monitoring Metric #10	Number of unique beneficiaries who have a service for residential treatment for SUD during the measurement period.	Individuals identified with a SUD diagnosis using CMS Metric #3.	Claims and enrollment data	ITS, including sensitivity analysis
Rate of Medicaid beneficiaries receiving withdrawal management	CMS SUD Monitoring Metric #11	Number of unique beneficiaries who received withdrawal management during the measurement period.	Individuals identified with a SUD diagnosis using CMS Metric #3.	Claims and enrollment data	ITS, including sensitivity analysis
Rate of Medicaid beneficiaries receiving MAT	CMS SUD Monitoring Metric #12	Number of unique beneficiaries who received MAT during the measurement period.	Individuals identified with a SUD diagnosis using CMS Metric #3.	Claims and enrollment data	ITS, including sensitivity analysis

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #3: Does the demonstration decrease the rate of emergency department visits among Medicaid beneficiaries with SUD?					
Demonstration Goal: Reduced utilization of emergency department and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services.					
Evaluation Hypothesis #3: The demonstration will decrease the rate of emergency department visits among Medicaid beneficiaries with SUD since the initial demonstration period.					
Emergency department visits for SUD-related diagnoses and specifically for OUD	CMS SUD Monitoring Metric #23	The number of ED visits with a SUD diagnosis present during the measurement period.	Beneficiaries enrolled in Medicaid for at least one month (30 consecutive days) during the measurement period.	Claims and enrollment data	ITS, including sensitivity analysis
Evaluation Question #4: Does the demonstration decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD?					
Demonstration Goal: Fewer readmissions to the same or higher level of care where the readmission is preventable or medically inappropriate.					
Evaluation Hypothesis #4: The demonstration will decrease the rate of hospital readmissions among Medicaid beneficiaries with SUD since prior to the initial demonstration period.					
Readmissions Among Beneficiaries with SUD	CMS SUD Monitoring Metric #25	At least one acute unplanned readmission for any diagnosis within 30 days of the date of discharge from the index hospital stay.	Medicaid beneficiaries age 18 and older with a SUD diagnosis and an index stay (discharges in first 11 months of measurement year).	Claims and enrollment data	Descriptive statistics, chi-square tests
Evaluation Question #5: Does the demonstration increase the percentage of Medicaid beneficiaries with SUD who receive care for comorbid conditions?					
Demonstration Goal: Improved access to care for physical health conditions among beneficiaries.					
Evaluation Hypothesis #5: The demonstration will increase the percentage of Medicaid beneficiaries who receive care for comorbid conditions since prior to the initial demonstration period.					
Access to preventive/ambulatory health services for adult Medicaid beneficiaries with SUD	NCQA, CMS SUD Monitoring Metric #32	Number of beneficiaries with SUD who had an ambulatory or preventive care visit during the measurement period.	Number of beneficiaries with a SUD diagnosis	Claims and enrollment data	ITS, including sensitivity analysis

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #6: Does the demonstration increase the level of access to community-based SUD treatment for Medicaid beneficiaries with SUD?					
Demonstration Goal: Increased rates of identification, initiation, and engagement in treatment for OUD and other SUDs.					
Demonstration Goal: Increased adherence to and retention in treatment.					
Demonstration Goal: Reduction in overdose deaths, particularly those due to opioids.					
Demonstration Goal: Reduced utilization of emergency department and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services.					
Evaluation Hypothesis #6: The demonstration will improve access to community-based services for SUD treatment since the initial demonstration period.					
ASAM 3.x bed capacity for Medicaid beneficiaries	HMA-Burns	Total number of beds available at ASAM level 3.1 and 3.5 by providers licensed by Division of Mental Health & Addiction and registered as Medicaid providers.		FSSA-maintained report	Descriptive statistics (frequencies and percentages)
MAT prescribers in Indiana accepting Medicaid clients	HMA-Burns	Total MAT prescribers in Indiana that received payment for delivering MAT to a Medicaid beneficiary in the previous 12 months.	Total MAT prescribers in Indiana	FSSA report, claims data	Descriptive statistics (frequencies and percentages)
Authorized residential treatment days as a percentage of total requested days	HMA-Burns	Total days requested and approved by MCEs to residential treatment providers to deliver treatment to Medicaid beneficiaries.	Total days requested by residential treatment providers to deliver treatment to Medicaid beneficiaries.	MCE-submitted data	Descriptive statistics (frequencies and percentages)
Average distance travelled by Medicaid beneficiaries seeking residential treatment	HMA-Burns	Total driving miles from member's home to residential treatment provider where service is received.	Total unique member-to-provider residential treatment stays in the study period.	Claims and enrollment data	Descriptive statistics (frequencies and percentages). Results will be computed across eight regions of the state.

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #7: Does the demonstration improve transitions between ASAM levels of care?					
Demonstration Goal: Increased adherence to and retention in treatment.					
Demonstration Goal: Reduction in overdose deaths, particularly those due to opioids.					
Demonstration Goal: Reduced utilization of emergency department and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services.					
Evaluation Hypothesis #7: Care coordination and transitions between ASAM levels of care will improve during the demonstration period.					
Percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries which were followed by a SUD treatment.	RTI, NQF #3590	Number of beneficiaries within (a) 7 and (b) 14 days who received a SUD treatment following discharge from an inpatient or residential SUD provider in a 12-month period.	Number of beneficiaries, age 18-64, with an inpatient or residential SUD stay in 12-month period.	Claims and enrollment data	Descriptive statistics (frequencies and percentages)
Percentage of discharges from inpatient or residential treatment for SUD that readmit for inpatient or residential within 180 days of initial discharge	HMA-Burns	Number of Medicaid beneficiaries an index event that readmit to inpatient hospital or residential treatment for SUD within 180 days of discharge from the index event.	Number of beneficiaries, age 18-64, with an inpatient or residential SUD stay in 12-month period.	Claims and enrollment data	Descriptive statistics (frequencies and percentages)
Rate of Medicaid beneficiaries enrolled in managed care and actively engaged in case or care management with their MCE	HMA-Burns	Number of unique beneficiaries who are actively enrolled in case or care management with their MCE. One rate will be computed for complex case management, another for care management.	Individuals identified with a SUD diagnosis using CMS Metric #3 who are enrolled with an Indiana MCE for a minimum of 90 days.	Claims and enrollment data plus MCE-submitted data	Descriptive statistics (frequencies and percentages)

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

Measure description	Measure steward, endorsement	Numerator	Denominator	Data source	Analytic approach
Evaluation Question #8: Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?					
Demonstration Goal: Increased rates of identification, initiation, and engagement in treatment for OUD and other SUDs.					
Demonstration Goal: Increased adherence to and retention in treatment.					
Demonstration Goal: Reduced utilization of emergency department and inpatient hospital settings for treatment where the utilization is preventable or medically inappropriate through improved access to other continuum of care services.					
Evaluation Hypothesis #8: The demonstration will rebalance Medicaid expenditures for treatment of SUD more toward community-based care since the initial demonstration period.					
Per beneficiary per month costs in total and by categories of service among the SUD population	CMS-specified (SMI/SED and SUD Guidance Appendix C)	Total monthly costs for SUD beneficiaries. Categories include inpatient, outpatient, pharmacy, long term care, IMDs and other.	1. Total member months for beneficiaries with an SUD diagnosis. 2. Total member months for all enrolled beneficiaries.	Claims data	ITS, including sensitivity analysis
Per capita SUD spending	CMS SUD Monitoring Metric #28	Total monthly costs for SUD beneficiaries. Categories include residential treatment, intensive outpatient, outpatient, assessment.	1. Total member months for beneficiaries with an SUD diagnosis. 2. Total member months for all enrolled beneficiaries.	Claims data	ITS, including sensitivity analysis

SECTION IV: METHODOLOGICAL LIMITATIONS

There are inherent limitations to both the study design and its specific application to the SUD waiver evaluation. That being said, the proposed design is feasible and is a rational explanatory framework for evaluating the impact of the SUD waiver on the SUD population. Moreover, to fill gaps left by the limitations of this study design, a limited number of qualitative methods are proposed to provide a more holistic and comprehensive evaluation.

Some measures and/or sub-populations may not be meaningful for reporting and insufficient statistical power to detect a difference is a concern. For any observational studies, especially if the population size exposures and the outcomes being assessed are rare, it is difficult to find statistically significant results. It is not unexpected, therefore, that many of the outcome measure sample sizes will be too small to observe statistically significant results. HMA-Burns recommends a threshold for minimum numbers of observations. For any measures below this threshold, the expectation of statistical testing would be waived.

While CMS may prefer comparator group from another state, in the last two years, the proliferation of the SUD demonstrations across the country renders few comparable states to Indiana. Moreover, this would require significantly more resources and cooperation with another state on sharing data.

Therefore, HMA-Burns recommends using statistical tests comparing the pre- and post-waiver period to test hypotheses in the absence of a control group.

Another limitation is the length of time of the evaluation period. In some cases, the time period may be insufficient to observe descriptive or statically significant differences in outcomes in the SUD population. Therefore, it is expected that not all outcomes included in the study will show a demonstrable change descriptively, although we do expect some process measures to show a change during this time frame.

Moreover, with any study focused on the SUD population and potentially rare outcome measures, such as overdose rates, insufficient statistical power to detect a difference is a concern. For any observational studies, especially if the exposures and the outcomes being assessed are rare, it is difficult to find statistically significant results. It is not unexpected, therefore, that many of the outcome measure sample sizes will be too small to observe statistically significant results.

Related to the issues mentioned above, many of the outcome measures are multi-dimensional and influenced by social determinants of health. While changes under the waiver related to access to care may be one dimension of various outcomes of interest, and may contribute to improvements, it may be difficult to achieve statistically significant findings in the absence of data on other contributing dimensions, like social determinants of health such as housing, employment, and previous incarcerations.

SECTION V: SPECIAL METHODOLOGICAL CONSIDERATIONS

The proposed Evaluation Design Plan provides more than adequate rigor in the observational study design, especially when considering the range of supplemental evaluation methods proposed for inclusion. As described in Section IV, the study mitigates known limitations to the extent feasible drawing upon the range of options to fill gaps in the observational study design.

An important special consideration in Indiana is the fact this Indiana will be the first state undertaking a SUD demonstration renewal evaluation. Although other State Medicaid Agencies may have implemented more sophisticated SUD service delivery systems even prior to their own waiver demonstration approval, there may be less demonstrable changes in some measures between Indiana's second SUD demonstration and its first demonstration when compared to the State's first SUD demonstration period and pre-demonstration period.

Also, observed changes in outcome measures in the current waiver period will be difficult, if not impossible, to attribute to one specific demonstration component or activities outside the demonstration itself but occurring simultaneously (e.g., activities supported through federal grants) given the interrelationship of the components themselves. For many outcome measures, changes in the post-waiver period will be difficult, if not impossible, to attribute to coinciding related activities resulting from the combination of waiver, planning grant, and other activities occurring in the state. Therefore, it will be important to use statistical tests of significance so that findings are properly put into context.

Lastly, the evaluators recognize that the utilization patterns that will occur relatively early in this demonstration period will be severely disrupted due to public health emergency. The predictability of future utilization patterns remains uncertain as of the date of this document. The evaluators are prepared to work with CMS in the event that guidance is provided to states for all waiver evaluations as to options that CMS will offer with respect to how to account for the acute period of the pandemic. The initial plan for handling the effects of the public health emergency are addressed in Section III. Methodology.

ATTACHMENT A: INDEPENDENT EVALUATOR

Process

Burns & Associates, a division of Health Management Associates, (HMA-Burns) submitted a proposal to the Family and Social Services Administration to be to conduct the evaluation of Indiana's SUD demonstration waiver renewal. The proposal was developed based upon the criteria set forth in the waiver demonstration's Special Terms and Conditions as approved by the Centers for Medicare and Medicaid Services.

The FSSA has the authority to pursue this engagement through an existing contract with HMA that is effective from July 1, 2021 through June 30, 2025. HMA-Burns provided a proposed budget to complete all activities required for the waiver evaluation, but the current contract for this engagement ends June 30, 2025.

Vendor Qualifications

The team at HMA-Burns that will conduct this evaluation has also completed evaluation and monitoring work for Indiana's first SUD waiver demonstration. That work is ongoing, including the development of the Summative Evaluation. The HMA-Burns team joined Health Management Associates effective September 1, 2020 when HMA acquired Burns & Associates.

Burns & Associates (B&A) was founded in 2006. Its team works almost exclusively with state Medicaid agencies or related social services agencies in state government. During its 14-year history, B&A worked with 33 state agencies in 26 states. The HMA-Burns team proposed to complete this evaluation is also currently conducting the evaluation of the State of Delaware's SUD demonstration, the State of Delaware's Section 1115 Diamond State Health Plan Waiver demonstration, and the State of Colorado's Section 1115 Adult Prenatal Coverage in Child Health Plan Plus (CHP+) demonstration.

For Indiana's initial SUD demonstration, the HMA-Burns team developed the approved Evaluation Design Plan, produced the Interim Evaluation, and conducted the MidPoint Assessment. For the Delaware and Colorado waivers, the team has delivered Evaluation Design Plans and work is underway related to activities defined in these evaluation design plans.

Prior to the acquisition by HMA, the HMA-Burns team on this Indiana engagement conducted independent assessments of Indiana's 1915(b) waiver for Hoosier Care Connect and served as the External Quality Review Organization (EQRO) for Indiana from 2007 to 2020. The team wrote an External Quality Review (EQR) report each year during this period. The reports were all submitted to CMS. HMA-Burns team members also conducted independent evaluations for state agencies in Minnesota, New York, and Oklahoma.

Assuring Independence

HMA-Burns attests to having no conflicts to perform the tasks needed to serve as an independent evaluator on this engagement. HMA-Burns' Principal Investigator is prepared to deliver a signed attestation to this effect upon request.

FINAL VERSION**Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025****ATTACHMENT B: EVALUATION BUDGET**

The total budget for this Evaluation Design is \$1,045,000. The distribution of hours and cost for each deliverable is shown in the exhibit below. All costs are built into the hourly rates for the staff conducting the work, including travel and other overhead costs.

Labor Category	Evaluation Design	Mid-Point Assessment	Interim Evaluation	Summative Evaluation	Total
Principal Investigator	120	180	280	320	900
Onsite Reviewers and Stakeholder Interviewers	60	220	320	430	1,030
Statistician	5	120	400	500	1,025
SAS Programmer	0	30	144	206	380
Data Analyst	30	80	120	180	410
All Labor Categories	215	630	1,264	1,636	3,745
Deliverable Cost	\$65,000	\$180,000	\$350,000	\$450,000	\$1,045,000

ATTACHMENT C: TIMELINE AND MILESTONES

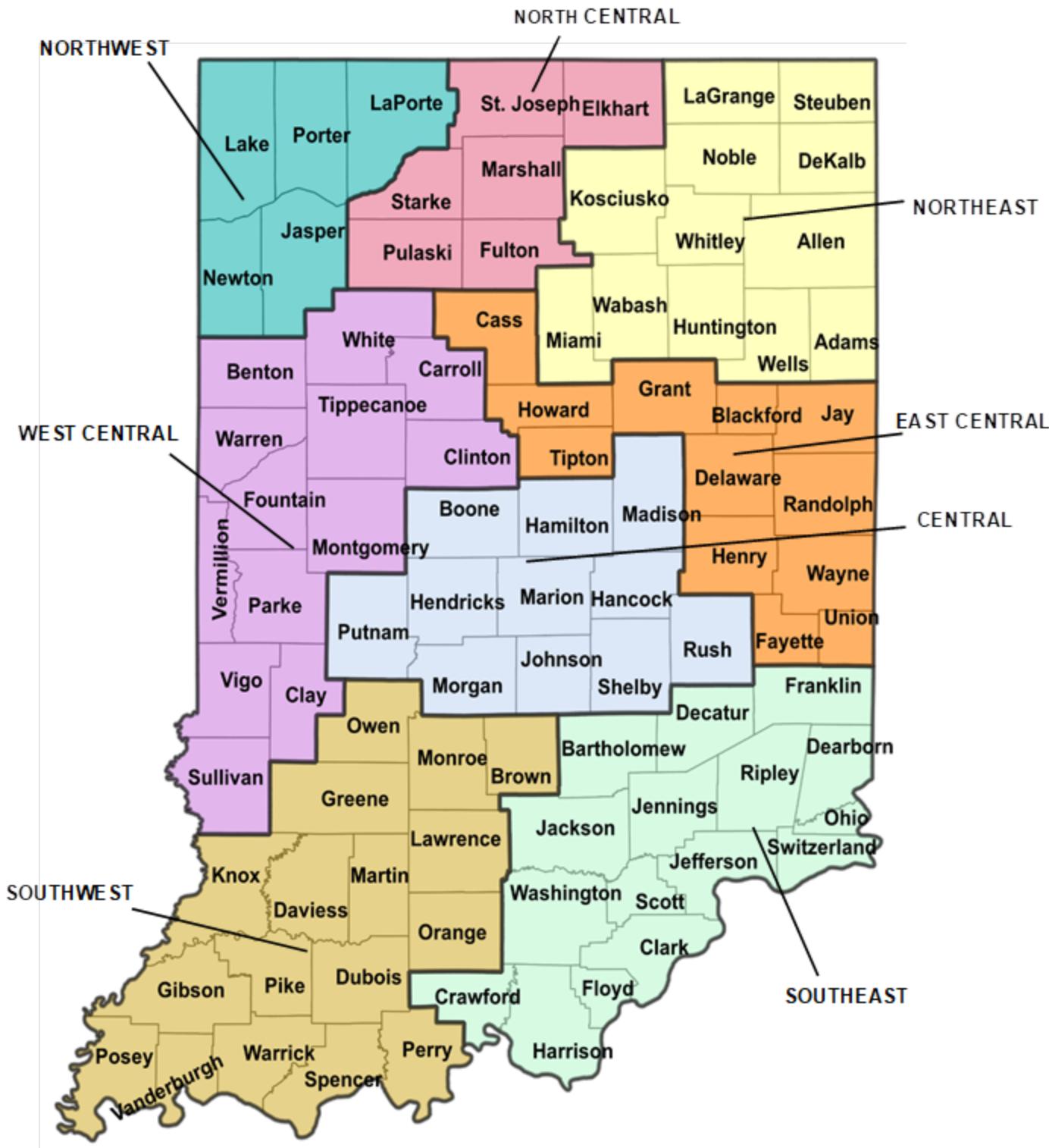
The HMA-Burns team was required to submit a work plan, including major tasks and milestones, to complete the scope of work requested by the State of Indiana related to its SUD demonstration waiver evaluation for activities completed through the available contracting period ending June 30, 2025. In an effort to show the complete level of effort that would be proposed to complete all deliverables, HMA-Burns is showing a work plan that covers the entire evaluation period. A summary of the work plan is shown on the next page. Tasks are further detailed out by sub-task and available upon request. Tasks are scheduled out by calendar quarter.

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Evaluation Design Plan for Indiana's 1115 Substance Use Disorder Waiver, Jan. 2021 – Dec. 2025

APPENDIX B: MAP OF INDIANA'S 92 COUNTIES TO FSSA EIGHT REGIONS

Appendix B – Map of Indiana's 92 Counties to FSSA's Eight Regions



APPENDIX C: INTERVIEW QUESTIONS TO PROVIDERS

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

As the State's independent evaluator, Burns & Associates, a Division of Health Management Associates (HMA-Burns) will be completing the Interim Evaluation for Indiana's SUD second demonstration period (January 2021 through December 2025). The period covered in the Interim Evaluation is January 2021 through December 2023. The Interim Evaluation is due to CMS at the end of December 2024.

One of HMA-Burns' requirements for the Interim Evaluation is to obtain feedback from stakeholders specifically related to what they perceive to have/have not worked, what improved/what still needs to be improved, and the greatest successes/greatest challenges in the waiver. Stakeholders includes providers, actual Medicaid beneficiaries receiving SUD services, and managed care entities (MCEs).

To that end, two members of the HMA-Burns team will lead a facilitated discussion with providers who opt to provide feedback through an in-person or web-based (via Zoom) interview. We ask that you review the questions below to consider (a) who would be appropriate representatives from your organization to participate in this focus group and (b) be prepared to offer responses to these questions. All feedback provided will be verbal and will not be attributed to an individual or a provider organization by name.

CMS is also interested in obtaining feedback from Medicaid beneficiaries. To facilitate gathering Medicaid beneficiary feedback, HMA-Burns has developed three mechanisms for beneficiaries receiving SUD services to provide their input.

- ***Option 1: Facilitated Beneficiary Discussion in Residential Treatment Settings.*** For those residential providers opting for the in person (or Zoom) facilitated discussion, if possible, if we were able to speak to a few individuals after our provider interview concludes, we would greatly appreciate it. The facilitated beneficiary discussion questions we would ask are available on page 7 of this document. We will not record the discussion. The input provided would be completely anonymous and would not be linked to any individual or organization.
- ***Option 2: Online Survey.*** The survey is only 5 questions and can be completed within five minutes. Survey respondents will be anonymous. **We would greatly appreciate it if you would consider offering the following link to your Medicaid clients to complete this survey:** https://healthmanagement.qualtrics.com/jfe/form/SV_bDU5zjp9ptdR33U, and if possible, allow clients to complete the survey while at the provider site. The survey will be open until **June 30, 2024**. A hardcopy of the online survey is available beginning on page 5 of this document.
- ***Option 3: Complete a Hardcopy of the Online Survey.*** The survey is only 5 questions and can be completed within five minutes. Survey respondents will be anonymous. **We would greatly appreciate it if you would consider offering a hardcopy and place to complete the survey to your Medicaid clients.** HMA-Burns will supply a postage paid envelope to return completed surveys. The survey will be open until **June 30, 2024**. A hardcopy of the survey is available beginning on page 5 of this document.

Your feedback is greatly appreciated. Please note that in the Final Interim Evaluation report delivered to CMS and the State, individual provider names or participants in the facilitated discussion are never mentioned.

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

Provider Name:

How long have you been an SUD provider for FSSA: [enter number of years]

Services provided by your organization. Check all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

Region(s) of the state where you offer services organization.

The counties assigned to each region are shown to the right of the region name. Check all that apply.

