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# Interim Evaluation 2024

## Indiana's Section 1115 Substance Use Disorder Demonstration – Initial Draft

Prepared for
Indiana Family and Social Services Administration

December 31, 2024

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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 |

| Measures Where Desired Outcome Was Met: | Outcome |
|---|---|
| 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 |

| Measures Where Desired Outcome Was Met: | Outcome |
|---|---|
| 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 | Type |
|---|---|
| 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 | Type |
|---|---|
| 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 |

| Measures Where Desired Outcome Was Met: | Outcome |
|---|---|
| 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 | Type |
|---|---|
| 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: | Outcome |
|---|---|
| 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 | Type |
|---|---|
| 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 |

| Measures Where Desired Outcome Was Met: | Outcome |
|---|---|
| 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 Residental Discharges with SUD follow-up, 7 days | Increase |
| Percentage of Inpatient or Residental 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 | Type |
|---|---|
| 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;
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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.

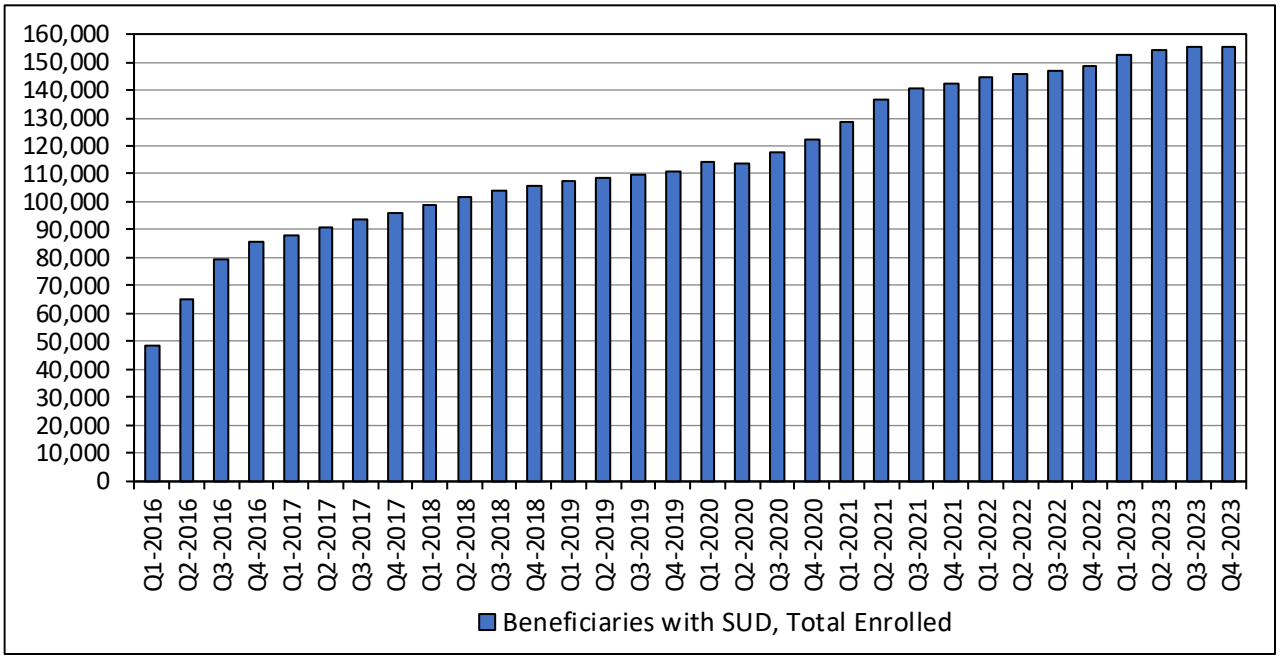
### Population Groups Impacted by the Demonstration