Northwest	<input type="checkbox"/> Lake, Porter, LaPorte, Newton, Jasper
North Central	<input type="checkbox"/> St. Joseph, Elkhart, Starke, Marshall, Pulaski, Fulton
Northeast	<input type="checkbox"/> LaGrange, Steuben, Noble, DeKalb, Kosciusko, Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams
West Central	<input type="checkbox"/> Benton, White, Carroll, Warren, Tippecanoe, Clinton, Fountain, Montgomery, Vermillion, Parke, Vigo, Clay, Sullivan
Central	<input type="checkbox"/> Boone, Hamilton, Madison, Putnam, Hendrick, Marion, Hancock, Morgan, Johnson, Shelby, Rush
East Central	<input type="checkbox"/> Cass, Howard, Tipton, Grant, Blackford, Jay, Delaware, Randolph, Henry, Wayne, Fayette, Union
Southwest	<input type="checkbox"/> Owen, Monroe, Brown, Greene, Knox, Daviess, Martin, Lawrence, Orange, Gibson, Pike, Dubois, Posey, Vanderburgh, Warrick, Spencer, Perry
Southeast	<input type="checkbox"/> Bartholomew, Decatur, Franklin, Jackson, Jennings, Ripley, Dearborn, Ohio, Jefferson, Switzerland, Washington, Scott, Clark, Crawford, Harrison, Floyd

Medicaid Managed Care Entities (MCEs) that you contract with. Check all that apply.

Anthem	<input type="checkbox"/>
CareSource	<input type="checkbox"/>
MDwise	<input type="checkbox"/>
MHS (Managed Health Services)	<input type="checkbox"/>
UHC (United Healthcare)	<input type="checkbox"/>

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

1. Thinking back, from January 2021 through December 2023, what is your opinion on the guidance provided to you by FSSA related to SUD services? How has this guidance impacted your participation in providing SUD services to Medicaid beneficiaries? Is there anything that you believe the FSSA can do now to improve guidance related to SUD waiver implementation efforts?
2. Since January 2021, what do you think about the adequacy of the provider network across the spectrum of ASAM levels of care? Are there specific ASAM levels of care that are better? If you think improvements are needed, for which services (e.g., certain ASAM levels) and for which regions of the state?
3. What is your opinion of the impact of telehealth on the adequacy of the provider network across the spectrum of ASAM levels of care? Are there specific sectors of the ASAM continuum that experienced improved access because of telehealth?
4. Over the past year, have you considered expanding your scope of services to other ASAM levels? If yes, which levels? If no, why not (e.g., rates, administrative burden, lack of clinicians, other workforce issues, etc.)?
5. What is your opinion of early intervention services (ASAM 0.5) under the demonstration? Is there more FSSA could do to improve use of early intervention services?
6. What is your opinion of the prior authorization process and use of a single form? Has this made prior authorization easier and more understandable? If you think improvements are needed, what are they specifically?
7. Did you or anyone on your staff attend any ASAM training sponsored by the FSSA? If yes, what was the last training you attended? Did you find the training helpful?
8. Other than the ASAM training, what is your opinion of other communications that you receive from the FSSA or the Medicaid MCEs that you have contracts with about SUD services and processes? Examples could include provider bulletins or other training such as on billing procedures. What, if anything, has been most helpful? If you think improvements are needed, where specifically?
9. How would you assess your interactions with the MCEs regarding SUD services for contracting, authorization or billing today? How does this compare to last year? Are some MCEs easier to work with than others? If there are differences, what are they (e.g., contracting, authorizations, billing, etc.)?
10. How would you assess your interactions with the MCEs regarding care coordination for members today? Do the MCEs assist you with coordinating care for members? How does this compare to last year? If you think improvements are needed, where specifically?
11. Do you perceive that there is still confusion on the part of members about covered services for SUD? If yes, what services specifically?
12. What, in your opinion, has improved in the delivery of treatment for SUD in calendar year 2023 compared to calendar year 2021? Are there any items that have gotten worse?

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

13. Do you have recommendations related to the delivery of treatment for SUD that you would like communicated in the Interim Evaluation?

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

Online and Hardcopy Medicaid Member Questionnaire

Hello. Our company, Health Management Associates, was hired by the State of Indiana to review services for people seeking treatment for alcohol and drugs. The State is trying to expand services available for treatment throughout Indiana. The federal government is providing money to Indiana to help them do that. In return, the federal government wants to hear from citizens of Indiana getting treatment and providers delivering treatment to see how that is going.

We wanted to ask you five questions to see what you think. This will take about 5 minutes for you to complete the questionnaire. **You do not need to give us your name or other personal details on the survey.** Your service provider will be giving you a link to submit this survey to us online. We wanted you to see this hard copy of the survey so that you know in advance the questions that you will be asked. We greatly appreciate that you have agreed to provide input and thank you for your time.

Place a in the boxes below that best matches your answer to each question.

1. How did you find out about where you could get treatment? Please check all that apply to you.

Family member	<input type="checkbox"/>
Friend	<input type="checkbox"/>
Sponsor	<input type="checkbox"/>
Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings	<input type="checkbox"/>
Healthcare provider (doctor, nurse, physician assistant, hospital, clinic)	<input type="checkbox"/>
Court/jail/prison/law enforcement/parole office	<input type="checkbox"/>
Website	<input type="checkbox"/>
Homeless shelter	<input type="checkbox"/>

2. Was it hard to figure out where to get treatment? Yes No

If you answered Yes, please check all of the reasons why that apply to you.

Could not find a provider near my home	<input type="checkbox"/>
Found a provider, but they have a waiting list	<input type="checkbox"/>
Provider won't take Medicaid	<input type="checkbox"/>

3. What do you think would help you or others who are seeking treatment about how they can find providers to help them? Please check all that you think would help.

Social media	<input type="checkbox"/>
Radio or television	<input type="checkbox"/>
Billboards	<input type="checkbox"/>
AA/NA meeting locations	<input type="checkbox"/>
Healthcare provider (doctor, nurse, physician assistant, hospital, clinic)	<input type="checkbox"/>
Court/jail/prison/law enforcement/parole office	<input type="checkbox"/>
Targeted outreach (e.g., schools)	<input type="checkbox"/>
Government offices (e.g., WIC, welfare, county)	<input type="checkbox"/>
Homeless shelter	<input type="checkbox"/>

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

4. Over the past 12 months, did you receive any alcohol and/or drug treatment services online or by phone? Yes No

If you answered Yes, please check all of the type or types of providers that you received services from online or by phone.

Type of Provider	Provided care online or by phone
Primary Care Doctor	<input type="checkbox"/>
Psychiatrist or Psychologist	<input type="checkbox"/>
Counselor	<input type="checkbox"/>
Outpatient Clinic/Office (not residential)	<input type="checkbox"/>
Peer Support Professional	<input type="checkbox"/>
Peer Recovery Coach	<input type="checkbox"/>

5. Are there services that you need but you cannot find help for? Please provide feedback for all services that apply to you and how much of a problem it is to find the type of provider.

Type of provider	Big Problem	Small Problem	No Problem	Doesn't Apply to Me
Primary Care Doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychiatrist or Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counselor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Residential treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treatment in an office setting (not residential)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Methadone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suboxone/Subutex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation to/from services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. [Optional] If other, what specifically?

Facilitated Discussion with Provider Representatives for Indiana SUD Waiver Interim Evaluation

Questions for Web-based focus group or individual sessions with Medicaid members

Introductory language for session:

Hello. I am [HMA team member name(s)]. I am from a company called Health Management Associates. Our company was hired by the State of Indiana to review services for people seeking treatment for alcohol and drugs. The State is trying to expand services available for treatment throughout Indiana. The federal government is providing money to Indiana to help them do that. In return, the federal government wants to hear from citizens of Indiana getting treatment and providers delivering treatment to see how that is going.

We wanted to ask you just a few questions to see what you think. You do not have to give us your name or other personal details. Our questions are more about how you found out about treatment. When we submit our report, we will not put anyone's name in the report. It is all anonymous.

1. How did you find out about where you could get treatment? Was it hard to figure out?
2. Did you receive any services by phone or through an online appointment? Did it make it easier for you to get treatment for alcohol and/or drugs?
3. What do you think would help you or others who are seeking treatment about how they can find providers to help them?
4. Are there services that you need but you cannot find help for? Can you provide examples?

We greatly appreciate that you have agreed to talk to us and thank you for your time.

APPENDIX D: ONLINE SURVEY TOOL TO PROVIDERS

Indiana Medicaid 1115 SUD Interim Evaluation – Online Outreach to Provider Representatives

As the State's independent evaluator, Burns & Associates, a Division of Health Management Associates (HMA-Burns) will be completing the Interim Evaluation for Indiana's SUD second demonstration period (January 2021 through December 2025). The period covered in the Interim Evaluation is January 2021 through December 2023. The Interim Evaluation is due to CMS at the end of December 2024.

One of HMA-Burns' requirements for the Interim Evaluation is to obtain feedback from stakeholders specifically related to what they perceive to have/have not worked, what improved/what still needs to be improved, and the greatest successes/greatest challenges in the waiver. Stakeholders includes providers, actual beneficiaries receiving SUD services, and managed care entities (MCEs).

Your feedback is greatly appreciated. Please note that in the Final Interim Evaluation report delivered to CMS and the State, individual provider names are never mentioned.

Provider Name: **[Optional fillable]**

How long have you been an SUD provider for FSSA: **[enter number of years]**

Services provided by your organization. Check all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

Region(s) of the state where you offer services organization.

The counties assigned to each region are shown to the right. Check all that apply.

Northwest	<input type="checkbox"/> Lake, Porter, LaPorte, Newton, Jasper
North Central	<input type="checkbox"/> St. Joseph, Elkhart, Starke, Marshall, Pulaski, Fulton
Northeast	<input type="checkbox"/> LaGrange, Steuben, Noble, DeKalb, Kosciusko, Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams
West Central	<input type="checkbox"/> Benton, White, Carroll, Warren, Tippecanoe, Clinton, Fountain, Montgomery, Vermillion, Parke, Vigo, Clay, Sullivan
Central	<input type="checkbox"/> Boone, Hamilton, Madison, Putnam, Hendrick, Marion, Hancock, Morgan, Johnson, Shelby, Rush
East Central	<input type="checkbox"/> Cass, Howard, Tipton, Grant, Blackford, Jay, Delaware, Randolph, Henry, Wayne, Fayette, Union
Southwest	<input type="checkbox"/> Owen, Monroe, Brown, Greene, Knox, Daviess, Martin, Lawrence, Orange, Gibson, Pike, Dubois, Posey, Vanderburgh, Warrick, Spencer, Perry
Southeast	<input type="checkbox"/> Bartholomew, Decatur, Franklin, Jackson, Jennings, Ripley, Dearborn, Ohio, Jefferson, Switzerland, Washington, Scott, Clark, Crawford, Harrison, Floyd

Indiana Medicaid 1115 SUD Interim Evaluation – Online Outreach to Provider Representatives

Medicaid Managed Care Entities (MCEs) that you contract with. Check all that apply.

Anthem	<input type="checkbox"/>
CareSource	<input type="checkbox"/>
MDwise	<input type="checkbox"/>
MHS (Managed Health Services)	<input type="checkbox"/>
UHC (United Healthcare)	<input type="checkbox"/>

Questions for the Online Survey

1. Thinking back, from January 2021 through December 2023, what is your opinion on the guidance provided to you by FSSA related to SUD services and how has this impacted your participation in providing SUD services to Medicaid beneficiaries?
 - a. Please select the response that most closely matches your opinion of the guidance.

Very helpful and encouraged participation/provision of SUD services	<input type="checkbox"/>
Somewhat helpful and supported participation/provision of SUD services	<input type="checkbox"/>
Not helpful but still able to participate/provide SUD services	<input type="checkbox"/>
Not helpful and made it difficult to participate/provide SUD services	<input type="checkbox"/>
Caused my organization to stop providing some SUD services	<input type="checkbox"/>
Caused my organization to elect to not provide or expand some SUD services	<input type="checkbox"/>
 - b. Is there anything that FSSA could do now to improve guidance related to SUD services?
 Yes No
 - c. If yes, what specifically? Select all that apply.

Provider Bulletins	<input type="checkbox"/>
Online Training	<input type="checkbox"/>
In Person Training	<input type="checkbox"/>
Meetings with State Staff	<input type="checkbox"/>
Meetings with MCEs	<input type="checkbox"/>
2. Since January 2021, what do you think about the adequacy of the provider network across the spectrum of ASAM levels of care? Improved No Change Somewhat Worse Worse
 - a. Are there specific ASAM levels of care that are better? Select all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

Indiana Medicaid 1115 SUD Interim Evaluation – Online Outreach to Provider Representatives

b. If you think improvements are needed, for which services? Select all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

c. If you think improvements are needed, for which regions? Select all that apply.

Northwest	<input type="checkbox"/> Lake, Porter, LaPorte, Newton, Jasper
North Central	<input type="checkbox"/> St. Joseph, Elkhart, Starke, Marshall, Pulaski, Fulton
Northeast	<input type="checkbox"/> LaGrange, Steuben, Noble, DeKalb, Kosciusko, Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams
West Central	<input type="checkbox"/> Benton, White, Carroll, Warren, Tippecanoe, Clinton, Fountain, Montgomery, Vermillion, Parke, Vigo, Clay, Sullivan
Central	<input type="checkbox"/> Boone, Hamilton, Madison, Putnam, Hendrick, Marion, Hancock, Morgan, Johnson, Shelby, Rush
East Central	<input type="checkbox"/> Cass, Howard, Tipton, Grant, Blackford, Jay, Delaware, Randolph, Henry, Wayne, Fayette, Union
Southwest	<input type="checkbox"/> Owen, Monroe, Brown, Greene, Knox, Daviess, Martin, Lawrence, Orange, Gibson, Pike, Dubois, Posey, Vanderburgh, Warrick, Spencer, Perry
Southeast	<input type="checkbox"/> Bartholomew, Decatur, Franklin, Jackson, Jennings, Ripley, Dearborn, Ohio, Jefferson, Switzerland, Washington, Scott, Clark, Crawford, Harrison, Floyd

3. What is your opinion of the impact of telehealth on the adequacy of the provider network across the spectrum of ASAM levels of care? Helpful Somewhat Helpful Not Helpful

a. Are there specific sectors of the ASAM continuum that experienced improved access because of telehealth? Select all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

Indiana Medicaid 1115 SUD Interim Evaluation – Online Outreach to Provider Representatives

4. Over the past year, have you considered expanding your scope of services to other ASAM levels?

Yes No

a. If yes, which ASAM levels? Select all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

b. If no, why not? Check all that apply Rates Administrative Burden Lack of Clinicians

Other Workforce Issues Other

c. [Optional] If other was checked, what specifically? [fillable]

5. What is your opinion of early intervention services (ASAM 0.5) under the demonstration? [fillable]

a. Is there more FSSA could do to improve use of early intervention services? [fillable]

6. What is your opinion of the prior authorization process and use of a single form? Helpful

Somewhat Helpful Not Helpful

a. Has this made prior authorization easier and more understandable? Yes No

b. [optional] If you think improvements are needed, what are they specifically? [fillable]

7. Did you or anyone on your staff attend any ASAM trainings sponsored by FSSA? Yes No

a. [optional] If yes, what was the last training you attended? [fillable]

b. Did you find the training helpful? Yes No

8. Other than the ASAM training, what is your opinion of other communications that you receive from the FSSA or the Medicaid MCEs that you have contracts with about SUD services and processes?

Examples could include provider bulletins or other trainings such as on billing procedures.

Helpful Somewhat Helpful Not Helpful

a. [optional] What, if anything, has been most helpful? [fillable]

b. [optional] If you think improvements are needed, where specifically? [fillable]

9. How would you assess your interactions with the MCEs regarding SUD services for contracting, authorization or billing today? Easy Neutral Somewhat Difficult Difficult

Indiana Medicaid 1115 SUD Interim Evaluation – Online Outreach to Provider Representatives

- a. How does this compare to last year? Improved No Change Somewhat Worse Worse
- b. If you contract with more than one MCE, are some MCEs easier to work with than others?
 Yes No I only contract with one MCE
- c. If there are differences, what are they? Check all that apply.
 Contracting
 Authorizations
 Billing
 Other
- d. [Optional] If other was checked, what specifically? [\[fillable\]](#)

10. How would you assess your interactions with the MCEs regarding care coordination for members today? Easy Neutral Somewhat Difficult Difficult

- a. Do the MCEs assist you with coordinating care for members? Please check the box that best applies.

Anthem	<input type="checkbox"/> Yes	<input type="checkbox"/> No
CareSource	<input type="checkbox"/> Yes	<input type="checkbox"/> No
MDwise	<input type="checkbox"/> Yes	<input type="checkbox"/> No
MHS	<input type="checkbox"/> Yes	<input type="checkbox"/> No
UHC	<input type="checkbox"/> Yes	<input type="checkbox"/> No

- b. How does this compare to last year? Improved No Change Somewhat Worse Worse
- c. If you think improvements are needed, where specifically? [\[fillable\]](#)

11. Do you perceive that there is still confusion on the part of members about covered services for SUD? Yes No

If yes, what services specifically? Check all that apply.

Opioid Treatment Program	<input type="checkbox"/>
Early Intervention (ASAM 0.5)	<input type="checkbox"/>
Outpatient Services (ASAM 1.0)	<input type="checkbox"/>
Intensive Outpatient Services (ASAM 2.1)	<input type="checkbox"/>
Partial Hospitalization (ASAM 2.5)	<input type="checkbox"/>
Residential: Clinically Managed Low-Intensity (ASAM 3.1)	<input type="checkbox"/>
Residential: Clinically Managed High-Intensity (ASAM 3.5)	<input type="checkbox"/>
Medically Monitored Intensive Inpatient Services (ASAM 3.7)	<input type="checkbox"/>
Medically Managed Intensive Inpatient (ASAM 4.0)	<input type="checkbox"/>
Addiction Recovery Management Services	<input type="checkbox"/>
Supportive Housing Services	<input type="checkbox"/>
Medication Assisted Treatment	<input type="checkbox"/>

12. What, in your opinion, has improved in the delivery of treatment for SUD in calendar year 2023 compared to calendar year 2021? [\[fillable\]](#)

- a. Are there any items that have gotten worse? [\[fillable\]](#)

13. Do you have recommendations related to the delivery of treatment for SUD that you would like communicated in the Interim Evaluation? [\[fillable\]](#)

APPENDIX E: ONLINE SURVEY TOOL TO BENEFICIARIES

Indiana Medicaid 1115 SUD Waiver – Interim Evaluation – Online Medicaid Member Questionnaire

Hello. Our company, Health Management Associates, was hired by the State of Indiana to review services for people seeking treatment for alcohol and drugs. The State is trying to expand services available for treatment throughout Indiana. The federal government is providing money to Indiana to help them do that. In return, the federal government wants to hear from citizens of Indiana getting treatment and providers delivering treatment to see how that is going.

We wanted to ask you five questions to see what you think. This will take about 5 minutes for you to complete the questionnaire. **You do not need to give us your name or other personal details on the survey.** Your service provider will be giving you a link to submit this survey to us online. We wanted you to see this hard copy of the survey so that you know in advance the questions that you will be asked. We greatly appreciate that you have agreed to provide input and thank you for your time.

Place a in the boxes below that best matches your answer to each question.

1. How did you find out about where you could get treatment? Please check all that apply to you.

Family member	<input type="checkbox"/>
Friend	<input type="checkbox"/>
Sponsor	<input type="checkbox"/>
Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings	<input type="checkbox"/>
Healthcare provider (doctor, nurse, physician assistant, hospital, clinic)	<input type="checkbox"/>
Court/jail/prison/law enforcement/parole office	<input type="checkbox"/>
Website	<input type="checkbox"/>
Homeless shelter	<input type="checkbox"/>

2. Was it hard to figure out where to get treatment? Yes No

If you answered Yes, please check all of the reasons why that apply to you.

Could not find a provider near my home	<input type="checkbox"/>
Found a provider, but they have a waiting list	<input type="checkbox"/>
Provider won't take Medicaid	<input type="checkbox"/>

3. What do you think would help you or others who are seeking treatment about how they can find providers to help them? Please check all that you think would help.

Social media	<input type="checkbox"/>
Radio or television	<input type="checkbox"/>
Billboards	<input type="checkbox"/>
AA/NA meeting locations	<input type="checkbox"/>
Healthcare provider (doctor, nurse, physician assistant, hospital, clinic)	<input type="checkbox"/>
Court/jail/prison/law enforcement/parole office	<input type="checkbox"/>
Targeted outreach (e.g., schools)	<input type="checkbox"/>
Government offices (e.g., WIC, welfare, county)	<input type="checkbox"/>
Homeless shelter	<input type="checkbox"/>

Indiana Medicaid 1115 SUD Waiver – Interim Evaluation – Online Medicaid Member Questionnaire

4. Over the past 12 months, did you receive any alcohol and/or drug treatment services online or by phone?
 Yes No

If you answered Yes, please check all of the type or types of providers that you received services from online or by phone.

Type of Provider	Provided care online or by phone
Primary Care Doctor	<input type="checkbox"/>
Psychiatrist or Psychologist	<input type="checkbox"/>
Counselor	<input type="checkbox"/>
Outpatient Clinic/Office (not residential)	<input type="checkbox"/>
Peer Support Professional	<input type="checkbox"/>
Peer Recovery Coach	<input type="checkbox"/>

5. Are there services that you need but you cannot find help for? Please provide feedback for all services that apply to you and how much of a problem it is to find the type of provider.

Type of provider	Big Problem	Small Problem	No Problem	Doesn't Apply to Me
Primary Care Doctor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Psychiatrist or Psychologist	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Counselor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Residential treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treatment in an office setting (not residential)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Methadone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Suboxone/Subutex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transportation to/from services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. [Optional] If other, what specifically?

APPENDIX F: INTERVIEW QUESTIONS TO MANAGED CARE ENTITIES

Facilitated Discussion with MCE Representatives for SUD Waiver Interim Evaluation

June 4, 2024

As the State's independent evaluator, Burns & Associates, a Division of Health Management Associates (HMA-Burns) will facilitate this MCE stakeholder group discussion to gain feedback that can be included in the Interim Evaluation of Indiana's SUD waiver for the second demonstration period (January 2021 through December 2025). The Interim Evaluation is due to CMS at the end of December 2024.

One of HMA-Burns' requirements for the Interim Evaluation is to obtain feedback from stakeholders specifically related to what they perceive to have/have not worked, what improved/what still needs to be improved, and the greatest successes/greatest challenges in the waiver. Stakeholders includes managed care entities (MCEs), providers, and actual beneficiaries receiving SUD services.

To that end, two members of the HMA-Burns team will lead a facilitated discussion. We ask that you review the questions below to consider (a) who would be appropriate representatives from your organization to participate in this focus group and (b) be prepared to offer responses to these questions. All feedback provided will be verbal and will not be attributed to an individual or an MCE by name.

CMS is also interested in obtaining feedback from Medicaid beneficiaries. To facilitate gathering Medicaid beneficiary feedback, HMA-Burns has developed a brief set of questions and three mechanisms for beneficiaries receiving SUD services to provide their input. Each method should take no longer than five minutes to complete.

- Option 1: Facilitated Medicaid beneficiary discussion at provider onsite interviews. The facilitated discussion is only four questions and is completely anonymous.
- Option 2: Online Survey. A separate online survey is being offered to Indiana Medicaid members who have received SUD treatment services. The survey is only five questions and can be completed within five minutes. The link to offer to Medicaid clients to complete this survey is here: https://healthmanagement.qualtrics.com/jfe/form/SV_bDU5zjp9ptdR33U
- Option 2: Complete a Hardcopy of the Online Survey.

While the MCEs are not obligated to assist HMA-Burns with collecting beneficiary feedback, we are interested in your opinion on how we are proposing to gather Medicaid beneficiary input from those receiving SUD services to be used in planning for conducting the final evaluation once the second demonstration period has concluded.

- Are there other mechanisms that may be more effective in gathering feedback from beneficiaries?
- Are there specific providers or provider types that would be more helpful in assisting HMA-Burns with collection of Medicaid beneficiary feedback?
- Are there other venues/opportunities that are you are aware of that could assist us with gathering feedback? For example, existing focus groups or venues for members to provide feedback? HMA-Burns is prepared to offer gift cards as a gesture of thanks that would be distributed immediately after the focus groups or interview concludes.

We greatly appreciate your feedback and input and thank you in advance for your time.

Facilitated Discussion with MCE Representatives for SUD Waiver Interim Evaluation

June 4, 2024

1. Thinking back, from January 2021 through December 2023, what is your opinion on the guidance provided to you by FSSA related to the SUD demonstration? How did this impact your (the MCE's) responsibilities for implementing waiver activities and providing access to SUD services to Medicaid beneficiaries?
2. Is there anything that you believe the FSSA can do now to improve guidance related to SUD services waiver implementation efforts during this demonstration period beginning January 2021?
3. Do you perceive that the expectations of the MCEs related to the SUD waiver have changed over this demonstration period beginning January 2021? If yes, how so?
4. Since January 2021, how would you characterize the adequacy of the provider network along the ASAM levels of care? Are there specific ASAM levels of care that are better? If you think improvements are needed, for which services (e.g., certain ASAM levels) and for which regions of the state?
5. What is your opinion of the impact of telehealth on the adequacy of the provider network across the spectrum of ASAM levels of care? Are there specific sectors of the ASAM continuum that experienced improved access because of telehealth?
6. What is your opinion of early intervention services (ASAM 0.5) under the demonstration? Is there more FSSA could do to improve use of early intervention services?
7. How would you characterize the guidance about and the impact of the Pregnancy Promise Program for members with OUD over the past year? What information have you shared with providers about the Pregnancy Promise Program? What information have you shared with beneficiaries?
8. How would you assess provider compliance and their general understanding of contracting, authorization, or billing rules today? How does this compare to last year? Are some provider types easier to work with than others? If you think improvements are needed, where specifically?
9. How would you assess your interactions with providers regarding care coordination for members today? How does this compare to last year? Are some provider types easier to work with than others? If there are differences, what are they?
10. Do you perceive that there is still confusion on the part of providers about covered services for SUD? If yes, what specifically?
11. Do you perceive that there is still confusion on the part of members about covered services for SUD? If yes, what services specifically?
12. What, in your opinion, has improved in the delivery of treatment for SUD in calendar year 2023 compared to calendar year 2021? Are there any items that have gotten worse?
13. Do you have recommendations related to the delivery of treatment for SUD that you would like communicated in the Interim Evaluation?

APPENDIX G: STATISTICAL TESTS ON MEASURES

CMS Metric #8 - Outpatient Services per 1,000 Medicaid Beneficiaries

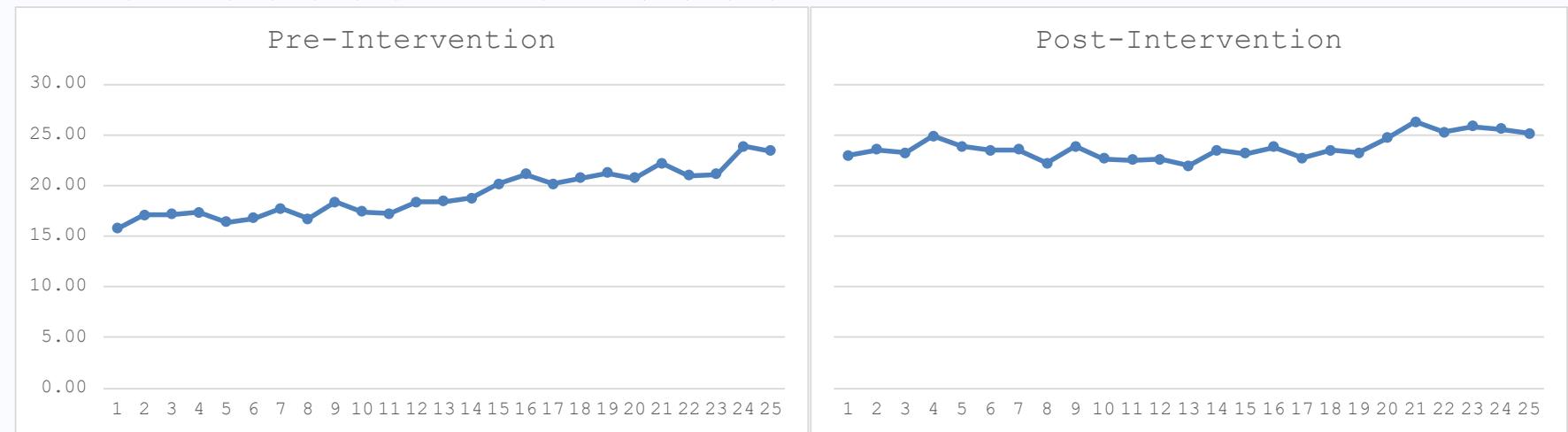
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
15.71	201802	1	0	0
17.09	201803	2	0	0
17.12	201804	3	0	0
17.33	201805	4	0	0
16.37	201806	5	0	0
16.73	201807	6	0	0
17.69	201808	7	0	0
16.71	201809	8	0	0
18.33	201810	9	0	0
17.43	201811	10	0	0
17.18	201812	11	0	0
18.36	201901	12	0	0
18.43	201902	13	0	0
18.74	201903	14	0	0
20.17	201904	15	0	0
21.08	201905	16	0	0
20.17	201906	17	0	0
20.73	201907	18	0	0
21.2	201908	19	0	0
20.7	201909	20	0	0
22.16	201910	21	0	0
20.96	201911	22	0	0
21.13	201912	23	0	0
23.85	202001	24	0	0
23.39	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
22.98	202112	26	1	1
23.51	202201	27	1	2
23.23	202202	28	1	3
24.87	202203	29	1	4
23.86	202204	30	1	5
23.46	202205	31	1	6
23.55	202206	32	1	7
22.2	202207	33	1	8
23.85	202208	34	1	9
22.66	202209	35	1	10
22.49	202210	36	1	11
22.56	202211	37	1	12
21.91	202212	38	1	13
23.47	202301	39	1	14
23.14	202302	40	1	15
23.76	202303	41	1	16
22.67	202304	42	1	17
23.47	202305	43	1	18
23.18	202306	44	1	19
24.65	202307	45	1	20
26.29	202308	46	1	21
25.26	202309	47	1	22
25.82	202310	48	1	23
25.58	202311	49	1	24
25.1	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-0.2069	<.0001
post-intervention trend	0.0849	0.0008
pre-intervention trend	0.2917	<.0001



CMS Metric #8 - Outpatient Services per 1,000 Medicaid Beneficiaries with SUD diagnosis

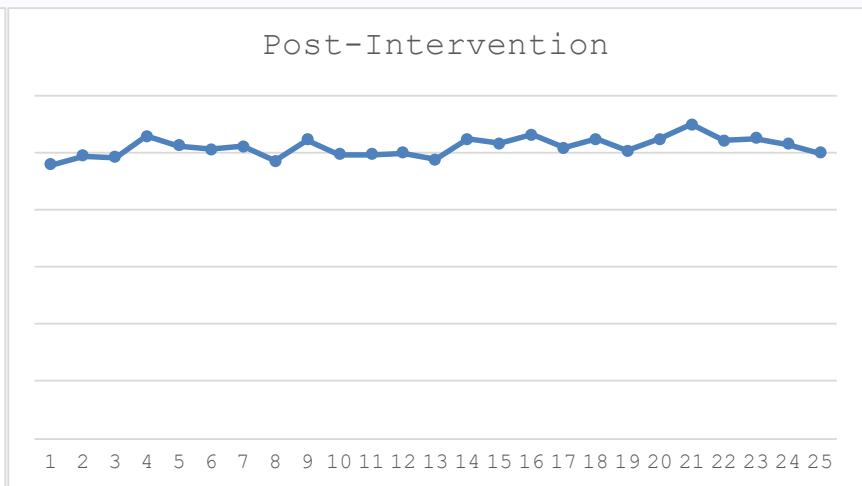
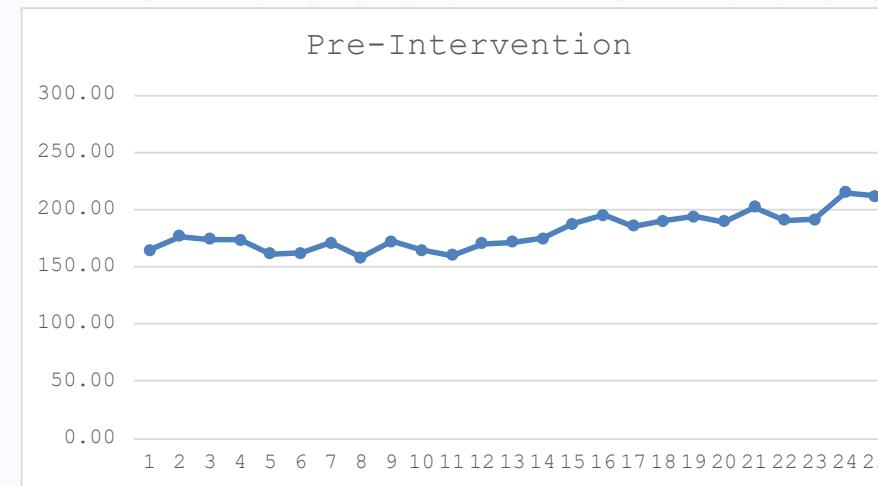
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
164.44	201802	1	0	0
176.27	201803	2	0	0
174.08	201804	3	0	0
173.36	201805	4	0	0
160.98	201806	5	0	0
161.94	201807	6	0	0
170.88	201808	7	0	0
158.36	201809	8	0	0
172.05	201810	9	0	0
164.49	201811	10	0	0
159.81	201812	11	0	0
170.26	201901	12	0	0
171.15	201902	13	0	0
174.54	201903	14	0	0
187.45	201904	15	0	0
194.82	201905	16	0	0
185.5	201906	17	0	0
189.66	201907	18	0	0
193.94	201908	19	0	0
189.43	201909	20	0	0
202.29	201910	21	0	0
190.71	201911	22	0	0
191.46	201912	23	0	0
214.94	202001	24	0	0
211.35	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
238.77	202112	26	1	1
247.03	202201	27	1	2
245.57	202202	28	1	3
264.01	202203	29	1	4
255.39	202204	30	1	5
252.47	202205	31	1	6
254.89	202206	32	1	7
242.1	202207	33	1	8
260.99	202208	34	1	9
248.08	202209	35	1	10
247.87	202210	36	1	11
249.6	202211	37	1	12
243.75	202212	38	1	13
261.21	202301	39	1	14
257.63	202302	40	1	15
264.98	202303	41	1	16
253.77	202304	42	1	17
261.34	202305	43	1	18
251.24	202306	44	1	19
261.69	202307	45	1	20
274.42	202308	46	1	21
260.07	202309	47	1	22
262.24	202310	48	1	23
257	202311	49	1	24
249.35	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-1.2527	0.0004
post-intervention trend	0.5476	0.0180
pre-intervention trend	1.8003	<.0001



CMS Metric #9 - Intensive Outpatient and Partial Hospitalization Services per 1,000 Medicaid Beneficiaries

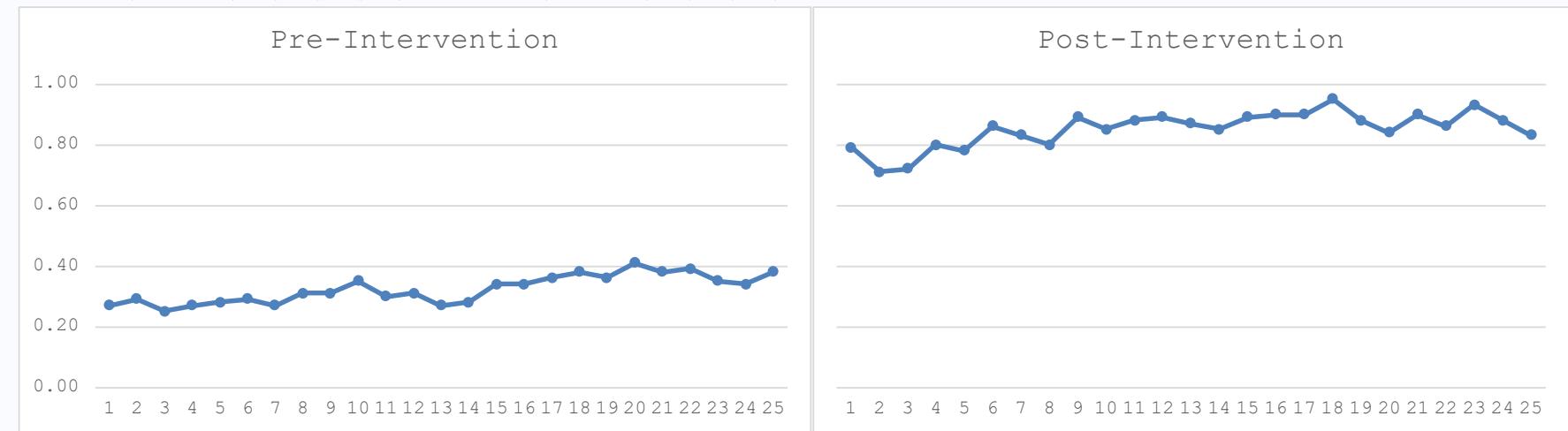
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
0.27	201601	1	0	0
0.29	201602	2	0	0
0.25	201603	3	0	0
0.27	201604	4	0	0
0.28	201605	5	0	0
0.29	201606	6	0	0
0.27	201607	7	0	0
0.31	201608	8	0	0
0.31	201609	9	0	0
0.35	201610	10	0	0
0.3	201611	11	0	0
0.31	201612	12	0	0
0.27	201701	13	0	0
0.28	201702	14	0	0
0.34	201703	15	0	0
0.34	201704	16	0	0
0.36	201705	17	0	0
0.38	201706	18	0	0
0.36	201707	19	0	0
0.41	201708	20	0	0
0.38	201709	21	0	0
0.39	201710	22	0	0
0.35	201711	23	0	0
0.34	201712	24	0	0
0.38	201801	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
0.79	202112	26	1	1
0.71	202201	27	1	2
0.72	202202	28	1	3
0.8	202203	29	1	4
0.78	202204	30	1	5
0.86	202205	31	1	6
0.83	202206	32	1	7
0.8	202207	33	1	8
0.89	202208	34	1	9
0.85	202209	35	1	10
0.88	202210	36	1	11
0.89	202211	37	1	12
0.87	202212	38	1	13
0.85	202301	39	1	14
0.89	202302	40	1	15
0.9	202303	41	1	16
0.9	202304	42	1	17
0.95	202305	43	1	18
0.88	202306	44	1	19
0.84	202307	45	1	20
0.9	202308	46	1	21
0.86	202309	47	1	22
0.93	202310	48	1	23
0.88	202311	49	1	24
0.83	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	0.0003	0.8593
post-intervention trend	0.0054	<.0001
pre-intervention trend	0.0052	<.0001



CMS Metric #9 - Intensive Outpatient and Partial Hospitalization Services per 1,000 Medicaid Beneficiaries with SUD diagnosis

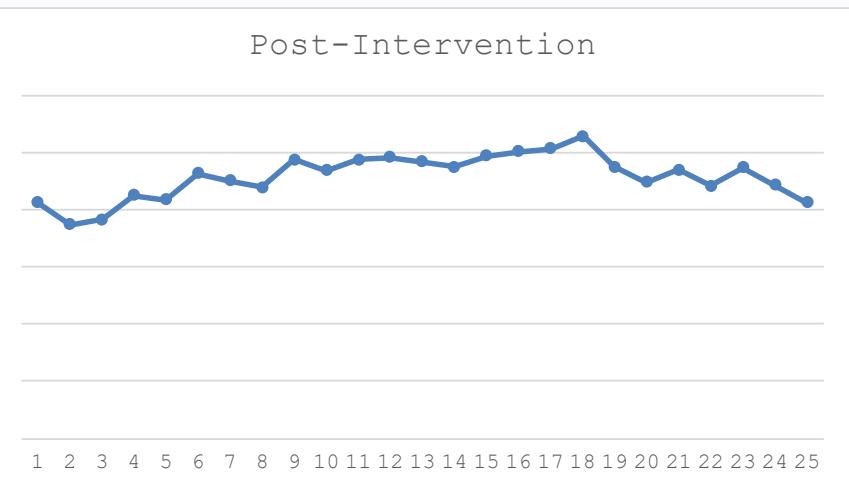
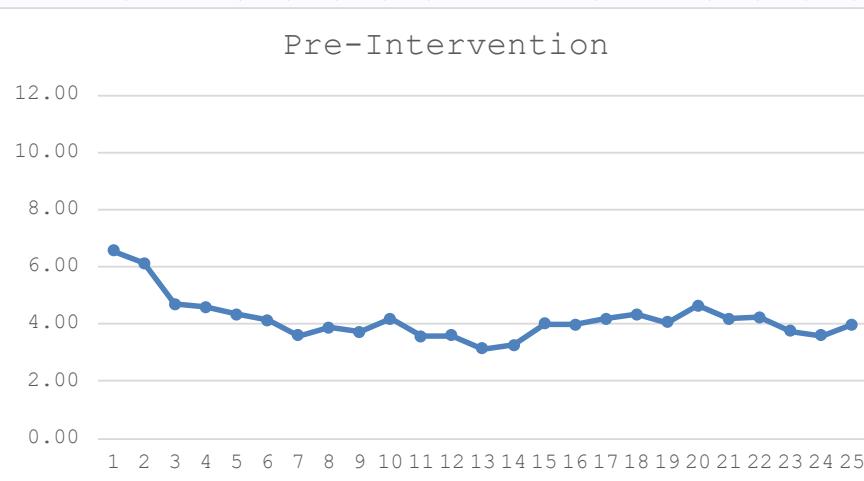
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
6.56	201601	1	0	0
6.11	201602	2	0	0
4.68	201603	3	0	0
4.59	201604	4	0	0
4.32	201605	5	0	0
4.12	201606	6	0	0
3.59	201607	7	0	0
3.87	201608	8	0	0
3.73	201609	9	0	0
4.18	201610	10	0	0
3.57	201611	11	0	0
3.59	201612	12	0	0
3.12	201701	13	0	0
3.26	201702	14	0	0
4.01	201703	15	0	0
3.98	201704	16	0	0
4.19	201705	17	0	0
4.32	201706	18	0	0
4.06	201707	19	0	0
4.63	201708	20	0	0
4.19	201709	21	0	0
4.22	201710	22	0	0
3.74	201711	23	0	0
3.58	201712	24	0	0
3.97	201801	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
8.23	202112	26	1	1
7.47	202201	27	1	2
7.65	202202	28	1	3
8.5	202203	29	1	4
8.34	202204	30	1	5
9.26	202205	31	1	6
9.01	202206	32	1	7
8.77	202207	33	1	8
9.73	202208	34	1	9
9.36	202209	35	1	10
9.74	202210	36	1	11
9.83	202211	37	1	12
9.66	202212	38	1	13
9.48	202301	39	1	14
9.87	202302	40	1	15
10.02	202303	41	1	16
10.12	202304	42	1	17
10.57	202305	43	1	18
9.49	202306	44	1	19
8.95	202307	45	1	20
9.39	202308	46	1	21
8.83	202309	47	1	22
9.47	202310	48	1	23
8.85	202311	49	1	24
8.24	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	0.0925	0.0016
post-intervention trend	0.0446	0.0222
pre-intervention trend	-0.0479	0.0180



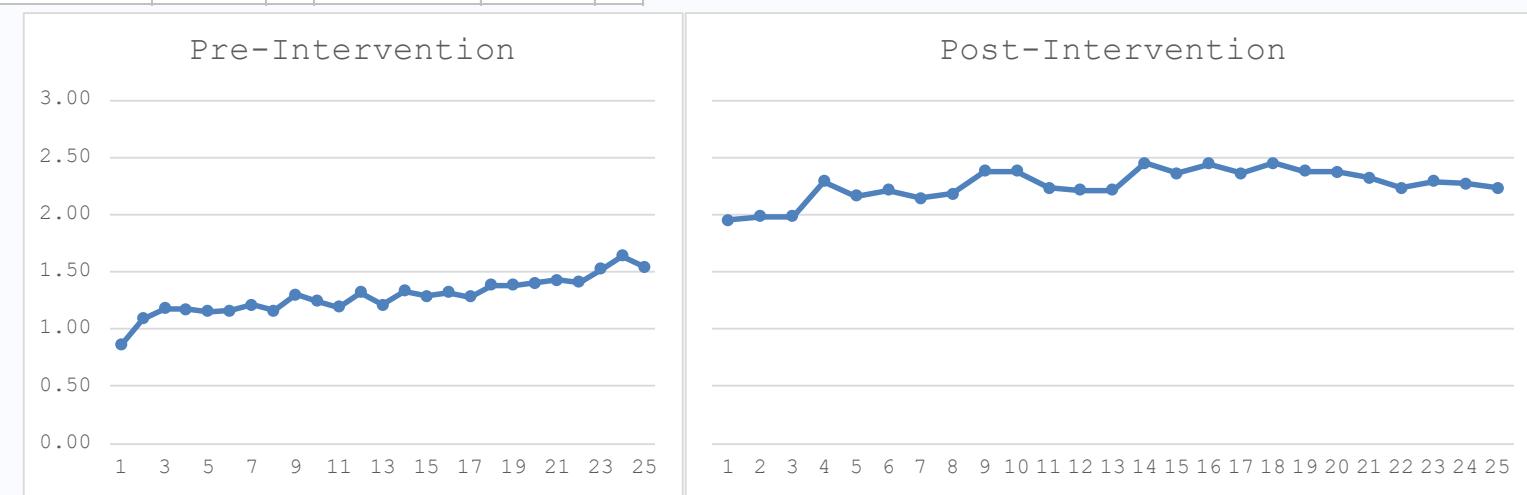
CMS Metric #10 - Residential and Inpatient Services per 1,000 Medicaid Beneficiaries