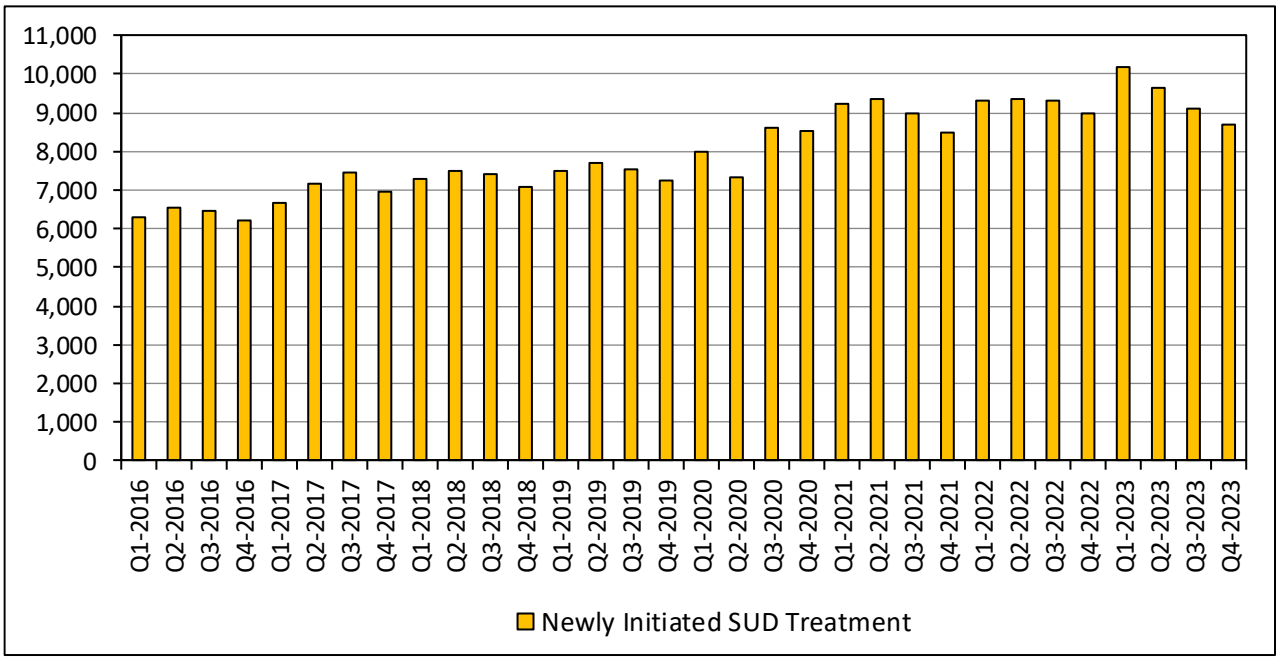
The evaluators used CMS's specifications for SUD Metric #3 (Medicaid Beneficiaries with SUD Diagnosis) and Metric #2 (Medicaid Beneficiaries with Newly Initiated SUD Diagnosis) to assess the trend in the Medicaid population most likely to be impacted by the demonstration. Exhibit 8, which appears on 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