Statistical Analysis: Interrupted Time Series

Pre-Intervention			Post-Intervention		
OUTCOME	time	t	OUTCOME	time	t
0.86	201802	1	1.95	202112	26
1.09	201803	2	1.98	202201	27
1.18	201804	3	1.98	202202	28
1.17	201805	4	2.29	202203	29
1.15	201806	5	2.16	202204	30
1.16	201807	6	2.21	202205	31
1.21	201808	7	2.14	202206	32
1.16	201809	8	2.18	202207	33
1.3	201810	9	2.38	202208	34
1.24	201811	10	2.38	202209	35
1.19	201812	11	2.23	202210	36
1.32	201901	12	2.21	202211	37
1.21	201902	13	2.21	202212	38
1.33	201903	14	2.45	202301	39
1.29	201904	15	2.36	202302	40
1.32	201905	16	2.44	202303	41
1.28	201906	17	2.36	202304	42
1.38	201907	18	2.45	202305	43
1.38	201908	19	2.38	202306	44
1.4	201909	20	2.37	202307	45
1.43	201910	21	2.32	202308	46
1.41	201911	22	2.23	202309	47
1.52	201912	23	2.29	202310	48
1.64	202001	24	2.27	202311	49
1.54	202002	25	2.23	202312	50

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-0.0087	0.0243
post-intervention trend	0.0115	<.0001
pre-intervention trend	0.0201	<.0001



CMS Metric #10 - Residential and Inpatient Services per 1,000 Medicaid Beneficiaries with SUD diagnosis

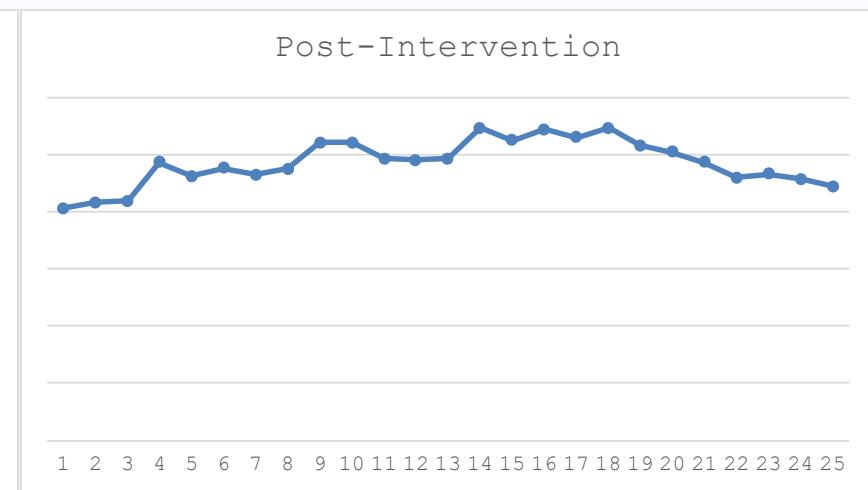
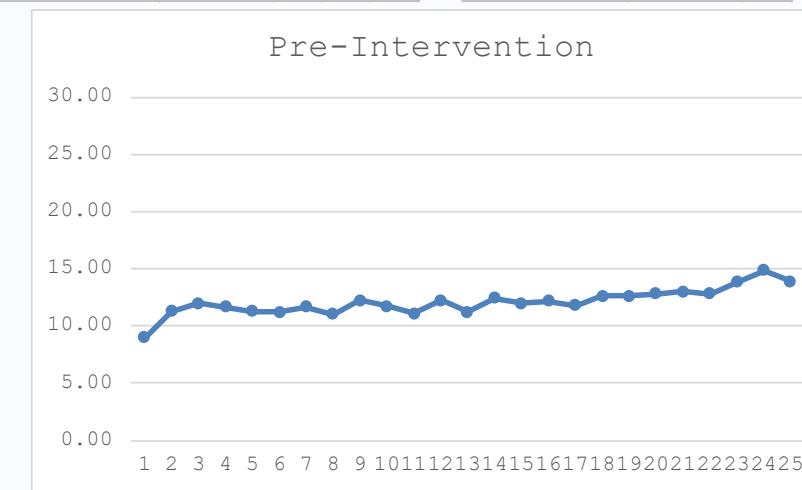
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
8.98	201802	1	0	0
11.28	201803	2	0	0
12	201804	3	0	0
11.66	201805	4	0	0
11.3	201806	5	0	0
11.21	201807	6	0	0
11.68	201808	7	0	0
11.01	201809	8	0	0
12.24	201810	9	0	0
11.73	201811	10	0	0
11.09	201812	11	0	0
12.23	201901	12	0	0
11.2	201902	13	0	0
12.41	201903	14	0	0
11.96	201904	15	0	0
12.18	201905	16	0	0
11.78	201906	17	0	0
12.59	201907	18	0	0
12.63	201908	19	0	0
12.82	201909	20	0	0
13.02	201910	21	0	0
12.79	201911	22	0	0
13.8	201912	23	0	0
14.82	202001	24	0	0
13.91	202002	25	0	0

Post-Intervention		
OUTCOME	time	t
20.27	202112	26
20.76	202201	27
20.91	202202	28
24.26	202203	29
23.08	202204	30
23.76	202205	31
23.2	202206	32
23.74	202207	33
25.99	202208	34
26.01	202209	35
24.58	202210	36
24.49	202211	37
24.64	202212	38
27.28	202301	39
26.23	202302	40
27.18	202303	41
26.46	202304	42
27.28	202305	43
25.77	202306	44
25.21	202307	45
24.27	202308	46
22.95	202309	47
23.29	202310	48
22.83	202311	49
22.2	202312	50

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-0.0339	0.7101
post-intervention trend	0.0940	0.3043
pre-intervention trend	0.1279	<.0001



CMS Metric #11 - Withdrawal Management per 1,000 Medicaid Beneficiaries

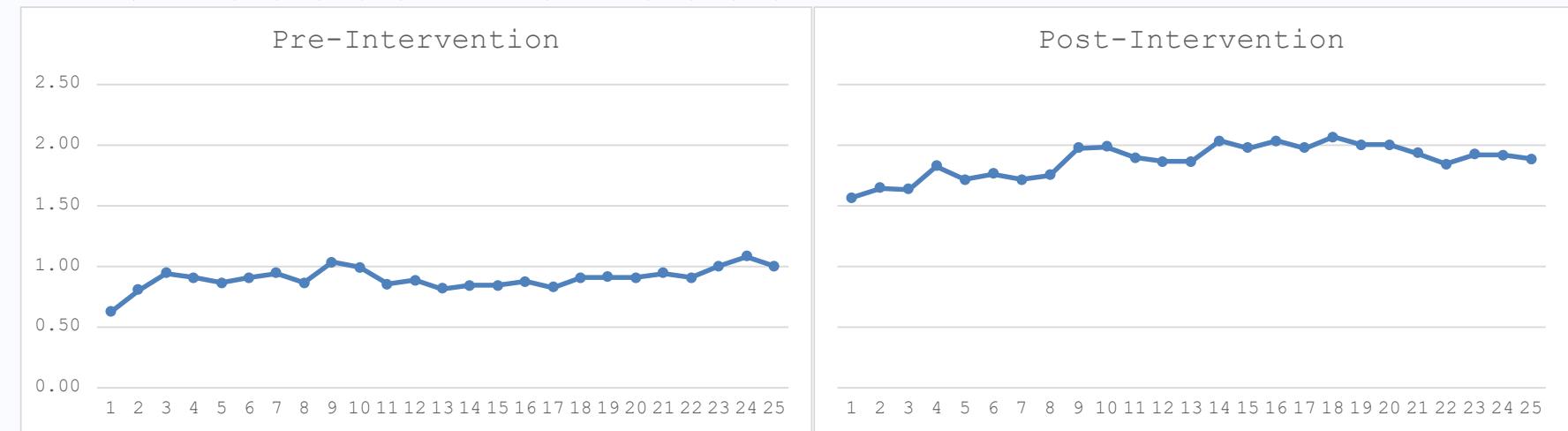
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
0.62	201802	1	0	0
0.8	201803	2	0	0
0.94	201804	3	0	0
0.9	201805	4	0	0
0.86	201806	5	0	0
0.9	201807	6	0	0
0.94	201808	7	0	0
0.86	201809	8	0	0
1.03	201810	9	0	0
0.99	201811	10	0	0
0.85	201812	11	0	0
0.88	201901	12	0	0
0.81	201902	13	0	0
0.84	201903	14	0	0
0.84	201904	15	0	0
0.87	201905	16	0	0
0.82	201906	17	0	0
0.9	201907	18	0	0
0.91	201908	19	0	0
0.9	201909	20	0	0
0.94	201910	21	0	0
0.9	201911	22	0	0
1	201912	23	0	0
1.08	202001	24	0	0
1	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
1.56	202112	26	1	1
1.64	202201	27	1	2
1.63	202202	28	1	3
1.82	202203	29	1	4
1.71	202204	30	1	5
1.76	202205	31	1	6
1.71	202206	32	1	7
1.75	202207	33	1	8
1.97	202208	34	1	9
1.98	202209	35	1	10
1.89	202210	36	1	11
1.86	202211	37	1	12
1.86	202212	38	1	13
2.03	202301	39	1	14
1.97	202302	40	1	15
2.03	202303	41	1	16
1.97	202304	42	1	17
2.06	202305	43	1	18
2	202306	44	1	19
2	202307	45	1	20
1.93	202308	46	1	21
1.84	202309	47	1	22
1.92	202310	48	1	23
1.91	202311	49	1	24
1.88	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	0.0073	0.0492
post-intervention trend	0.0132	<.0001
pre-intervention trend	0.0059	0.0256



CMS Metric #11 - Withdrawal Management per 1,000 Medicaid Beneficiaries with SUD diagnosis

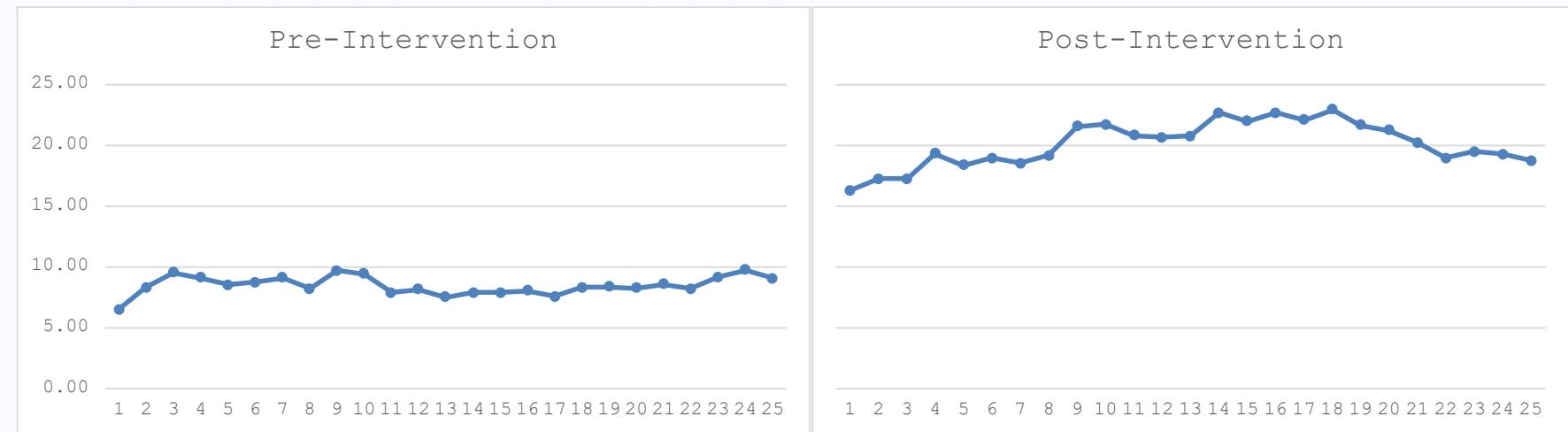
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
6.49	201802	1	0	0
8.26	201803	2	0	0
9.52	201804	3	0	0
9.05	201805	4	0	0
8.47	201806	5	0	0
8.68	201807	6	0	0
9.05	201808	7	0	0
8.16	201809	8	0	0
9.67	201810	9	0	0
9.38	201811	10	0	0
7.86	201812	11	0	0
8.13	201901	12	0	0
7.49	201902	13	0	0
7.86	201903	14	0	0
7.84	201904	15	0	0
8.03	201905	16	0	0
7.53	201906	17	0	0
8.27	201907	18	0	0
8.31	201908	19	0	0
8.25	201909	20	0	0
8.55	201910	21	0	0
8.15	201911	22	0	0
9.11	201912	23	0	0
9.69	202001	24	0	0
9.04	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
16.26	202112	26	1	1
17.22	202201	27	1	2
17.22	202202	28	1	3
19.29	202203	29	1	4
18.32	202204	30	1	5
18.9	202205	31	1	6
18.51	202206	32	1	7
19.14	202207	33	1	8
21.53	202208	34	1	9
21.7	202209	35	1	10
20.8	202210	36	1	11
20.6	202211	37	1	12
20.72	202212	38	1	13
22.63	202301	39	1	14
21.94	202302	40	1	15
22.61	202303	41	1	16
22.03	202304	42	1	17
22.89	202305	43	1	18
21.63	202306	44	1	19
21.21	202307	45	1	20
20.2	202308	46	1	21
18.93	202309	47	1	22
19.47	202310	48	1	23
19.22	202311	49	1	24
18.69	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	0.1025	0.0511
post-intervention trend	0.1140	0.0016
pre-intervention trend	0.0115	0.7520



CMS Metric #12 - Medication-Assisted Treatment per 1,000 Medicaid Beneficiaries

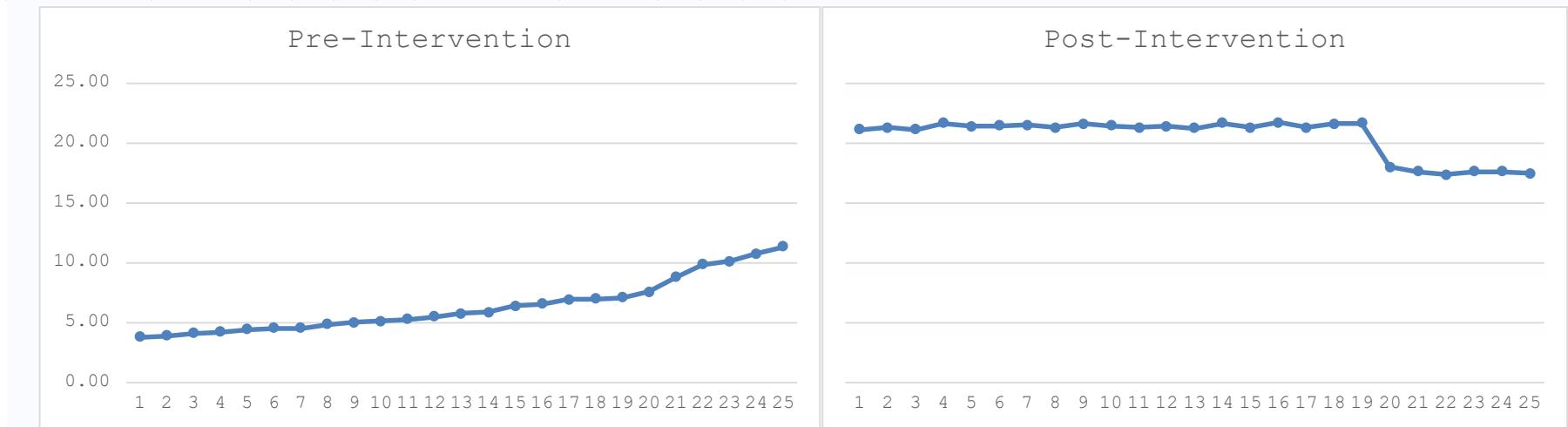
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
3.78	201601	1	0	0
3.85	201602	2	0	0
4.1	201603	3	0	0
4.19	201604	4	0	0
4.37	201605	5	0	0
4.51	201606	6	0	0
4.49	201607	7	0	0
4.83	201608	8	0	0
4.97	201609	9	0	0
5.08	201610	10	0	0
5.24	201611	11	0	0
5.47	201612	12	0	0
5.73	201701	13	0	0
5.83	201702	14	0	0
6.38	201703	15	0	0
6.54	201704	16	0	0
6.87	201705	17	0	0
6.95	201706	18	0	0
7.04	201707	19	0	0
7.54	201708	20	0	0
8.74	201709	21	0	0
9.81	201710	22	0	0
10.11	201711	23	0	0
10.74	201712	24	0	0
11.33	201801	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
21.11	202112	26	1	1
21.27	202201	27	1	2
21.11	202202	28	1	3
21.62	202203	29	1	4
21.38	202204	30	1	5
21.4	202205	31	1	6
21.45	202206	32	1	7
21.24	202207	33	1	8
21.57	202208	34	1	9
21.39	202209	35	1	10
21.23	202210	36	1	11
21.35	202211	37	1	12
21.19	202212	38	1	13
21.65	202301	39	1	14
21.24	202302	40	1	15
21.69	202303	41	1	16
21.26	202304	42	1	17
21.59	202305	43	1	18
21.63	202306	44	1	19
17.93	202307	45	1	20
17.61	202308	46	1	21
17.3	202309	47	1	22
17.59	202310	48	1	23
17.57	202311	49	1	24
17.43	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-0.4495	<.0001
post-intervention trend	-0.1620	0.0008
pre-intervention trend	0.2875	<.0001



CMS Metric #12 - Medication-Assisted Treatment per 1,000 Medicaid Beneficiaries with SUD diagnosis

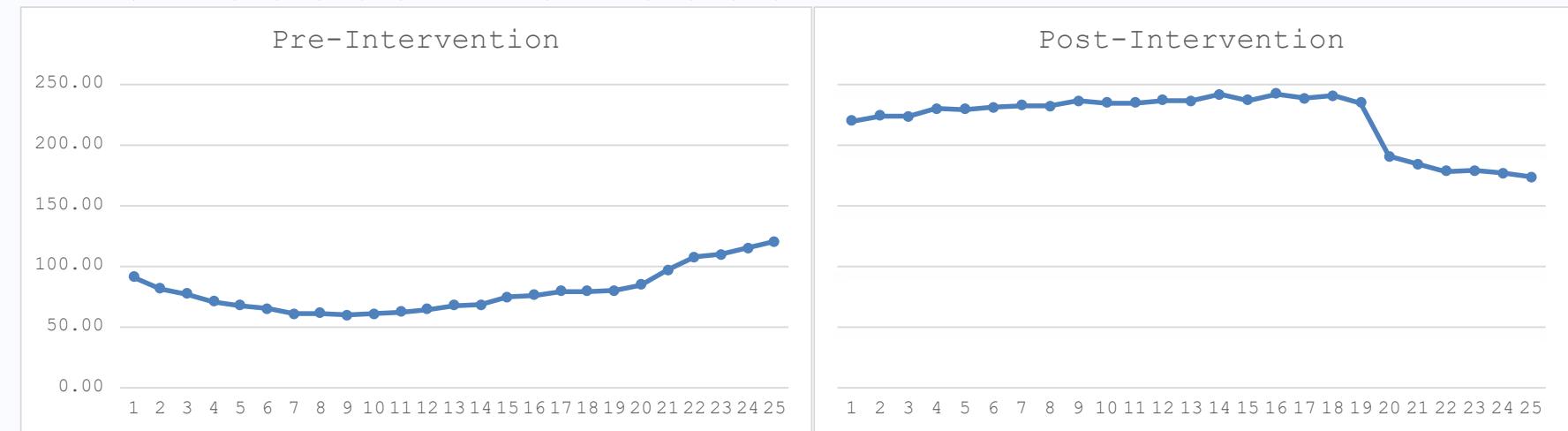
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
90.84	201601	1	0	0
80.95	201602	2	0	0
76.68	201603	3	0	0
70.77	201604	4	0	0
67.29	201605	5	0	0
64.58	201606	6	0	0
60.53	201607	7	0	0
61.11	201608	8	0	0
59.57	201609	9	0	0
60.65	201610	10	0	0
61.82	201611	11	0	0
64.18	201612	12	0	0
67.34	201701	13	0	0
68.07	201702	14	0	0
74.42	201703	15	0	0
75.62	201704	16	0	0
79.01	201705	17	0	0
79.05	201706	18	0	0
79.46	201707	19	0	0
84.46	201708	20	0	0
96.41	201709	21	0	0
107.02	201710	22	0	0
109.26	201711	23	0	0
114.71	201712	24	0	0
119.77	201801	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
219.4	202112	26	1	1
223.47	202201	27	1	2
223.12	202202	28	1	3
229.52	202203	29	1	4
228.85	202204	30	1	5
230.36	202205	31	1	6
232.18	202206	32	1	7
231.65	202207	33	1	8
236.08	202208	34	1	9
234.12	202209	35	1	10
234.07	202210	36	1	11
236.21	202211	37	1	12
235.82	202212	38	1	13
240.98	202301	39	1	14
236.41	202302	40	1	15
241.81	202303	41	1	16
238.07	202304	42	1	17
240.34	202305	43	1	18
234.44	202306	44	1	19
190.3	202307	45	1	20
183.81	202308	46	1	21
178.18	202309	47	1	22
178.69	202310	48	1	23
176.5	202311	49	1	24
173.18	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-3.5528	0.0013
post-intervention trend	-1.9392	0.0412
pre-intervention trend	1.6136	0.0350



CMS Metric #23 - ED Utilization for SUD per 1,000 Medicaid Beneficiaries

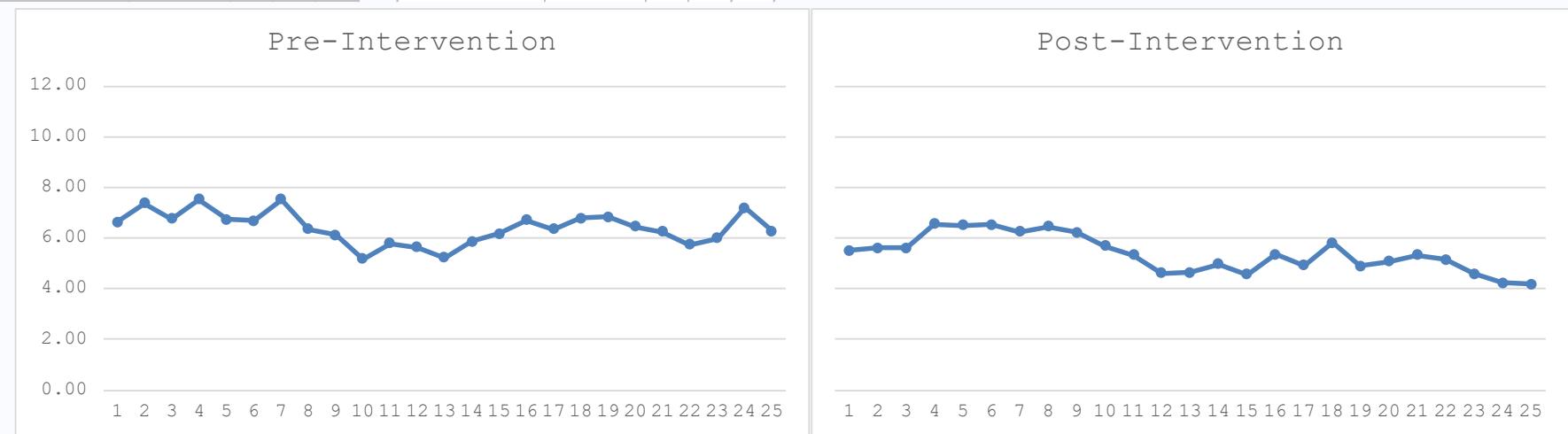
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
6.64	201802	1	0	0
7.36	201803	2	0	0
6.75	201804	3	0	0
7.51	201805	4	0	0
6.74	201806	5	0	0
6.67	201807	6	0	0
7.52	201808	7	0	0
6.35	201809	8	0	0
6.11	201810	9	0	0
5.18	201811	10	0	0
5.78	201812	11	0	0
5.64	201901	12	0	0
5.23	201902	13	0	0
5.86	201903	14	0	0
6.18	201904	15	0	0
6.7	201905	16	0	0
6.35	201906	17	0	0
6.79	201907	18	0	0
6.82	201908	19	0	0
6.45	201909	20	0	0
6.25	201910	21	0	0
5.74	201911	22	0	0
5.99	201912	23	0	0
7.18	202001	24	0	0
6.26	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
5.5	202112	26	1	1
5.6	202201	27	1	2
5.61	202202	28	1	3
6.55	202203	29	1	4
6.5	202204	30	1	5
6.53	202205	31	1	6
6.24	202206	32	1	7
6.44	202207	33	1	8
6.23	202208	34	1	9
5.68	202209	35	1	10
5.33	202210	36	1	11
4.62	202211	37	1	12
4.63	202212	38	1	13
4.97	202301	39	1	14
4.56	202302	40	1	15
5.36	202303	41	1	16
4.93	202304	42	1	17
5.81	202305	43	1	18
4.89	202306	44	1	19
5.07	202307	45	1	20
5.32	202308	46	1	21
5.14	202309	47	1	22
4.58	202310	48	1	23
4.22	202311	49	1	24
4.19	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-0.0471	0.0434
post-intervention trend	-0.0709	<.0001
pre-intervention trend	-0.0238	0.1434



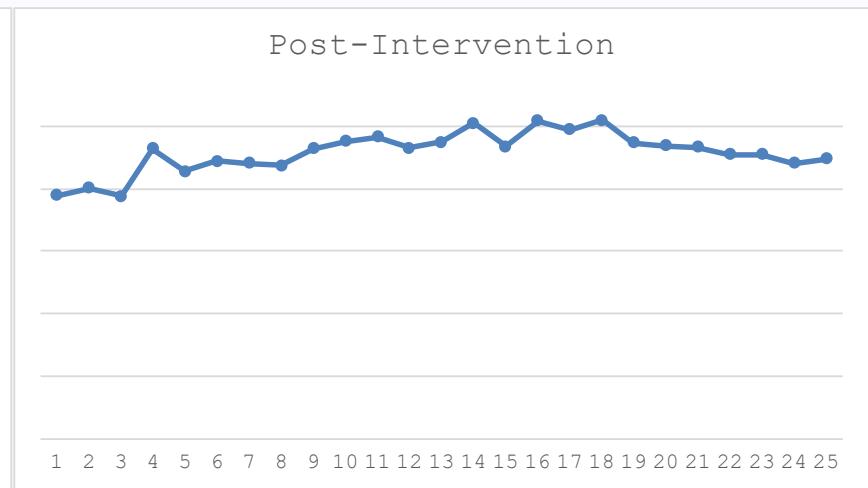
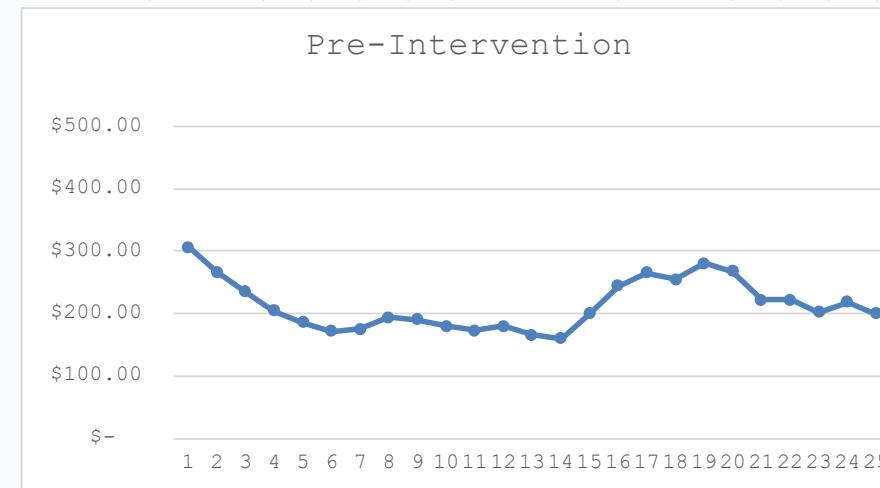
CMS Metric #30 - Per Capita SUD Spending
 Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
\$ 305.96	201601	1	0	0
\$ 266.04	201602	2	0	0
\$ 235.18	201603	3	0	0
\$ 203.81	201604	4	0	0
\$ 186.11	201605	5	0	0
\$ 171.67	201606	6	0	0
\$ 175.64	201607	7	0	0
\$ 194.12	201608	8	0	0
\$ 190.89	201609	9	0	0
\$ 180.10	201610	10	0	0
\$ 172.82	201611	11	0	0
\$ 180.12	201612	12	0	0
\$ 166.16	201701	13	0	0
\$ 159.77	201702	14	0	0
\$ 200.05	201703	15	0	0
\$ 244.40	201704	16	0	0
\$ 264.82	201705	17	0	0
\$ 254.97	201706	18	0	0
\$ 280.02	201707	19	0	0
\$ 267.47	201708	20	0	0
\$ 221.32	201709	21	0	0
\$ 221.75	201710	22	0	0
\$ 201.77	201711	23	0	0
\$ 218.40	201712	24	0	0
\$ 199.77	201801	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
\$ 389.55	202112	26	1	1
\$ 400.81	202201	27	1	2
\$ 388.28	202202	28	1	3
\$ 463.58	202203	29	1	4
\$ 427.39	202204	30	1	5
\$ 443.98	202205	31	1	6
\$ 441.19	202206	32	1	7
\$ 436.59	202207	33	1	8
\$ 463.47	202208	34	1	9
\$ 475.35	202209	35	1	10
\$ 482.27	202210	36	1	11
\$ 465.20	202211	37	1	12
\$ 474.84	202212	38	1	13
\$ 504.51	202301	39	1	14
\$ 467.93	202302	40	1	15
\$ 508.91	202303	41	1	16
\$ 494.80	202304	42	1	17
\$ 510.05	202305	43	1	18
\$ 473.96	202306	44	1	19
\$ 468.98	202307	45	1	20
\$ 466.26	202308	46	1	21
\$ 454.75	202309	47	1	22
\$ 454.26	202310	48	1	23
\$ 440.48	202311	49	1	24
\$ 447.63	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	1.9735	0.1621
post-intervention trend	2.3078	0.0188
pre-intervention trend	0.3343	0.7351



CMS Metric #31 - Per Capita SUD Spending Within IMDs

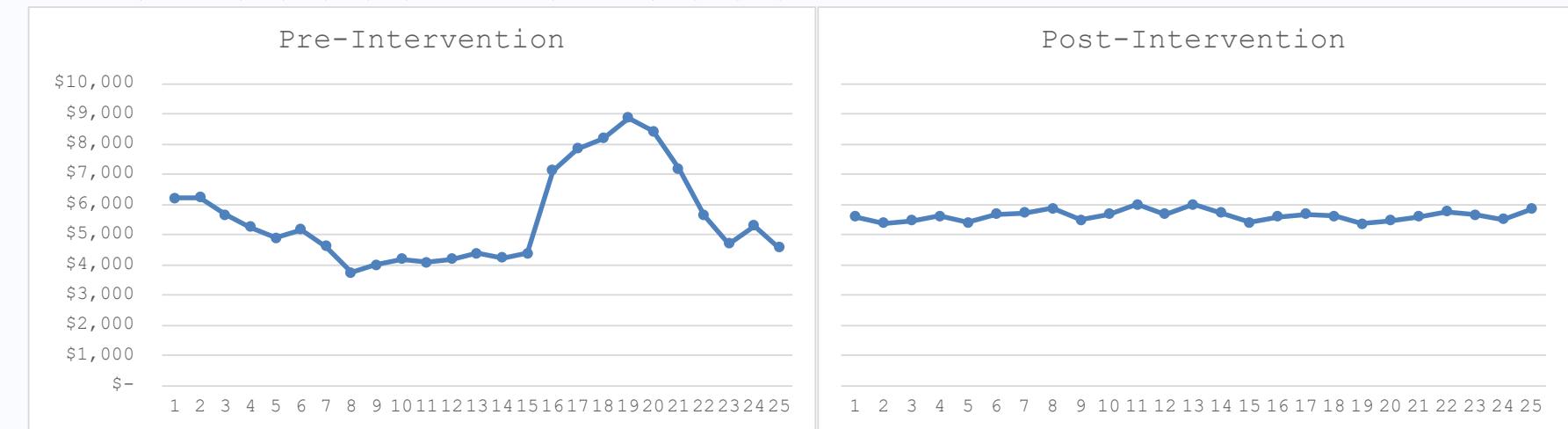
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
\$ 6,213.40	201601	1	0	0
\$ 6,222.67	201602	2	0	0
\$ 5,645.33	201603	3	0	0
\$ 5,251.67	201604	4	0	0
\$ 4,890.96	201605	5	0	0
\$ 5,168.90	201606	6	0	0
\$ 4,608.43	201607	7	0	0
\$ 3,745.79	201608	8	0	0
\$ 3,986.24	201609	9	0	0
\$ 4,191.26	201610	10	0	0
\$ 4,083.07	201611	11	0	0
\$ 4,180.72	201612	12	0	0
\$ 4,374.16	201701	13	0	0
\$ 4,236.04	201702	14	0	0
\$ 4,372.80	201703	15	0	0
\$ 7,116.05	201704	16	0	0
\$ 7,834.73	201705	17	0	0
\$ 8,179.32	201706	18	0	0
\$ 8,857.84	201707	19	0	0
\$ 8,419.22	201708	20	0	0
\$ 7,186.00	201709	21	0	0
\$ 5,630.39	201710	22	0	0
\$ 4,683.38	201711	23	0	0
\$ 5,284.08	201712	24	0	0
\$ 4,560.80	201801	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
\$ 5,594.70	202112	26	1	1
\$ 5,377.08	202201	27	1	2
\$ 5,449.70	202202	28	1	3
\$ 5,609.56	202203	29	1	4
\$ 5,395.30	202204	30	1	5
\$ 5,682.88	202205	31	1	6
\$ 5,716.22	202206	32	1	7
\$ 5,872.81	202207	33	1	8
\$ 5,480.34	202208	34	1	9
\$ 5,665.70	202209	35	1	10
\$ 5,989.16	202210	36	1	11
\$ 5,682.61	202211	37	1	12
\$ 5,984.79	202212	38	1	13
\$ 5,722.16	202301	39	1	14
\$ 5,398.48	202302	40	1	15
\$ 5,579.42	202303	41	1	16
\$ 5,679.93	202304	42	1	17
\$ 5,613.14	202305	43	1	18
\$ 5,358.57	202306	44	1	19
\$ 5,467.08	202307	45	1	20
\$ 5,597.12	202308	46	1	21
\$ 5,766.45	202309	47	1	22
\$ 5,650.68	202310	48	1	23
\$ 5,509.84	202311	49	1	24
\$ 5,833.00	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-56.4722	0.1861
post-intervention trend	2.9225	0.9217
pre-intervention trend	59.3947	0.0518



HMA-Burns Metric #1 - Per Capita Total Spending for Individuals with SUD

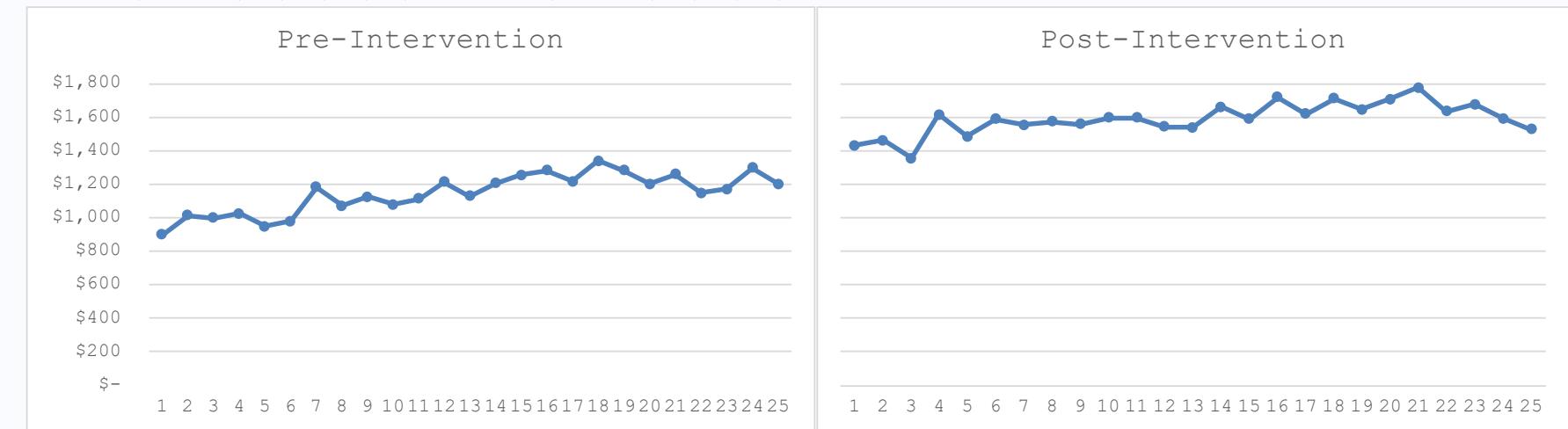
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
\$ 900.09	201802	1	0	0
\$ 1,012.75	201803	2	0	0
\$ 996.71	201804	3	0	0
\$ 1,024.59	201805	4	0	0
\$ 949.95	201806	5	0	0
\$ 979.82	201807	6	0	0
\$ 1,182.26	201808	7	0	0
\$ 1,069.12	201809	8	0	0
\$ 1,123.11	201810	9	0	0
\$ 1,079.22	201811	10	0	0
\$ 1,113.14	201812	11	0	0
\$ 1,211.67	201901	12	0	0
\$ 1,127.72	201902	13	0	0
\$ 1,204.06	201903	14	0	0
\$ 1,254.75	201904	15	0	0
\$ 1,281.40	201905	16	0	0
\$ 1,214.36	201906	17	0	0
\$ 1,339.38	201907	18	0	0
\$ 1,282.48	201908	19	0	0
\$ 1,200.16	201909	20	0	0
\$ 1,258.41	201910	21	0	0
\$ 1,149.07	201911	22	0	0
\$ 1,170.51	201912	23	0	0
\$ 1,297.32	202001	24	0	0
\$ 1,200.42	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
\$ 1,429.66	202112	26	1	1
\$ 1,463.08	202201	27	1	2
\$ 1,355.65	202202	28	1	3
\$ 1,613.50	202203	29	1	4
\$ 1,484.80	202204	30	1	5
\$ 1,588.46	202205	31	1	6
\$ 1,552.84	202206	32	1	7
\$ 1,573.28	202207	33	1	8
\$ 1,558.00	202208	34	1	9
\$ 1,594.12	202209	35	1	10
\$ 1,595.15	202210	36	1	11
\$ 1,542.03	202211	37	1	12
\$ 1,537.95	202212	38	1	13
\$ 1,658.89	202301	39	1	14
\$ 1,587.36	202302	40	1	15
\$ 1,718.69	202303	41	1	16
\$ 1,617.30	202304	42	1	17
\$ 1,708.85	202305	43	1	18
\$ 1,643.82	202306	44	1	19
\$ 1,707.86	202307	45	1	20
\$ 1,776.91	202308	46	1	21
\$ 1,635.26	202309	47	1	22
\$ 1,676.05	202310	48	1	23
\$ 1,592.06	202311	49	1	24
\$ 1,525.33	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-4.4055	0.1280
post-intervention trend	8.5194	<.0001
pre-intervention trend	12.9249	<.0001



HMA-Burns Metric #2 - Per Capita Total Spending Excluding SUD Spending for Individuals with SUD

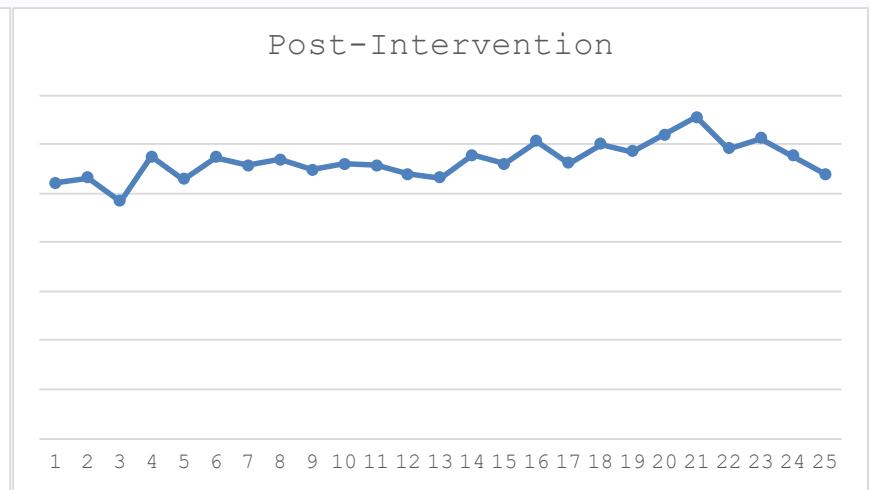
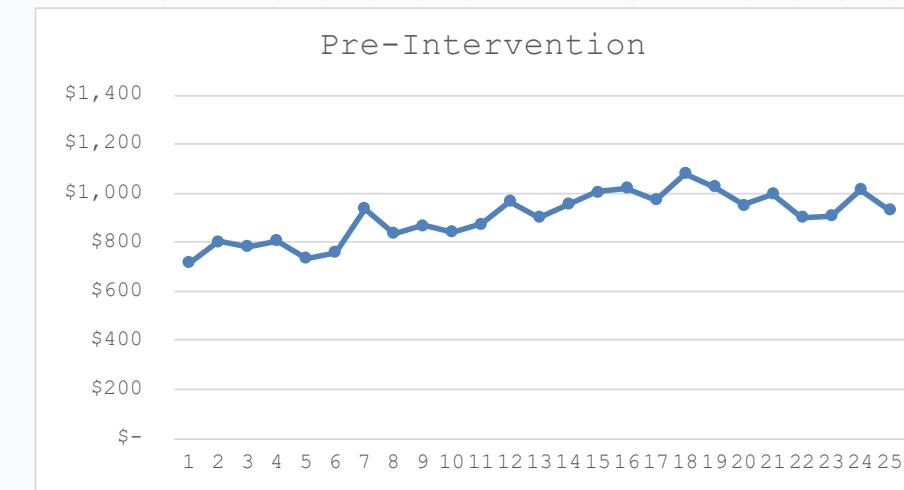
Statistical Analysis: Interrupted Time Series

Pre-Intervention				
OUTCOME	time	t	x	tx
\$ 717.11	201802	1	0	0
\$ 803.00	201803	2	0	0
\$ 781.23	201804	3	0	0
\$ 806.02	201805	4	0	0
\$ 735.12	201806	5	0	0
\$ 757.01	201807	6	0	0
\$ 935.92	201808	7	0	0
\$ 835.59	201809	8	0	0
\$ 867.34	201810	9	0	0
\$ 840.49	201811	10	0	0
\$ 875.95	201812	11	0	0
\$ 967.55	201901	12	0	0
\$ 901.56	201902	13	0	0
\$ 956.18	201903	14	0	0
\$ 1,006.92	201904	15	0	0
\$ 1,019.77	201905	16	0	0
\$ 971.98	201906	17	0	0
\$ 1,079.19	201907	18	0	0
\$ 1,026.52	201908	19	0	0
\$ 950.71	201909	20	0	0
\$ 996.71	201910	21	0	0
\$ 902.46	201911	22	0	0
\$ 906.43	201912	23	0	0
\$ 1,013.85	202001	24	0	0
\$ 931.57	202002	25	0	0