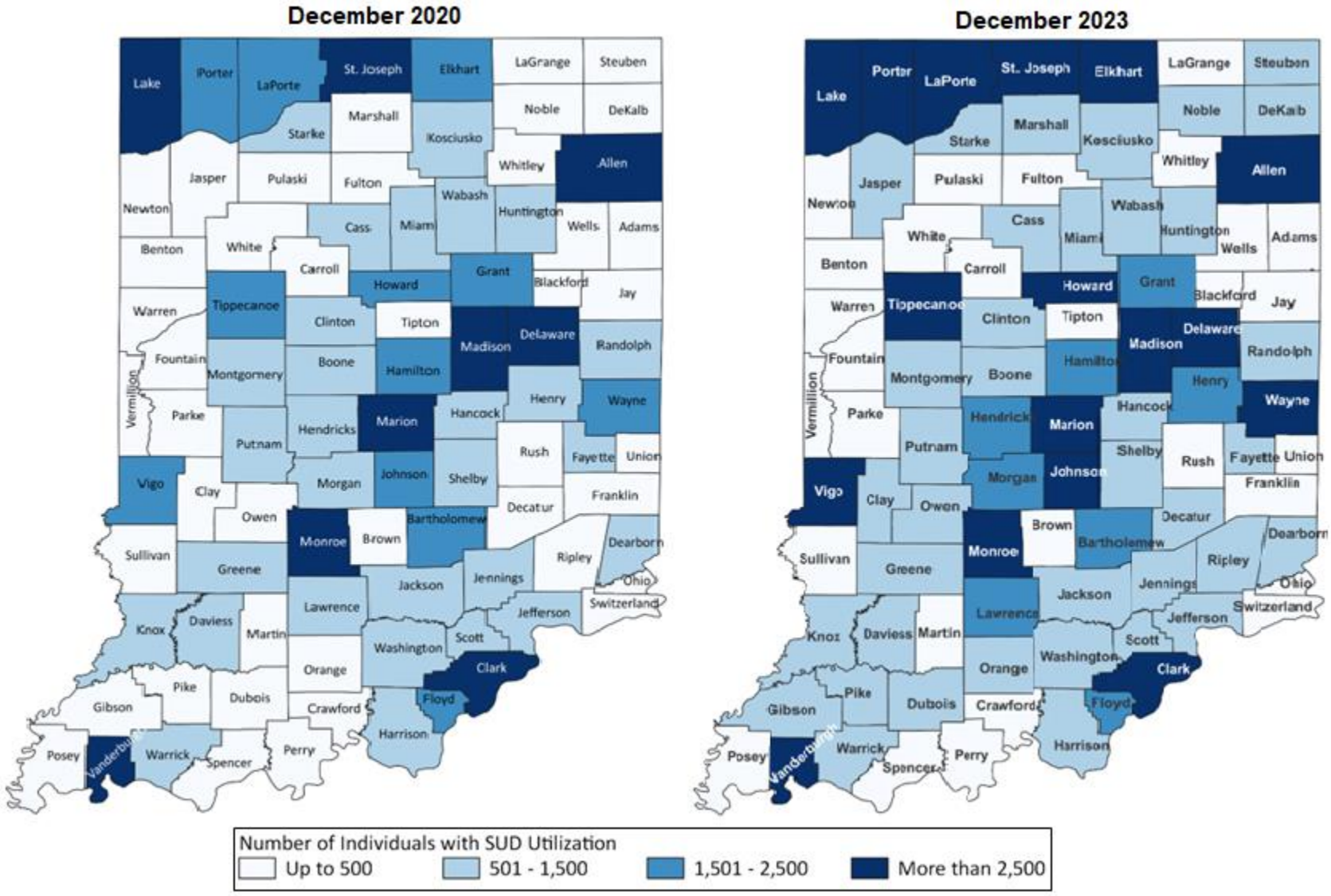
involved, and beneficiaries enrolled in the MRO benefit are also over-represented within the total population with SUD compared to their proportional enrollment in Medicaid overall (i.e., each subpopulation has a higher percentage of its members with SUD than the statewide percentage shown at the top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

| | December 2020 end of demonstration period | | | December 2023 end of demonstration period | | |
|---|---|---|---|---|---|---|
| **Category** | **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.