Post-Intervention				
OUTCOME	time	t	x	tx
\$ 1,040.11	202112	26	1	1
\$ 1,062.27	202201	27	1	2
\$ 967.37	202202	28	1	3
\$ 1,149.92	202203	29	1	4
\$ 1,057.41	202204	30	1	5
\$ 1,144.47	202205	31	1	6
\$ 1,111.64	202206	32	1	7
\$ 1,136.70	202207	33	1	8
\$ 1,094.53	202208	34	1	9
\$ 1,118.78	202209	35	1	10
\$ 1,112.88	202210	36	1	11
\$ 1,076.83	202211	37	1	12
\$ 1,063.11	202212	38	1	13
\$ 1,154.38	202301	39	1	14
\$ 1,119.43	202302	40	1	15
\$ 1,209.78	202303	41	1	16
\$ 1,122.50	202304	42	1	17
\$ 1,198.80	202305	43	1	18
\$ 1,169.86	202306	44	1	19
\$ 1,238.88	202307	45	1	20
\$ 1,310.64	202308	46	1	21
\$ 1,180.51	202309	47	1	22
\$ 1,221.79	202310	48	1	23
\$ 1,151.58	202311	49	1	24
\$ 1,077.70	202312	50	1	25

ITS Output Table from SAS

Parameter	Estimate	p-value
post-intervention trend compared to pre-intervention trend	-4.1192	0.0944
post-intervention trend	6.2116	0.0003
pre-intervention trend	10.3308	<.0001



**Metric 15a1: Chi-Square Test of Association of Initiation of AOD Treatment
(Alcohol abuse or dependence) by Pre/Post Years**

Table of Initiation by Year			
Initiation	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	10947 47.32	23666 44.70	34613
Yes	12185 52.68	29281 55.30	41466
Total	23132	52947	76079

Statistics for Table of Initiation by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	44.7869	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.1116	1.0776	1.1465

**Metric 15b1: Chi-Square Test of Association of Engagement of AOD Treatment
(Alcohol abuse or dependence) by Pre/Post Years**

Table of Engagement by Year			
Engagement	Years		
	2018/2019	2022/2023	Total
No	9300 76.32	20283 69.27	29583
Yes	2885 23.68	8998 30.73	11883
Total	12185	29281	41466

Statistics for Table of Engagement by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	209.3651	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.4300	1.3622	1.5012

**Metric 15a2: Chi-Square Test of Association of Initiation of AOD Treatment
(Opiod abuse or dependence) by Pre/Post Years**

Table of Initiation by Year			
Initiation	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	5708 38.02	10891 33.11	16599
Yes	9307 61.98	22000 66.89	31307
Total	15015	32891	47906

Statistics for Table of Initiation by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	109.4405	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.2389	1.1901	1.2896

**Metric 15b2: Chi-Square Test of Association of Engagement of AOD Treatment
(Opiod abuse or dependence) by Pre/Post Years**

Table of Engagement by Year			
Engagement	Years		
Frequency Col Pct	2018/2019 Pre	2022/2023 Post	Total
No	5038 54.13	9224 41.93	14262
Yes	4269 45.87	12776 58.07	17045
Total	9307	22000	31307

Statistics for Table of Engagement by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	392.7378	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.6346	1.5568	1.7163

**Metric 15a3: Chi-Square Test of Association of Initiation of AOD Treatment
(Other drug abuse or dependence) by Pre/Post Years**

Table of Initiation by Year			
Initiation	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	14706 49.60	33117 46.25	47823
Yes	14946 50.40	38490 53.75	53436
Total	29652	71607	101259

Statistics for Table of Initiation by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	94.2524	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.1436	1.1130	1.1750

**Metric 15b3: Chi-Square Test of Association of Engagement of AOD Treatment
(Other drug abuse or dependence) by Pre/Post Years**

Table of Engagement by Year			
Engagement	Years		
	2018/2019	2022/2023	Total
No	11479 76.80	25110 65.24	36589
Yes	3467 23.20	13380 34.76	16847
Total	14946	38490	53436

Statistics for Table of Engagement by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	667.0488	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.7642	1.6893	1.8425

**Metric 15a4: Chi-Square Test of Association of Initiation of AOD Treatment
(Total AOD abuse or dependence) by Pre/Post Years**

Table of Initiation by Year			
Initiation	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	27117 46.50	58183 43.76	85300
Yes	31205 53.50	74784 56.24	105989
Total	58322	132967	191289

Statistics for Table of Initiation by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	122.9913	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.1169	1.0953	1.1390

**Metric 15b4: Chi-Square Test of Association of Engagement of AOD Treatment
(Total AOD abuse or dependence) by Pre/Post Years**

Table of Engagement by Year			
Engagement	Years		
Frequency Col Pct	2018/2019 Pre	2022/2023 Post	Total
No	21356 68.44	45250 60.51	66606
Yes	9849 31.56	29534 39.49	39383
Total	31205	74784	105989

Statistics for Table of Engagement by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	592.9730	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.4152	1.3761	1.4555

Metric 17a: Chi-Square Test of Association of Follow-Up After EDV for Alcohol and Other Drug Abuse or Dependence within 7 Days by Pre/Post Years

Table of FollowUp_7day by Year			
FollowUp_7day	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	8502 89.97	19625 86.74	28127
Yes	948 10.03	2999 13.26	3947
Total	9450	22624	32074

Statistics for Table of FollowUp_7day by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	64.2063	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.3705	1.2685	1.4807

Metric 17b: Chi-Square Test of Association of Follow-Up After EDV for Alcohol and Other Drug Abuse or Dependence within 30 Days by Pre/Post Years

Table of FollowUp_30day by Year			
FollowUp_30day	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	8029 84.96	18100 80.00	26129
Yes	1421 15.04	4524 20.00	5945
Total	9450	22624	32074

Statistics for Table of FollowUp_30day by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	108.5782	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.4122	1.3232	1.5073

Metric 18: Chi-Square Test of Association of Use of Opioids at High Dosage in Persons Without Cancer by Pre/Post Years

Table of High_Dosage_Use by Year			
High_Dosage_Use	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	59609 94.92	75947 97.05	135556
Yes	3191 5.08	2308 2.95	5499
Total	62800	78255	141055

Statistics for Table of High_Dosage_Use by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	422.6515	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	0.5677	0.5375	0.5996

**Metric 19: Chi-Square Test of Association of Use of Opioids from Multiple Providers
in Persons Without Cancer by Pre/Post Years**

Table of Multiple_Providers by Year			
Multiple_Providers	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	69379 98.99	97867 98.72	167246
Yes	707 1.01	1264 1.28	1971
Total	70086	99131	169217

Statistics for Table of Multiple_Providers by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	25.2958	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.2674	1.1554	1.3903

Metric 21: Chi-Square Test of Association of Concurrent Use of Opioids and Benzodiazepines by Pre/Post Years

Table of Concurrent_Use by Year			
Concurrent_Use	Years		
	2018/2019 Pre	2022/2023 Post	Total
No	61144 84.59	90935 89.45	152079
Yes	11136 15.41	10721 10.55	21857
Total	72280	101656	173936

Statistics for Table of Concurrent_Use by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	908.2904	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	0.6473	0.6292	0.6660

Metric 22: Chi-Square Test of Association of Continuity of Pharmacotherapy by Pre/Post Years

Table of Continuity by Year			
Continuity	Years		
Frequency	2018/2019	2022/2023	Total
Col Pct	Pre	Post	
No	25707 74.48	65478 77.33	91185
Yes	8808 25.52	19200 22.67	28008
Total	34515	84678	119193

Statistics for Table of Continuity by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	110.4211	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	0.8558	0.8313	0.8810

Metric 25: Chi-Square Test of Association of Readmissions Among Beneficiaries with SUD by Pre/Post Years

Table of Readmissions by Year			
Readmissions	Years		
Frequency	2016/2017	2022/2023	Total
Col Pct	Pre	Post	
No	66513 82.51	86046 78.62	152559
Yes	14100 17.49	23403 21.38	37503
Total	80613	109449	190062

Statistics for Table of Readmissions by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	443.8760	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.2830	1.2536	1.3131

**Metric 32: Chi-Square Test of Association of Access to Preventive/Ambulatory Health Services
for Adult Medicaid Beneficiaries with SUD by Pre/Post Years**

Table of Access_Preventive_Svcs by Year			
Access_Preventive_Svcs	Years		
	2016/2017 Pre	2022/2023 Post	Total
No	7501 10.81	23454 10.11	30955
Yes	61869 89.19	208468 89.89	270337
Total	69370	231922	301292

Statistics for Table of Preventive Svcs by Year

The FREQ Procedure

Statistic	DF	Value	Prob	Significant
Chi-Square	1	28.3952	<.0001	Yes

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	1.0776	1.0484	1.1077

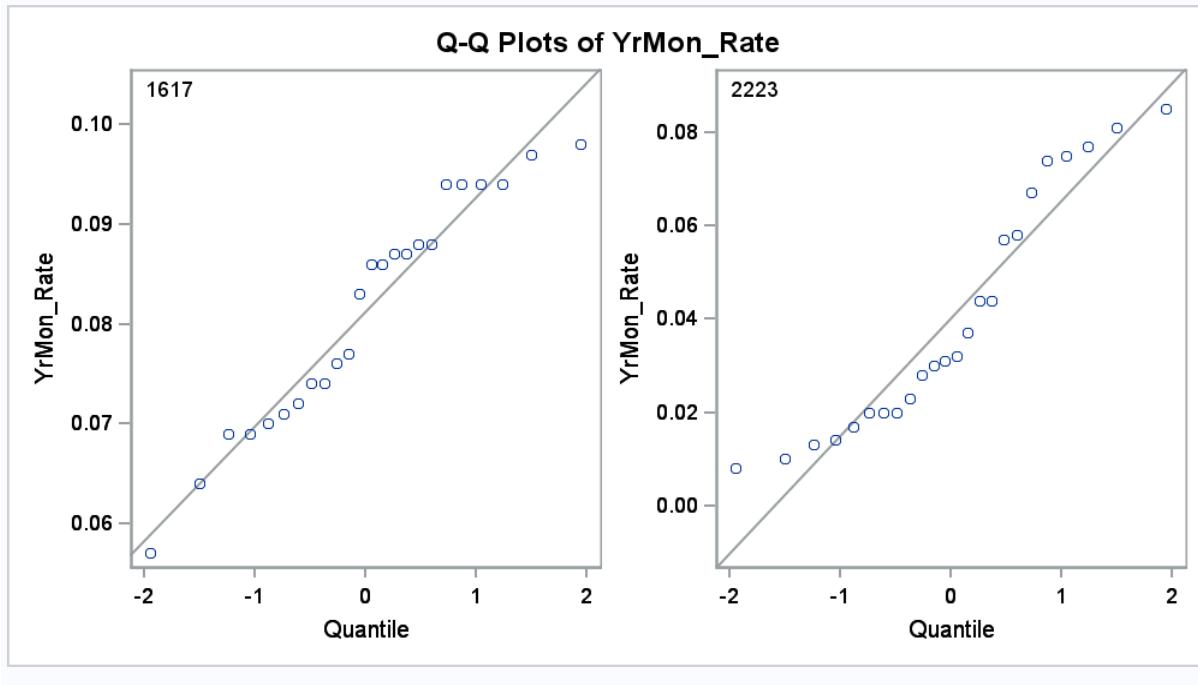
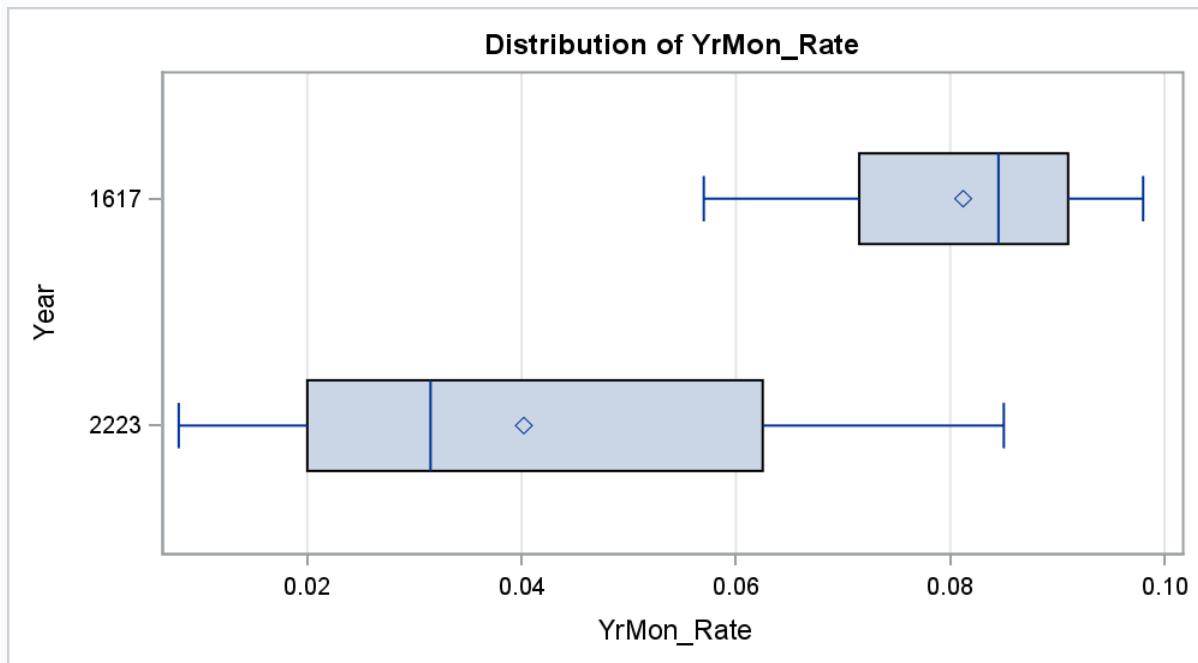
Metric #27: The TTEST Procedure of Rate of Overdose Deaths

Variable: YrMon_Rate

Year	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
2016/2017		24	0.0812	0.0115	0.00235	0.0570	0.0980
2022/2023		24	0.0402	0.0252	0.00514	0.00800	0.0850
Diff (1-2)	Pooled		0.0410	0.0196	0.00565		
Diff (1-2)	Satterthwaite		0.0410		0.00565		

Method	Variances	DF	t Value	Pr > t	Significant
Pooled	Equal	46	7.26	<.0001	
Satterthwaite	Unequal	32.189	7.26	<.0001	Yes

Equality of Variances				
Method	Num	Den	F Value	Pr > F
Folded F	23	23	4.80	0.0004



APPENDIX H: UTILIZATION MEASURES CY 2016 – CY 2023

Milestone: 1
CMS Metric #: 8
CMS Metric Name: Outpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2016	Jan	10,332	584	9,536	185	8,554	1,778	167	10	3,465	
2016	Feb	10,606	562	9,826	194	8,756	1,850	166	15	3,599	
2016	Mar	11,491	601	10,612	229	9,527	1,964	189	9	3,944	
2016	Apr	11,659	594	10,778	215	9,758	1,901	193	8	4,092	
2016	May	11,884	611	10,926	274	9,848	2,036	215	11	4,183	
2016	Jun	11,857	543	11,026	223	9,948	1,909	201	12	4,227	
2016	Jul	11,265	514	10,497	189	9,399	1,866	190	6	3,965	
2016	Aug	12,707	610	11,772	250	10,665	2,042	194	11	4,501	
2016	Sep	12,084	597	11,201	234	10,130	1,954	180	13	4,349	
2016	Oct	11,933	575	11,101	217	10,116	1,817	166	27	4,565	
2016	Nov	12,227	586	11,383	229	10,373	1,854	176	21	4,630	
2016	Dec	11,770	546	10,957	227	10,014	1,756	170	25	4,723	
2017	Jan	12,496	554	11,661	236	10,617	1,879	174	24	4,941	
2017	Feb	12,245	572	11,429	207	10,475	1,770	230	24	4,814	
2017	Mar	13,433	579	12,571	549	11,522	1,911	246	36	5,391	
2017	Apr	12,918	547	12,121	208	11,170	1,748	225	27	5,302	
2017	May	13,941	599	13,034	250	12,008	1,933	233	30	5,648	
2017	Jun	13,980	570	13,077	280	12,036	1,944	246	42	5,747	
2017	Jul	13,342	512	12,527	263	11,543	1,799	222	31	5,735	
2017	Aug	15,160	574	14,237	300	13,057	2,103	286	24	6,509	
2017	Sep	14,077	548	13,212	272	12,108	1,969	260	18	6,169	
2017	Oct	14,833	569	13,902	320	12,798	2,035	248	21	6,715	
2017	Nov	14,630	562	13,719	306	12,671	1,959	255	23	6,685	
2017	Dec	14,121	537	13,246	301	12,179	1,942	242	20	6,466	

Milestone: 1
CMS Metric #: 8
CMS Metric Name: Outpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2018	Jan	15,636	589	14,663	317	13,609	2,027	238	22	7,191	
2018	Feb	15,096	540	14,181	324	13,127	1,969	357	21	7,009	
2018	Mar	16,347	597	15,327	359	14,199	2,148	406	20	7,615	
2018	Apr	16,332	595	15,339	333	14,286	2,046	404	35	7,728	
2018	May	16,400	580	15,407	354	14,346	2,054	382	23	7,811	
2018	Jun	15,310	534	14,374	363	13,293	2,017	344	20	7,320	
2018	Jul	15,531	522	14,591	384	13,521	2,010	357	20	7,450	
2018	Aug	16,501	559	15,493	394	14,278	2,223	403	34	7,834	
2018	Sep	15,350	571	14,399	336	13,317	2,033	374	26	7,455	
2018	Oct	16,856	581	15,829	401	14,618	2,238	424	29	8,222	
2018	Nov	16,187	573	15,194	370	13,997	2,190	409	22	8,063	
2018	Dec	15,771	548	14,843	365	13,626	2,145	386	18	7,914	
2019	Jan	16,898	555	15,911	430	14,579	2,319	381	22	8,383	
2019	Feb	17,101	578	16,123	399	14,821	2,280	408	17	8,523	
2019	Mar	17,466	595	16,416	455	15,103	2,363	399	16	8,631	
2019	Apr	18,858	606	17,790	461	16,507	2,351	435	17	9,772	
2019	May	19,665	617	18,612	435	17,319	2,346	429	13	10,401	
2019	Jun	18,784	547	17,790	445	16,486	2,298	450	4	10,138	
2019	Jul	19,341	541	18,367	431	17,041	2,300	479	7	10,435	
2019	Aug	19,803	525	18,810	463	17,448	2,355	494	4	10,673	
2019	Sep	19,439	535	18,410	494	17,117	2,322	480	7	10,586	
2019	Oct	20,876	572	19,769	533	18,411	2,465	498	11	11,443	
2019	Nov	19,748	534	18,738	473	17,406	2,342	461	7	11,149	
2019	Dec	19,975	525	18,974	473	17,660	2,315	485	6	11,380	

Milestone: 1
CMS Metric #: 8
CMS Metric Name: Outpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2020	Jan	22,707	560	21,544	597	20,173	2,534	506	12	12,807	
2020	Feb	22,518	540	21,426	550	20,088	2,430	537	13	12,931	
2020	Mar	23,406	576	22,349	479	21,077	2,329	557	11	13,876	
2020	Apr	23,376	513	22,450	409	21,266	2,110	536	14	13,949	
2020	May	24,555	494	23,668	384	22,466	2,089	616	24	14,698	
2020	Jun	26,540	494	25,585	457	24,286	2,254	718	24	15,716	
2020	Jul	27,269	493	26,267	504	24,966	2,303	781	31	16,406	
2020	Aug	27,732	492	26,760	476	25,441	2,291	827	30	16,528	
2020	Sep	28,536	520	27,463	541	26,184	2,352	894	43	17,181	
2020	Oct	29,479	543	28,294	607	26,762	2,717	931	36	17,595	
2020	Nov	29,301	517	28,045	667	26,426	2,875	990	28	17,716	
2020	Dec	30,277	502	29,034	668	27,357	2,920	1,050	31	18,289	
2021	Jan	31,820	532	30,477	811	28,672	3,148	1,148	69	19,073	
2021	Feb	31,844	535	30,554	755	28,740	3,104	1,226	58	19,086	
2021	Mar	34,053	608	32,602	843	30,600	3,453	1,350	93	20,035	
2021	Apr	32,784	568	31,426	790	29,614	3,170	1,374	89	19,502	
2021	May	32,320	527	31,038	755	29,312	3,008	1,399	82	19,680	
2021	Jun	33,387	500	32,079	808	30,305	3,082	1,486	97	20,439	
2021	Jul	32,271	450	31,046	775	29,331	2,940	1,520	101	20,162	
2021	Aug	32,901	466	31,637	798	29,961	2,940	1,565	112	20,394	
2021	Sep	32,593	440	31,299	854	29,526	3,067	1,587	107	20,351	
2021	Oct	32,278	467	30,958	853	29,294	2,984	1,598	102	20,337	
2021	Nov	32,773	469	31,431	873	29,703	3,070	1,614	100	20,665	
2021	Dec	32,112	432	30,898	782	29,215	2,897	1,618	107	20,544	

Milestone: 1
CMS Metric #: 8
CMS Metric Name: Outpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2022	Jan	33,276	462	31,918	896	30,274	3,002	1,670	107	21,129	
2022	Feb	33,174	492	31,855	827	30,293	2,881	1,748	116	21,131	
2022	Mar	35,830	560	34,364	906	32,736	3,094	1,874	131	22,319	
2022	Apr	34,706	540	33,273	893	31,709	2,997	1,920	108	21,858	
2022	May	34,389	506	32,985	898	31,417	2,972	1,901	110	21,628	
2022	Jun	34,791	516	33,377	898	31,786	3,005	1,950	103	22,006	
2022	Jul	33,078	462	31,811	805	30,296	2,782	1,577	113	21,277	
2022	Aug	35,848	527	34,338	983	32,715	3,133	1,611	118	22,576	
2022	Sep	34,255	511	32,851	893	31,408	2,847	1,520	120	21,879	
2022	Oct	34,399	516	33,026	857	31,555	2,844	1,452	135	22,087	
2022	Nov	34,823	591	33,310	922	31,802	3,021	1,420	144	22,320	
2022	Dec	34,155	540	32,769	846	31,276	2,879	1,422	146	22,369	
2023	Jan	36,989	620	35,342	1,027	33,863	3,126	1,464	149	23,615	
2023	Feb	36,789	633	35,158	998	33,650	3,139	1,409	155	23,453	
2023	Mar	38,047	669	36,289	1,089	34,813	3,234	1,475	134	23,945	
2023	Apr	36,550	659	34,957	934	33,604	2,946	1,410	126	23,202	
2023	May	37,864	652	36,142	1,070	34,684	3,180	1,465	172	23,774	
2023	Jun	36,536	590	34,935	1,011	33,479	3,057	1,363	194	23,267	
2023	Jul	38,171	530	36,667	974	35,282	2,889	1,393	189	25,665	
2023	Aug	40,111	617	38,471	1,023	37,070	3,041	1,538	193	26,472	
2023	Sep	38,070	574	36,567	929	35,284	2,786	1,422	199	25,659	
2023	Oct	38,466	646	36,884	936	35,649	2,817	1,457	240	25,543	
2023	Nov	37,672	621	36,133	918	34,997	2,675	1,367	236	25,198	
2023	Dec	36,509	568	35,031	910	33,909	2,600	1,323	277	24,936	

Milestone: 1
CMS Metric #: 9
CMS Metric Name: Intensive Outpatient and Partial Hospitalization Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2016	Jan	242	7	228	1	218	24	4	0	129	
2016	Feb	258	10	244	0	236	22	4	0	134	
2016	Mar	225	5	217	0	205	20	1	0	131	
2016	Apr	245	5	238	0	225	20	2	1	118	
2016	May	254	2	242	2	231	23	3	0	124	
2016	Jun	262	9	248	2	234	28	3	0	133	
2016	Jul	244	12	224	1	226	18	3	0	109	
2016	Aug	283	7	266	1	255	28	3	0	140	
2016	Sep	289	6	266	0	267	22	1	0	153	
2016	Oct	328	4	310	0	301	27	1	0	183	
2016	Nov	284	4	272	1	263	21	2	2	165	
2016	Dec	288	2	276	0	268	20	3	2	162	
2017	Jan	252	0	233	0	234	18	6	0	141	
2017	Feb	265	1	255	0	249	16	11	1	152	
2017	Mar	329	5	322	0	303	26	10	1	192	
2017	Apr	329	4	324	0	298	31	5	0	182	
2017	May	349	3	343	0	316	33	12	0	197	
2017	Jun	364	2	357	2	341	23	10	1	188	
2017	Jul	346	1	343	1	327	19	9	0	173	
2017	Aug	399	1	393	2	378	21	9	2	205	
2017	Sep	366	2	362	2	344	22	6	1	192	
2017	Oct	374	1	369	2	352	22	7	0	199	
2017	Nov	334	5	327	1	317	17	7	1	177	
2017	Dec	322	3	315	1	300	22	7	0	149	

Milestone: 1
CMS Metric #: 9
CMS Metric Name: Intensive Outpatient and Partial Hospitalization Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2018	Jan	361	7	350	1	342	19	6	0	184	
2018	Feb	376	4	367	1	361	15	7	0	192	
2018	Mar	360	6	352	1	344	16	9	0	192	
2018	Apr	369	7	353	1	356	13	10	0	192	
2018	May	356	8	345	0	341	15	8	0	172	
2018	Jun	361	5	354	0	347	14	4	0	173	
2018	Jul	352	4	348	0	339	13	5	1	158	
2018	Aug	354	2	351	0	339	15	6	0	150	
2018	Sep	302	2	299	0	286	16	3	0	134	
2018	Oct	357	7	346	1	341	16	5	1	163	
2018	Nov	368	4	360	1	346	22	7	0	161	
2018	Dec	372	3	367	1	352	20	5	1	172	
2019	Jan	330	1	327	1	315	15	6	1	151	
2019	Feb	321	3	317	0	311	10	12	1	149	
2019	Mar	353	4	348	1	340	13	10	1	170	
2019	Apr	336	2	333	1	320	16	10	0	161	
2019	May	384	2	382	0	368	16	15	0	192	
2019	Jun	369	17	352	0	353	16	9	0	188	
2019	Jul	364	1	363	0	356	8	9	0	213	
2019	Aug	388	3	385	0	372	16	11	0	215	
2019	Sep	387	7	379	1	378	9	13	1	180	
2019	Oct	457	7	450	0	449	8	14	0	219	
2019	Nov	428	7	420	1	418	10	10	0	206	
2019	Dec	474	14	459	1	465	9	12	0	215	

Milestone: 1
CMS Metric #: 9
CMS Metric Name: Intensive Outpatient and Partial Hospitalization Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2020	Jan	530	10	519	1	516	14	11	0	243	
2020	Feb	536	15	517	3	522	14	11	1	216	
2020	Mar	563	9	552	2	554	9	12	0	228	
2020	Apr	347	5	340	2	341	6	8	1	130	
2020	May	449	6	441	2	444	5	9	1	184	
2020	Jun	512	9	502	1	504	8	13	1	207	
2020	Jul	589	14	573	2	578	11	19	1	244	
2020	Aug	656	20	633	3	640	16	21	2	274	
2020	Sep	711	20	688	3	689	22	25	1	313	
2020	Oct	735	16	713	4	713	22	25	1	327	
2020	Nov	736	20	711	4	706	30	28	2	320	
2020	Dec	782	17	757	6	750	32	21	3	341	
2021	Jan	743	15	724	4	711	32	19	4	331	
2021	Feb	764	17	745	2	742	22	31	8	322	
2021	Mar	902	15	885	2	868	34	43	13	349	
2021	Apr	971	17	952	2	936	35	52	12	391	
2021	May	1,056	15	1,038	3	1,019	37	60	13	426	
2021	Jun	1,110	20	1,088	2	1,072	38	66	9	433	
2021	Jul	1,116	24	1,090	2	1,082	34	61	12	442	
2021	Aug	1,155	19	1,133	3	1,119	36	56	13	441	
2021	Sep	1,080	18	1,060	2	1,054	26	54	10	413	
2021	Oct	1,075	15	1,059	1	1,046	29	61	13	390	
2021	Nov	1,116	18	1,096	2	1,082	34	60	5	429	
2021	Dec	1,107	20	1,083	4	1,083	24	44	2	447	

Milestone: 1
CMS Metric #: 9
CMS Metric Name: Intensive Outpatient and Partial Hospitalization Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2022	Jan	1,006	20	982	4	983	23	37	4	413	
2022	Feb	1,034	15	1,012	7	1,008	26	53	8	436	
2022	Mar	1,154	20	1,126	8	1,128	26	76	10	488	
2022	Apr	1,134	25	1,107	2	1,105	29	66	12	484	
2022	May	1,261	28	1,228	5	1,228	33	66	12	531	
2022	Jun	1,230	20	1,205	5	1,198	32	71	13	520	
2022	Jul	1,198	18	1,175	5	1,168	30	55	13	502	
2022	Aug	1,336	15	1,315	6	1,311	25	53	13	575	
2022	Sep	1,292	10	1,275	7	1,267	25	52	10	534	
2022	Oct	1,352	18	1,326	8	1,322	30	49	14	554	
2022	Nov	1,372	20	1,344	8	1,342	30	54	12	550	
2022	Dec	1,353	28	1,320	5	1,329	24	49	10	539	
2023	Jan	1,343	22	1,315	6	1,316	27	52	9	564	
2023	Feb	1,409	36	1,363	10	1,379	30	46	6	585	
2023	Mar	1,439	38	1,390	11	1,403	36	53	9	602	
2023	Apr	1,457	48	1,401	8	1,425	32	63	15	582	
2023	May	1,531	38	1,485	8	1,490	41	56	18	621	
2023	Jun	1,380	41	1,336	3	1,349	31	40	22	565	
2023	Jul	1,306	31	1,268	7	1,272	34	38	21	548	
2023	Aug	1,373	36	1,329	8	1,338	35	42	23	560	
2023	Sep	1,293	29	1,257	7	1,268	25	44	16	518	
2023	Oct	1,389	32	1,349	8	1,360	29	39	14	559	
2023	Nov	1,297	30	1,262	5	1,273	24	38	15	557	
2023	Dec	1,207	31	1,172	4	1,180	27	40	15	510	

Milestone: 1
CMS Metric #: 10
CMS Metric Name: Residential and Inpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+			Pregnant		OUD	
2016	Jan	945	10	859	36	842	103	5	2	321	
2016	Feb	798	8	706	44	708	90	6	0	261	
2016	Mar	793	13	715	39	706	87	5	0	282	
2016	Apr	727	10	672	32	636	91	5	0	235	
2016	May	726	10	665	45	614	112	4	1	227	
2016	Jun	726	10	674	35	629	97	4	1	199	
2016	Jul	896	14	829	39	796	100	5	0	290	
2016	Aug	1,110	9	1,064	34	1,022	88	6	2	495	
2016	Sep	1,163	7	1,112	31	1,077	86	6	1	509	
2016	Oct	1,143	11	1,068	28	1,048	95	2	2	504	
2016	Nov	1,108	6	1,036	29	1,027	81	4	3	487	
2016	Dec	1,157	5	1,088	31	1,070	87	2	5	512	
2017	Jan	959	7	893	27	878	81	3	3	464	
2017	Feb	977	6	926	27	903	74	6	1	459	
2017	Mar	1,168	5	1,119	31	1,087	81	6	2	563	
2017	Apr	1,031	5	984	32	939	92	36	1	502	
2017	May	1,050	7	987	34	963	87	24	4	529	
2017	Jun	1,033	6	983	35	957	76	33	3	502	
2017	Jul	1,122	2	1,061	37	1,034	88	23	1	555	
2017	Aug	1,087	4	1,030	32	994	93	21	2	549	
2017	Sep	1,022	5	967	29	948	74	22	2	522	
2017	Oct	950	3	907	27	875	75	15	3	470	
2017	Nov	877	7	835	30	803	74	18	0	470	
2017	Dec	894	4	851	27	821	73	29	2	460	

Milestone: 1
CMS Metric #: 10
CMS Metric Name: Residential and Inpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2018	Jan	849	6	809	27	773	76	24	1	443	
2018	Feb	824	8	789	24	747	77	30	2	421	
2018	Mar	1,046	4	994	37	958	88	42	6	474	
2018	Apr	1,126	9	1,068	32	1,044	82	38	4	546	
2018	May	1,103	8	1,040	34	1,022	81	25	4	490	
2018	Jun	1,075	4	1,029	28	1,003	72	29	2	516	
2018	Jul	1,075	8	1,018	37	1,002	73	26	2	495	
2018	Aug	1,128	5	1,075	38	1,043	85	32	3	508	
2018	Sep	1,067	3	1,015	43	975	92	31	2	460	
2018	Oct	1,199	3	1,142	37	1,116	83	17	4	550	
2018	Nov	1,154	9	1,082	42	1,060	94	14	3	534	
2018	Dec	1,094	7	1,044	39	1,019	75	10	1	499	
2019	Jan	1,214	7	1,167	37	1,130	84	6	2	560	
2019	Feb	1,119	6	1,065	47	1,024	95	5	2	494	
2019	Mar	1,242	4	1,181	56	1,130	112	8	2	524	
2019	Apr	1,203	6	1,139	56	1,094	109	16	2	505	
2019	May	1,229	10	1,165	53	1,122	107	7	2	519	
2019	Jun	1,193	7	1,128	58	1,088	105	17	0	492	
2019	Jul	1,284	8	1,222	53	1,189	95	22	0	567	
2019	Aug	1,290	3	1,230	55	1,198	92	23	1	553	
2019	Sep	1,316	7	1,248	60	1,220	96	15	0	553	
2019	Oct	1,344	6	1,283	55	1,241	103	31	1	566	
2019	Nov	1,324	4	1,269	50	1,229	95	24	1	562	
2019	Dec	1,440	2	1,390	47	1,341	99	27	0	626	

Milestone: 1
CMS Metric #: 10
CMS Metric Name: Residential and Inpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2020	Jan	1,566	0	1,506	59	1,450	116	29	0	722	
2020	Feb	1,482	1	1,431	50	1,378	104	23	1	673	
2020	Mar	1,532	4	1,476	51	1,421	111	37	2	719	
2020	Apr	1,373	8	1,315	50	1,280	93	32	2	638	
2020	May	1,766	6	1,713	47	1,672	94	40	1	849	
2020	Jun	1,992	3	1,927	61	1,873	119	44	2	1,004	
2020	Jul	2,091	7	2,026	56	1,977	114	39	4	1,025	
2020	Aug	2,057	5	1,995	57	1,919	138	47	2	985	
2020	Sep	2,065	5	2,003	57	1,953	112	41	4	1,011	
2020	Oct	2,278	7	2,215	53	2,149	129	57	5	1,138	
2020	Nov	2,194	7	2,123	61	2,057	137	46	2	1,094	
2020	Dec	2,126	4	2,060	55	1,992	134	54	6	1,033	
2021	Jan	2,414	4	2,354	56	2,257	157	64	8	1,138	
2021	Feb	2,372	4	2,312	56	2,224	148	61	9	1,115	
2021	Mar	2,678	6	2,617	55	2,514	164	76	16	1,259	
2021	Apr	2,767	7	2,696	64	2,588	179	83	20	1,262	
2021	May	2,874	4	2,800	70	2,709	165	104	11	1,328	
2021	Jun	2,921	7	2,841	73	2,749	172	123	14	1,392	
2021	Jul	2,905	2	2,842	61	2,737	168	91	15	1,427	
2021	Aug	2,876	5	2,800	71	2,683	193	94	27	1,389	
2021	Sep	2,783	10	2,716	57	2,606	177	116	19	1,303	
2021	Oct	2,850	8	2,772	70	2,675	175	126	20	1,331	
2021	Nov	2,726	4	2,662	60	2,574	152	124	18	1,269	
2021	Dec	2,726	9	2,661	56	2,579	147	103	15	1,272	

Milestone: 1
CMS Metric #: 10
CMS Metric Name: Residential and Inpatient Services
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+			Pregnant		OUD	
2022	Jan	2,796	9	2,728	59	2,648	148	102	19	1,364	
2022	Feb	2,825	9	2,752	64	2,674	151	110	22	1,345	
2022	Mar	3,293	14	3,209	70	3,094	199	131	26	1,546	
2022	Apr	3,136	12	3,058	66	2,942	194	121	22	1,418	
2022	May	3,236	6	3,172	58	3,045	191	136	26	1,448	
2022	Jun	3,166	8	3,086	72	2,980	186	139	19	1,429	
2022	Jul	3,243	7	3,172	64	3,055	188	126	21	1,451	
2022	Aug	3,570	13	3,492	65	3,365	205	124	28	1,726	
2022	Sep	3,591	10	3,505	76	3,394	197	125	20	1,669	
2022	Oct	3,411	12	3,328	71	3,210	201	110	24	1,544	
2022	Nov	3,417	13	3,333	71	3,224	193	102	24	1,534	
2022	Dec	3,453	15	3,365	73	3,276	177	112	40	1,564	
2023	Jan	3,863	9	3,780	74	3,670	193	118	42	1,737	
2023	Feb	3,745	25	3,633	87	3,518	227	116	41	1,657	
2023	Mar	3,902	21	3,800	81	3,658	244	114	38	1,748	
2023	Apr	3,811	17	3,724	70	3,603	208	100	34	1,687	
2023	May	3,952	19	3,845	88	3,722	230	101	44	1,786	
2023	Jun	3,748	17	3,637	94	3,518	230	84	61	1,701	
2023	Jul	3,677	17	3,571	89	3,446	231	111	61	1,637	
2023	Aug	3,547	20	3,423	104	3,323	224	112	41	1,542	
2023	Sep	3,359	17	3,260	82	3,155	204	96	50	1,457	
2023	Oct	3,416	18	3,309	89	3,203	213	85	52	1,493	
2023	Nov	3,346	10	3,242	94	3,129	217	91	56	1,502	
2023	Dec	3,251	6	3,173	72	3,071	180	92	67	1,451	

Milestone: 1
CMS Metric #: 11
CMS Metric Name: Withdrawal Management
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2016	Jan	454	1	415	3	423	31	1	1	305	
2016	Feb	392	4	344	3	377	15	0	0	229	
2016	Mar	366	0	342	2	347	19	4	1	228	
2016	Apr	348	0	335	1	318	30	2	0	202	
2016	May	313	0	302	5	273	40	0	1	170	
2016	Jun	307	0	300	0	280	27	2	0	155	
2016	Jul	444	0	435	0	416	28	0	0	265	
2016	Aug	661	0	652	3	638	23	3	2	454	
2016	Sep	657	1	643	1	636	21	2	2	462	
2016	Oct	709	1	676	1	673	36	0	2	488	
2016	Nov	685	0	651	2	656	29	4	3	464	
2016	Dec	670	1	641	2	644	26	0	5	472	
2017	Jan	641	1	610	2	622	19	1	2	443	
2017	Feb	617	1	600	1	603	14	2	2	428	
2017	Mar	752	0	735	2	729	23	0	2	512	
2017	Apr	723	0	708	5	693	30	1	0	472	
2017	May	757	0	734	4	730	27	1	4	499	
2017	Jun	747	1	738	5	728	19	1	2	481	
2017	Jul	824	0	804	5	794	30	0	1	532	
2017	Aug	791	1	766	3	756	35	1	2	511	
2017	Sep	748	1	726	2	731	17	0	1	488	
2017	Oct	722	0	710	1	706	16	3	2	447	
2017	Nov	635	0	628	6	618	17	4	0	429	
2017	Dec	686	0	680	0	669	17	6	2	442	

Milestone: 1
CMS Metric #: 11
CMS Metric Name: Withdrawal Management
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2018	Jan	676	3	664	3	649	27	5	0	442	
2018	Feb	596	3	589	2	577	19	5	1	399	
2018	Mar	766	1	748	6	738	28	10	5	462	
2018	Apr	893	0	875	2	870	23	8	4	555	
2018	May	856	2	834	3	838	18	5	4	477	
2018	Jun	806	0	796	3	791	15	8	2	469	
2018	Jul	832	1	814	5	815	17	10	2	468	
2018	Aug	874	1	856	5	846	28	9	3	486	
2018	Sep	791	0	781	5	767	24	6	2	433	
2018	Oct	947	0	930	5	926	21	10	3	531	
2018	Nov	923	1	896	4	897	26	12	2	532	
2018	Dec	776	2	768	3	759	17	8	1	435	
2019	Jan	807	0	804	1	788	19	4	1	477	
2019	Feb	748	0	744	1	732	16	3	1	421	
2019	Mar	787	3	782	3	759	28	6	2	441	
2019	Apr	789	1	785	2	761	28	15	2	438	
2019	May	811	2	805	3	772	39	4	2	449	
2019	Jun	762	0	758	3	738	24	13	0	412	
2019	Jul	843	1	833	6	822	21	12	0	473	
2019	Aug	849	1	839	4	825	24	15	1	475	
2019	Sep	847	0	839	7	821	26	10	0	461	
2019	Oct	882	1	873	5	861	21	23	0	475	
2019	Nov	844	0	840	3	820	24	15	1	456	
2019	Dec	950	0	945	4	920	30	19	0	511	

Milestone: 1
CMS Metric #: 11
CMS Metric Name: Withdrawal Management
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2020	Jan	1,024	1	1,015	6	995	29	19	0	569	
2020	Feb	963	0	960	2	938	25	19	0	541	
2020	Mar	1,017	2	1,010	4	986	31	34	0	594	
2020	Apr	955	0	949	3	930	25	28	0	538	
2020	May	1,267	0	1,263	2	1,246	21	34	1	755	
2020	Jun	1,432	1	1,421	8	1,394	38	39	1	875	
2020	Jul	1,524	1	1,513	6	1,490	34	35	2	905	
2020	Aug	1,530	0	1,520	8	1,481	49	45	2	886	
2020	Sep	1,531	1	1,520	7	1,492	39	40	3	894	
2020	Oct	1,700	1	1,693	4	1,655	45	53	5	1,022	
2020	Nov	1,644	2	1,632	8	1,600	44	38	2	966	
2020	Dec	1,586	0	1,572	8	1,534	52	44	5	903	
2021	Jan	1,804	0	1,795	9	1,744	60	51	8	993	
2021	Feb	1,772	0	1,767	5	1,725	47	50	7	977	
2021	Mar	1,942	0	1,935	7	1,889	53	68	13	1,093	
2021	Apr	2,063	1	2,050	12	1,992	71	70	17	1,133	
2021	May	2,157	1	2,146	10	2,091	66	91	10	1,180	
2021	Jun	2,209	2	2,190	17	2,142	67	114	10	1,252	
2021	Jul	2,261	0	2,246	15	2,183	78	82	12	1,286	
2021	Aug	2,260	1	2,238	21	2,175	85	88	21	1,256	
2021	Sep	2,204	0	2,199	5	2,125	79	101	15	1,191	
2021	Oct	2,264	1	2,252	11	2,187	77	112	15	1,217	
2021	Nov	2,219	1	2,205	13	2,150	69	113	16	1,175	
2021	Dec	2,187	2	2,172	13	2,124	63	93	15	1,170	

Milestone: 1
CMS Metric #: 11
CMS Metric Name: Withdrawal Management
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2022	Jan	2,319	1	2,307	11	2,249	70	95	19	1,277	
2022	Feb	2,326	0	2,309	17	2,258	68	98	16	1,256	
2022	Mar	2,618	1	2,604	13	2,519	99	111	19	1,397	
2022	Apr	2,489	0	2,472	17	2,381	108	113	20	1,260	
2022	May	2,575	0	2,561	14	2,482	93	130	23	1,293	
2022	Jun	2,526	1	2,508	17	2,433	93	124	15	1,275	
2022	Jul	2,615	2	2,597	16	2,513	102	114	19	1,305	
2022	Aug	2,957	2	2,938	17	2,839	118	117	23	1,575	
2022	Sep	2,996	2	2,974	20	2,888	108	116	16	1,522	
2022	Oct	2,886	5	2,859	22	2,755	131	104	17	1,421	
2022	Nov	2,874	4	2,852	18	2,764	110	89	22	1,414	
2022	Dec	2,904	4	2,878	22	2,819	85	96	37	1,438	
2023	Jan	3,204	1	3,182	21	3,095	109	103	36	1,579	
2023	Feb	3,133	8	3,106	19	2,997	136	102	32	1,524	
2023	Mar	3,247	10	3,212	25	3,103	144	103	35	1,609	
2023	Apr	3,173	9	3,147	17	3,053	120	87	25	1,560	
2023	May	3,316	10	3,271	35	3,176	140	85	38	1,627	
2023	Jun	3,146	8	3,109	29	3,012	134	76	57	1,551	
2023	Jul	3,094	11	3,058	25	2,959	135	97	53	1,493	
2023	Aug	2,952	12	2,898	42	2,824	128	104	35	1,414	
2023	Sep	2,771	8	2,734	29	2,654	117	91	44	1,320	
2023	Oct	2,856	10	2,815	31	2,734	122	73	45	1,368	
2023	Nov	2,818	5	2,788	25	2,700	118	79	51	1,384	
2023	Dec	2,737	5	2,717	15	2,637	100	85	58	1,326	