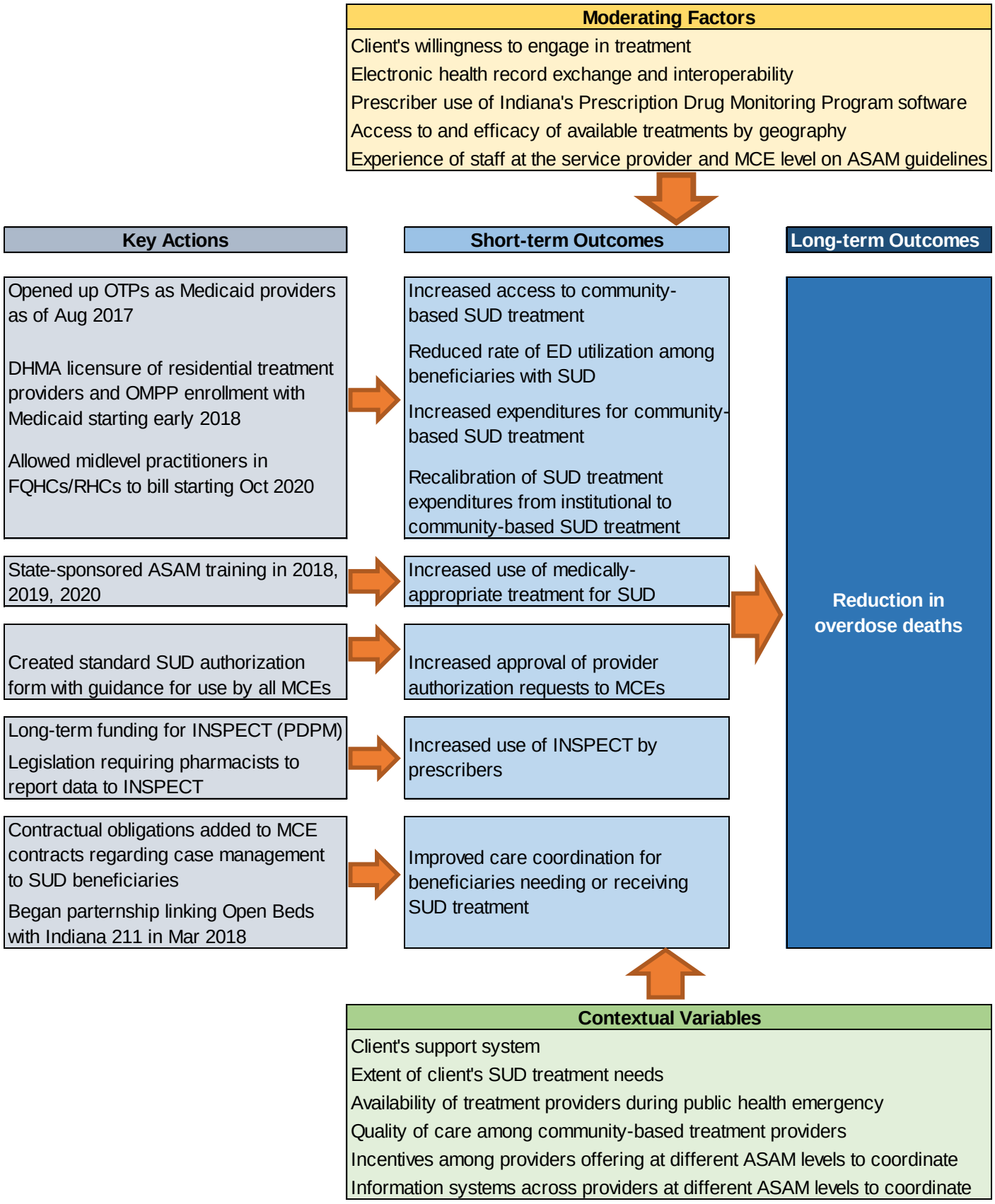
The HMA-Burns team constructed a logic model with the long-term outcome being a reduction in overdose deaths in Indiana because it is a measurable health outcome. The logic model appears as Exhibit 11 on the next page. Based on key actions taken by the State either at the start of the initial SUD demonstration 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, and 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 not 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 35 measures. Exhibit 15 on the following page shows the type of test applied to each measure. 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**.

## Exhibit 15. Analytic Methods Applied to Measures

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

# 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.

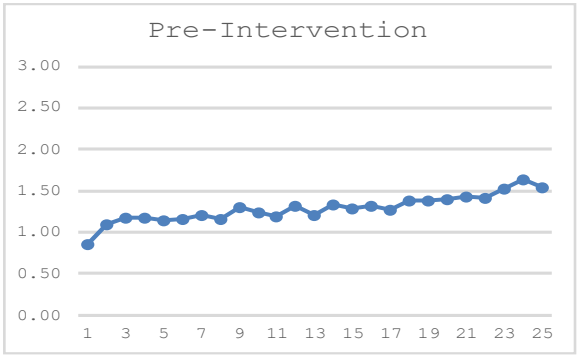
After the summary table, each of the 55 measures examined appears on a one-page dashboard report. Information about the research question posed, the measure and measure steward, and the data source used to analyze the measure are provided. Results are displayed graphically for the entire demonstration 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.

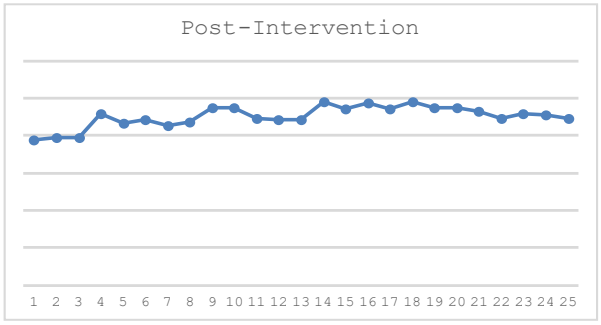
Using Metric 10 (Residential and Inpatient Services per 1,000 Medicaid Beneficiaries) as an example, the pre-intervention trend was significant with a p-value = <.0001. The post-intervention trend was highly significant with a p-value <.0001 as shown in Exhibit 16. Also significant with a p-value = 0.0243 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

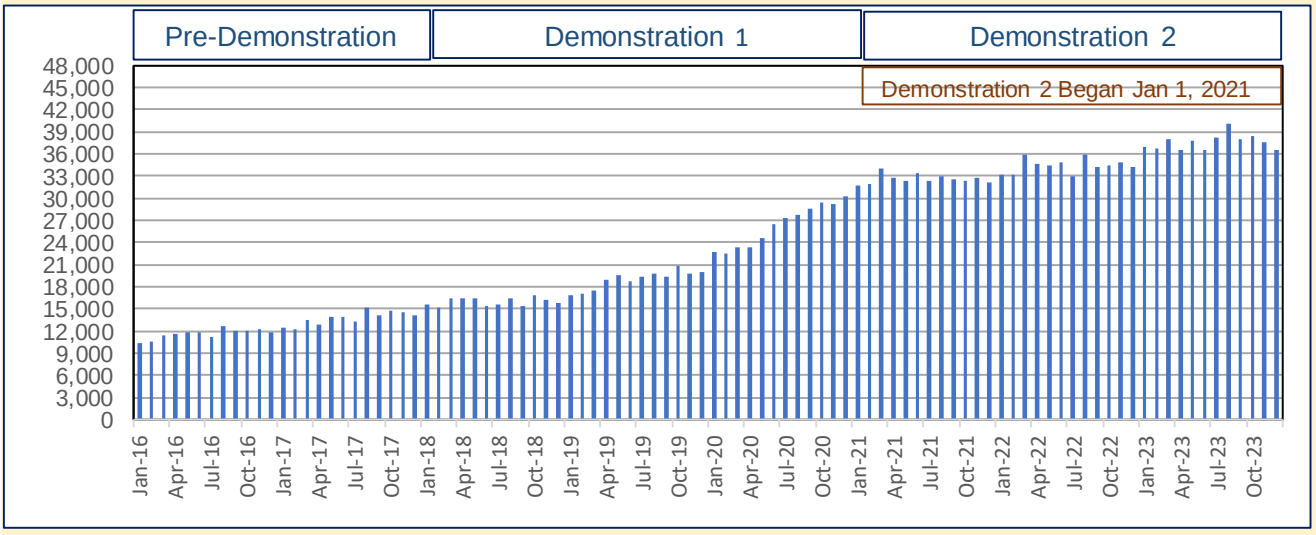
| | Measure Examined | Desired Outcome | Outcome Met? | Statistical Test | Statistically Significant? | P-Value |
|---|---|---|---|---|---|---|
| 1 | Users of Outpatient Services | Increase | Yes | Interrupted Time Series | Yes | <.0001 |
| 2 | Rate of Outpatient Services | Increase | Yes | Interrupted 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) |

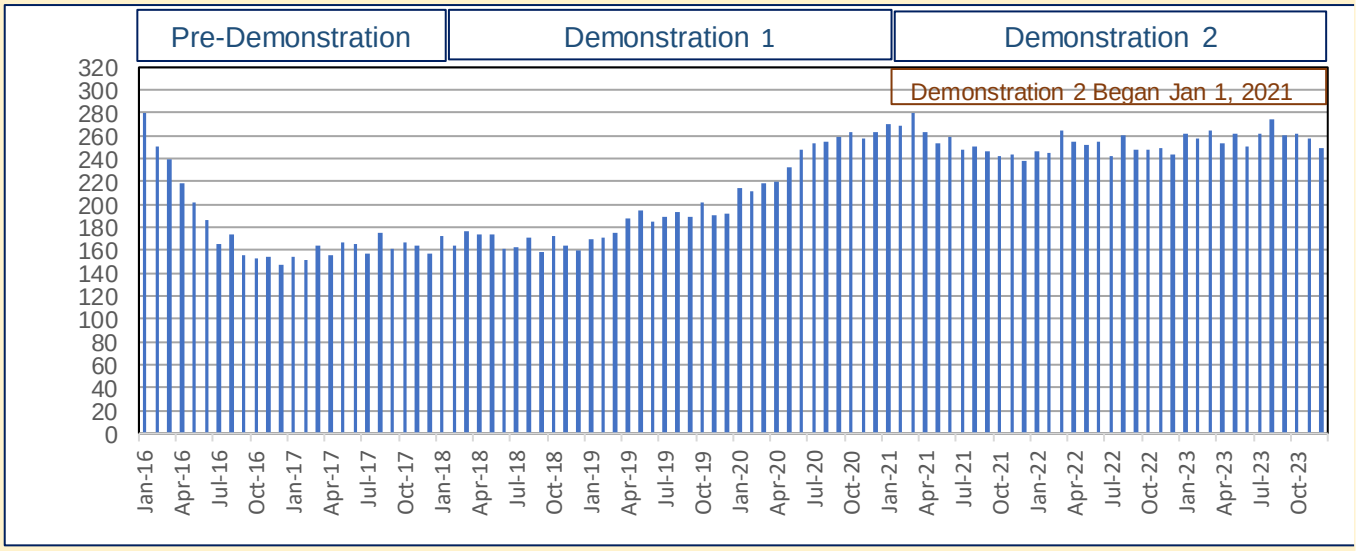
The average number of beneficiaries with SUD using outpatient services in the demonstration period was 35,864 compared to 17,954 during the pre-demonstration period, an increase of 99.8 percent. Each cohort population increased at least 15.6 percent during the demonstration period.