Milestone: 1
CMS Metric #: 12
CMS Metric Name: Medication-Assisted Treatment (MAT)
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2016	Jan	3,352	95	3,254	3	3,341	11	67	0	1,807	
2016	Feb	3,417	107	3,308	2	3,411	6	79	0	1,788	
2016	Mar	3,684	96	3,586	2	3,675	9	84	0	2,075	
2016	Apr	3,780	77	3,701	2	3,771	9	93	1	2,171	
2016	May	3,954	89	3,863	2	3,941	13	104	1	2,282	
2016	Jun	4,109	92	4,015	2	4,097	12	105	1	2,386	
2016	Jul	4,119	81	4,035	3	4,109	10	95	3	2,324	
2016	Aug	4,463	85	4,375	3	4,450	13	114	5	2,573	
2016	Sep	4,614	88	4,522	4	4,602	12	113	8	2,634	
2016	Oct	4,755	89	4,663	2	4,747	8	101	9	2,857	
2016	Nov	4,913	91	4,820	2	4,907	6	95	9	2,969	
2016	Dec	5,147	91	5,050	4	5,140	7	92	8	3,062	
2017	Jan	5,439	97	5,336	3	5,432	7	93	10	3,235	
2017	Feb	5,525	95	5,426	2	5,516	9	116	12	3,192	
2017	Mar	6,100	88	6,008	3	6,089	11	131	14	3,620	
2017	Apr	6,249	102	6,143	3	6,242	7	127	10	3,696	
2017	May	6,580	108	6,469	2	6,575	5	133	15	3,983	
2017	Jun	6,660	98	6,553	8	6,648	12	131	16	4,055	
2017	Jul	6,774	97	6,673	4	6,763	11	132	10	4,034	
2017	Aug	7,280	103	7,173	4	7,271	9	153	7	4,546	
2017	Sep	8,427	102	8,299	19	8,340	87	197	9	5,581	
2017	Oct	9,479	111	9,335	23	9,358	121	200	16	6,635	
2017	Nov	9,757	120	9,600	29	9,627	130	200	18	6,843	
2017	Dec	10,323	125	10,153	37	10,155	168	207	12	7,149	

Milestone: 1
CMS Metric #: 12
CMS Metric Name: Medication-Assisted Treatment (MAT)
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2018	Jan	10,895	132	10,724	33	10,722	173	195	12	7,683	
2018	Feb	10,781	119	10,620	36	10,613	168	323	16	7,503	
2018	Mar	11,524	136	11,342	40	11,345	179	353	14	8,023	
2018	Apr	11,858	131	11,684	38	11,667	191	366	15	8,306	
2018	May	12,489	129	12,315	44	12,260	229	391	10	8,834	
2018	Jun	12,660	132	12,483	44	12,412	248	396	11	9,002	
2018	Jul	13,012	125	12,829	53	12,757	255	419	10	9,185	
2018	Aug	13,630	146	13,419	55	13,357	273	445	15	9,726	
2018	Sep	13,575	127	13,380	62	13,303	272	454	11	9,779	
2018	Oct	14,321	128	14,127	62	14,043	278	466	9	10,362	
2018	Nov	14,571	110	14,392	59	14,293	278	451	12	10,656	
2018	Dec	14,669	106	14,501	59	14,383	286	431	7	10,795	
2019	Jan	15,161	111	14,983	64	14,875	286	440	16	11,297	
2019	Feb	15,400	107	15,221	68	15,115	285	437	7	11,353	
2019	Mar	15,996	122	15,798	73	15,698	298	416	8	11,506	
2019	Apr	16,502	111	16,317	68	16,197	305	425	7	12,612	
2019	May	16,839	114	16,650	75	16,514	325	423	4	12,831	
2019	Jun	16,716	106	16,529	81	16,393	323	446	4	12,672	
2019	Jul	17,104	106	16,908	86	16,769	335	475	4	13,084	
2019	Aug	17,211	91	17,029	90	16,872	339	467	4	13,284	
2019	Sep	17,162	90	16,972	95	16,824	338	465	3	13,295	
2019	Oct	17,911	85	17,731	91	17,568	343	483	9	13,962	
2019	Nov	17,919	88	17,734	93	17,566	353	478	5	13,904	
2019	Dec	18,249	90	18,064	93	17,876	373	483	3	14,210	

Milestone: 1
CMS Metric #: 12
CMS Metric Name: Medication-Assisted Treatment (MAT)
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2020	Jan	18,925	99	18,733	86	18,572	353	491	8	15,311	
2020	Feb	19,176	105	18,991	77	18,847	329	520	10	15,410	
2020	Mar	19,806	102	19,635	68	19,565	241	546	9	15,821	
2020	Apr	20,504	101	20,337	64	20,271	233	533	9	16,281	
2020	May	21,493	87	21,338	62	21,263	230	553	14	17,165	
2020	Jun	22,302	89	22,138	64	22,107	195	594	17	17,960	
2020	Jul	23,033	94	22,867	67	22,846	187	651	15	18,777	
2020	Aug	23,690	97	23,512	77	23,522	168	715	20	19,262	
2020	Sep	24,323	100	24,132	79	24,127	196	774	21	19,868	
2020	Oct	24,798	102	24,621	72	24,629	169	842	17	20,160	
2020	Nov	25,282	103	25,064	88	25,076	206	905	21	20,290	
2020	Dec	26,001	113	25,734	94	25,759	242	971	20	20,846	
2021	Jan	26,401	98	26,189	114	26,091	310	1,037	45	21,185	
2021	Feb	26,486	100	26,296	90	26,242	244	1,097	39	21,180	
2021	Mar	27,457	112	27,248	97	27,191	266	1,188	51	22,041	
2021	Apr	27,460	103	27,262	95	27,227	233	1,229	55	21,929	
2021	May	27,826	110	27,621	95	27,590	236	1,303	54	22,210	
2021	Jun	28,346	106	28,142	98	28,098	248	1,357	74	22,743	
2021	Jul	28,308	105	28,111	92	28,064	244	1,403	74	22,563	
2021	Aug	28,473	115	28,246	112	28,217	256	1,447	67	22,745	
2021	Sep	28,541	119	28,313	109	28,305	236	1,530	87	22,748	
2021	Oct	28,761	117	28,537	107	28,521	240	1,534	74	22,891	
2021	Nov	29,096	118	28,857	121	28,853	243	1,593	72	23,094	
2021	Dec	29,507	132	29,260	115	29,262	245	1,610	72	23,359	

Milestone: 1
CMS Metric #: 12
CMS Metric Name: Medication-Assisted Treatment (MAT)
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	Medicaid Only	Dual Eligible	Pregnant	Criminally Involved	OUD	MRO
2022	Jan	30,103	130	29,842	131	29,806	297	1,665	82	23,773	
2022	Feb	30,141	129	29,889	123	29,904	237	1,695	86	23,878	
2022	Mar	31,149	136	30,894	119	30,917	232	1,796	103	24,636	
2022	Apr	31,100	126	30,857	117	30,875	225	1,858	91	24,553	
2022	May	31,378	138	31,123	117	31,171	207	1,904	93	24,660	
2022	Jun	31,691	136	31,433	122	31,490	201	1,902	91	24,659	
2022	Jul	31,651	127	31,392	132	31,418	233	1,573	73	24,442	
2022	Aug	32,427	133	32,164	130	32,190	237	1,553	86	25,262	
2022	Sep	32,328	142	32,049	137	32,108	220	1,510	85	25,036	
2022	Oct	32,483	135	32,229	119	32,265	218	1,444	82	25,052	
2022	Nov	32,955	143	32,654	158	32,706	249	1,431	122	25,517	
2022	Dec	33,043	138	32,747	158	32,789	254	1,443	116	25,452	
2023	Jan	34,124	159	33,764	201	33,724	400	1,433	123	26,409	
2023	Feb	33,759	156	33,464	139	33,502	257	1,387	125	26,122	
2023	Mar	34,720	170	34,408	142	34,465	255	1,412	112	26,661	
2023	Apr	34,289	164	33,996	129	34,078	211	1,417	99	26,309	
2023	May	34,821	163	34,517	141	34,615	206	1,434	132	26,581	
2023	Jun	34,092	174	33,782	136	33,863	229	1,339	160	25,712	
2023	Jul	27,758	168	27,481	109	27,594	164	1,139	167	19,410	
2023	Aug	26,866	169	26,596	101	26,719	147	1,138	160	18,579	
2023	Sep	26,083	167	25,819	97	25,929	154	1,071	161	17,878	
2023	Oct	26,210	165	25,951	94	26,063	147	1,058	181	17,930	
2023	Nov	25,872	161	25,606	105	25,727	145	1,031	186	17,691	
2023	Dec	25,356	140	25,117	99	25,214	142	1,015	200	17,095	

Milestone: 5
CMS Metric #: 23
CMS Metric Name: Emergency Department Utilization for SUD per 1,000
Medicaid Beneficiaries
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	OUD	MRO
2016	Jan	5	0.2	11	2	168	16
2016	Feb	5	0.2	10	2	119	13
2016	Mar	7	0.3	14	2	141	19
2016	Apr	6	0.2	13	2	126	16
2016	May	8	0.3	16	2	142	18
2016	Jun	6	0.2	13	2	100	16
2016	Jul	6	0.2	13	2	91	17
2016	Aug	6	0.3	13	2	94	14
2016	Sep	6	0.2	12	2	78	15
2016	Oct	6	0.2	11	2	75	15
2016	Nov	5	0.2	11	2	67	14
2016	Dec	5	0.2	11	2	66	14
2017	Jan	6	0.3	12	1	68	14
2017	Feb	6	0.3	11	2	62	13
2017	Mar	7	0.3	13	2	74	17
2017	Apr	10	0.4	20	2	117	25
2017	May	10	0.3	21	2	126	22
2017	Jun	10	0.4	20	2	103	23
2017	Jul	10	0.4	21	3	107	26
2017	Aug	10	0.3	19	4	107	28
2017	Sep	8	0.4	16	2	84	18
2017	Oct	7	0.3	14	2	74	18
2017	Nov	7	0.3	14	2	69	19
2017	Dec	7	0.2	14	2	62	17
2018	Jan	7	0.2	14	3	65	18
2018	Feb	7	0.4	13	3	59	16
2018	Mar	7	0.3	15	2	64	16
2018	Apr	7	0.2	14	2	60	16
2018	May	8	0.3	15	2	61	17
2018	Jun	7	0.2	14	2	57	16
2018	Jul	7	0.2	14	3	56	15
2018	Aug	8	0.3	15	3	65	16
2018	Sep	6	0.3	13	3	51	14
2018	Oct	6	0.2	12	3	48	14
2018	Nov	5	0.2	11	2	43	11
2018	Dec	6	0.2	12	2	44	11

Milestone: 5
CMS Metric #: 23
CMS Metric Name: Emergency Department Utilization for SUD per 1,000
Medicaid Beneficiaries
Metric Type: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	OUD	MRO
2019	Jan	6	0.2	12	2	45	13
2019	Feb	5	0.2	11	2	42	10
2019	Mar	6	0.2	12	2	46	13
2019	Apr	6	0.2	13	3	49	15
2019	May	7	0.2	14	3	54	16
2019	Jun	6	0.2	13	3	50	15
2019	Jul	7	0.2	14	3	56	17
2019	Aug	7	0.2	14	3	55	15
2019	Sep	6	0.2	13	3	49	15
2019	Oct	6	0.2	13	3	48	14
2019	Nov	6	0.2	12	2	46	12
2019	Dec	6	0.2	12	2	45	13
2020	Jan	7	0.3	15	3	56	15
2020	Feb	6	0.2	13	2	50	13
2020	Mar	6	0.2	12	2	49	11
2020	Apr	5	0.1	10	2	37	12
2020	May	7	0.2	13	2	54	14
2020	Jun	7	0.2	14	3	60	14
2020	Jul	7	0.2	14	3	61	16
2020	Aug	7	0.2	14	3	65	15
2020	Sep	7	0.3	14	3	60	16
2020	Oct	7	0.2	12	4	55	14
2020	Nov	6	0.2	11	4	51	15
2020	Dec	6	0.2	11	4	46	12
2021	Jan	7	0.2	14	4	59	18
2021	Feb	6	0.2	11	3	46	15
2021	Mar	7	0.2	13	4	59	17
2021	Apr	7	0.2	13	4	61	18
2021	May	7	0.2	13	4	60	17
2021	Jun	7	0.2	13	4	58	18
2021	Jul	7	0.2	13	4	63	17
2021	Aug	7	0.2	13	4	61	16
2021	Sep	6	0.2	11	3	51	15
2021	Oct	6	0.2	11	4	51	15
2021	Nov	6	0.1	10	4	47	14
2021	Dec	6	0.2	10	3	43	13

Milestone: 5
CMS Metric #: 23
CMS Metric Name: Emergency Department Utilization for SUD per 1,000
Metric Type: Medicaid Beneficiaries
Reporting Category: CMS-constructed
Reporting Category: Other monthly and quarterly metrics

Year	Month	Demo	Age <18	Age 18-64	Age 65+	OUD	MRO
2022	Jan	6	0.1	10	3	47	12
2022	Feb	6	0.2	10	4	42	15
2022	Mar	7	0.2	12	5	54	14
2022	Apr	7	0.2	11	5	52	14
2022	May	7	0.2	11	5	48	15
2022	Jun	6	0.2	11	5	48	15
2022	Jul	6	0.2	11	4	50	14
2022	Aug	6	0.2	11	4	52	15
2022	Sep	6	0.2	10	4	43	15
2022	Oct	5	0.2	9	3	41	11
2022	Nov	5	0.2	8	3	35	10
2022	Dec	5	0.2	8	3	34	10
2023	Jan	5	0.2	9	3	41	11
2023	Feb	5	0.2	8	3	36	11
2023	Mar	5	0.3	9	3	42	13
2023	Apr	5	0.2	8	3	39	11
2023	May	6	0.3	10	4	49	12
2023	Jun	5	0.2	8	3	39	10
2023	Jul	5	0.2	9	4	41	11
2023	Aug	5	0.2	9	4	42	12
2023	Sep	5	0.2	9	3	40	10
2023	Oct	5	0.2	8	3	33	10
2023	Nov	4	0.2	7	3	31	9
2023	Dec	4	0.2	7	3	30	9

Milestone: Other SUD-related metrics

CMS Metric #: 30

CMS Metric Name: Per Capita SUD Spending

Metric Type: CMS-constructed

Reporting Category: Other annual metrics

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	360,740,457	529,748,093	542,967,092	622,589,840	795,621,989	636,466,652	763,877,728	856,088,879
Denominator	83,687	93,778	102,749	108,265	119,121	139,143	144,979	151,510
Rate	4,311	5,649	5,284	5,751	6,679	4,574	5,269	5,650

Milestone: Other SUD-related metrics
CMS Metric #: 31
CMS Metric Name: Per Capita SUD Spending within IMDs
Metric Type: CMS-constructed
Reporting Category: Other annual metrics

	CMS Measurement Period								
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	
Numerator	14,280,127	33,772,269	24,110,368	20,209,259	20,749,248	107,881,286	164,803,497	190,500,542	
Denominator	2,662	4,271	4,052	3,271	3,482	11,576	15,279	17,777	
Rate	5,364	7,907	5,950	6,178	5,959	9,319	10,786	10,716	

Milestone: Other SUD-related metrics
CMS Metric #: 32
CMS Metric Name: Access to Preventive/ Ambulatory Health Services for Adult Medicaid Beneficiaries with SUD [Adjusted HEDIS measure]
Metric Type: Established quality measure
Reporting Category: Annual metrics that are established quality measures

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	28,884	32,985	34,588	39,562	52,509	100,524	107,777	100,691
Denominator	32,168	37,202	38,768	44,222	60,316	111,614	120,246	111,676
Rate	89.8%	88.7%	89.2%	89.5%	87.1%	90.1%	89.6%	90.2%

Milestone: 5

CMS Metric #: 18

CMS Metric Name: Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD), [PQA, NQF #2940; Medicaid Adult Core Set]

Metric Type: Established quality measure

Reporting Category: Annual metrics that are established quality measures

	CMS Measurement Period								
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	
Numerator	3,268	2,409	1,773	1,418	1,354	1,235	1,189	1,119	
Denominator	57,634	48,011	33,811	28,989	30,649	40,409	40,959	37,296	
Rate	5.7%	5.0%	5.2%	4.9%	4.4%	3.1%	2.9%	3.0%	

Milestone:

5

CMS Metric #:

19

CMS Metric Name: Use of Opioids from Multiple Providers in Persons Without Cancer
(OMP), [PQA; NQF #2950]

Metric Type: Established quality measure

Reporting Category: Annual metrics that are established quality measures

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	1,624	1,167	400	307	262	439	560	704
Denominator	65,218	54,140	37,467	32,619	34,505	50,410	51,536	47,595
Rate	2.5%	2.2%	1.1%	0.9%	0.8%	0.9%	1.1%	1.5%

Milestone: 5

CMS Metric #: 21

CMS Metric Name: Concurrent Use of Opioids and Benzodiazepines (COB-AD), [PQA, NQF #3389; Medicaid Adult Core Set]

Metric Type: Established quality measure

Reporting Category: Annual metrics that are established quality measures

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	14,404	10,528	6,606	4,530	4,114	6,263	5,824	4,897
Denominator	67,492	55,826	38,746	33,534	36,480	52,329	53,264	48,392
Rate	21.3%	18.9%	17.0%	13.5%	11.3%	12.0%	10.9%	10.1%

Milestone: 1

CMS Metric #: 22

CMS Metric Name: Continuity of Pharmacotherapy for Opioid Use Disorder, [USC; NQF #3175]

Metric Type: Established quality measure

Reporting Category: Annual metrics that are established quality measures

	CMS Measurement Period								
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023	
Numerator	1,012	1,739	3,775	5,033	6,861	8,934	10,365	8,835	
Denominator	5,118	9,341	15,291	19,224	25,225	34,131	41,973	42,705	
Rate	19.8%	18.6%	24.7%	26.2%	27.2%	26.2%	24.7%	20.7%	

Milestone: 1
CMS Metric #: 15a
CMS Metric Name: Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD) - Initiation of AOD Treatment
Metric Type: Established quality measure
Reporting Category: Annual metrics that are established quality measures

Metric 15a1 Initiation of AOD Treatment - Alcohol abuse or dependence

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	5,505	6,394	6,065	6,120	6,946	13,383	14,651	14,630
Denominator	10,624	11,366	11,374	11,758	13,150	24,544	26,633	26,314
Rate	51.8%	56.3%	53.3%	52.0%	52.8%	54.5%	55.0%	55.6%

Metric 15a2 Initiation of AOD Treatment - Opioid abuse or dependence

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	3,405	4,588	4,668	4,639	5,958	10,478	11,251	10,749
Denominator	6,502	7,535	7,373	7,642	9,245	16,096	16,876	16,015
Rate	52.4%	60.9%	63.3%	60.7%	64.4%	65.1%	66.7%	67.1%

Metric 15a3 Initiation of AOD Treatment - Other drug abuse or dependence

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	5,415	7,132	7,312	7,634	8,964	18,229	19,078	19,412
Denominator	12,033	13,894	14,610	15,042	17,440	34,071	35,815	35,792
Rate	45.0%	51.3%	50.0%	50.8%	51.4%	53.5%	53.3%	54.2%

Metric 15a4 Initiation of AOD Treatment - Total AOD abuse or dependence

	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	1
Numerator	12,314	15,337	15,420	15,785	18,401	35,248	37,558	
Denominator	24,956	27,973	28,688	29,634	33,838	63,236	67,039	
Rate	49.3%	54.8%	53.8%	53.3%	54.4%	55.7%	56.0%	

Milestone: 1
CMS Metric #: 15b
CMS Metric Name: Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD) - Engagement of AOD Treatment
Metric Type: Established quality measure
Reporting Category: Annual metrics that are established quality measures

Metric 15b1 Engagement of AOD Treatment - Alcohol abuse or dependence

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	980	1,196	1,383	1,502	1,731	4,012	4,315	4,683
Denominator	5,505	6,394	6,065	6,120	6,946	13,383	14,651	14,630
Rate	17.8%	18.7%	22.8%	24.5%	24.9%	30.0%	29.5%	32.0%

Metric 15b2 Engagement of AOD Treatment - Opioid abuse or dependence

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	996	1,825	2,003	2,266	3,254	5,621	6,318	6,458
Denominator	3,405	4,588	4,668	4,639	5,958	10,478	11,251	10,749
Rate	29.3%	39.8%	42.9%	48.8%	54.6%	53.6%	56.2%	60.1%

Metric 15b3 Engagement of AOD Treatment - Other drug abuse or dependence

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	919	1,292	1,564	1,903	2,222	5,556	6,230	7,150
Denominator	5,415	7,132	7,312	7,634	8,964	18,229	19,078	19,412
Rate	17.0%	18.1%	21.4%	24.9%	24.8%	30.5%	32.7%	36.8%

Metric 15b4 Engagement of AOD Treatment - Total AOD abuse or dependence

	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	
Numerator	2,686	3,981	4,612	5,237	6,443	13,169	14,302	
Denominator	12,314	15,337	15,420	15,785	18,401	35,248	37,558	
Rate	21.8%	26.0%	29.9%	33.2%	35.0%	37.4%	38.1%	

Milestone: 1
CMS Metric #: 17(1)
CMS Metric Name: Follow-up after Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence: Age 18 and Older (FUA-AD)
Metric Type: Established quality measure
Reporting Category: Annual metrics that are established quality measures

Metric 17(1)(a) Percentage of ED visits for which the beneficiary received follow-up within

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	497	597	644	777	1,168	2,592	2,447	2,077
Denominator	4,740	5,193	4,527	4,923	6,508	12,273	12,266	10,358
Rate	10.5%	11.5%	14.2%	15.8%	17.9%	21.1%	19.9%	20.1%

Metric 17(1)(a) Percentage of ED visits for which the beneficiary received follow-up within 7

	CMS Measurement Period							
	CY 2016	CY 2017	CY 2018	CY 2019	CY 2020	CY 2021	CY 2022	CY 2023
Numerator	323	386	435	513	787	1,747	1,679	1,320
Denominator	4,740	5,193	4,527	4,923	6,508	12,273	12,266	10,358
Rate	6.8%	7.4%	9.6%	10.4%	12.1%	14.2%	13.7%	12.7%