## 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

| | Estimate | P-Value | Significant |
|---|---|---|---|
| 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 |

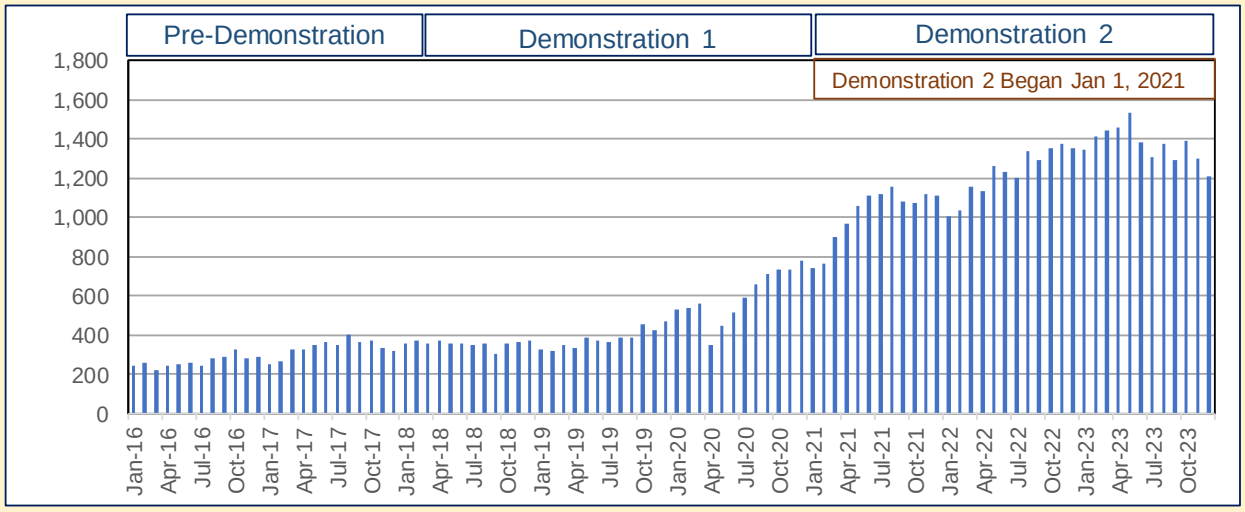
The average rate of beneficiaries with SUD using outpatient services in the demonstration period was 255 compared to 180 during the pre-demonstration period, an increase of 41.3 percent.

## 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:** Interrupted Time Series

| | 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 was1,290 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.

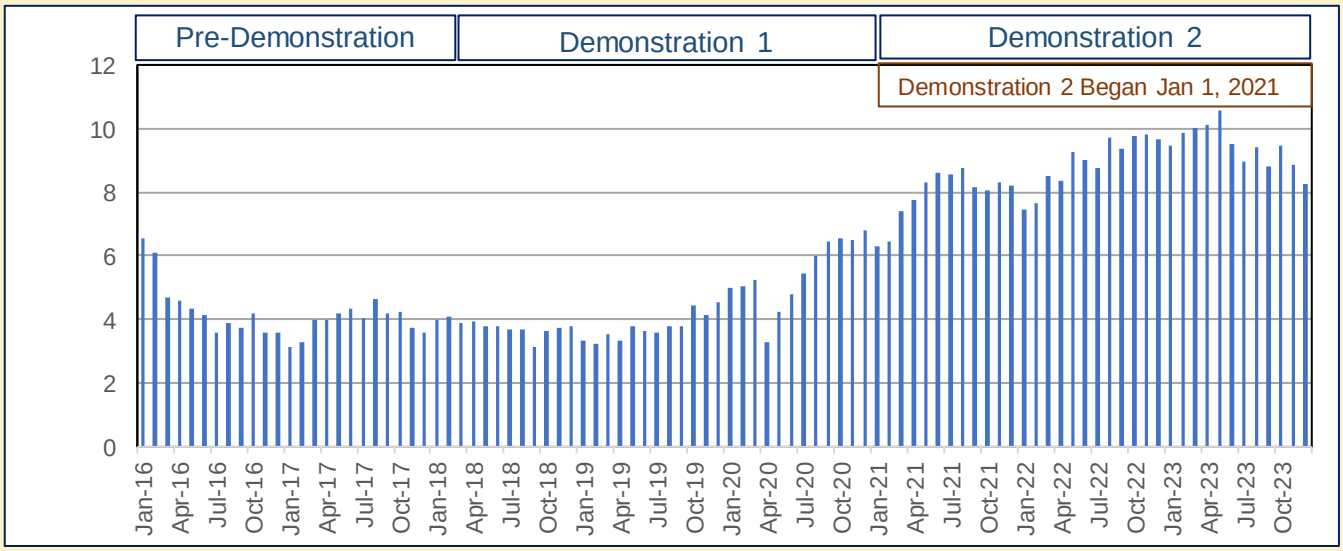
## Exhibit 21. Results from HMA-Burns Metric: Rate of Medicaid beneficiaries with an SUD diagnosis receiving Intensive Outpatient or Partial Hospitalization

**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:** Interrupted Time Series

| | 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 |

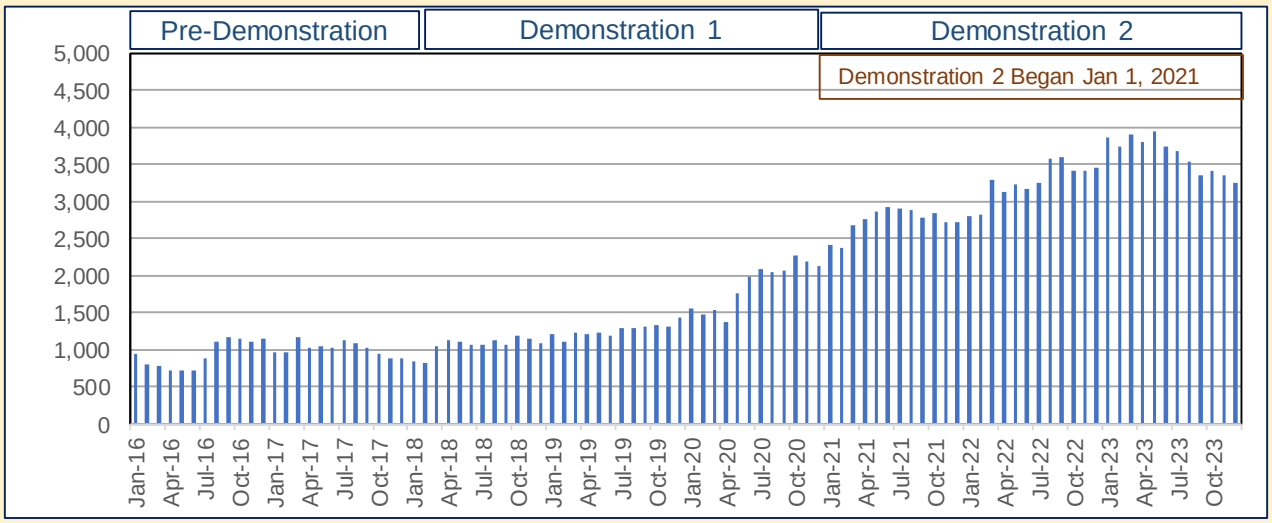
The average rate of beneficiaries with SUD using Intensive Outpatient or Partial Hospitalization services in the demonstration period was 9 compared to 4 during the pre-demonstration period, an increase of 137.8 percent.

## 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:**

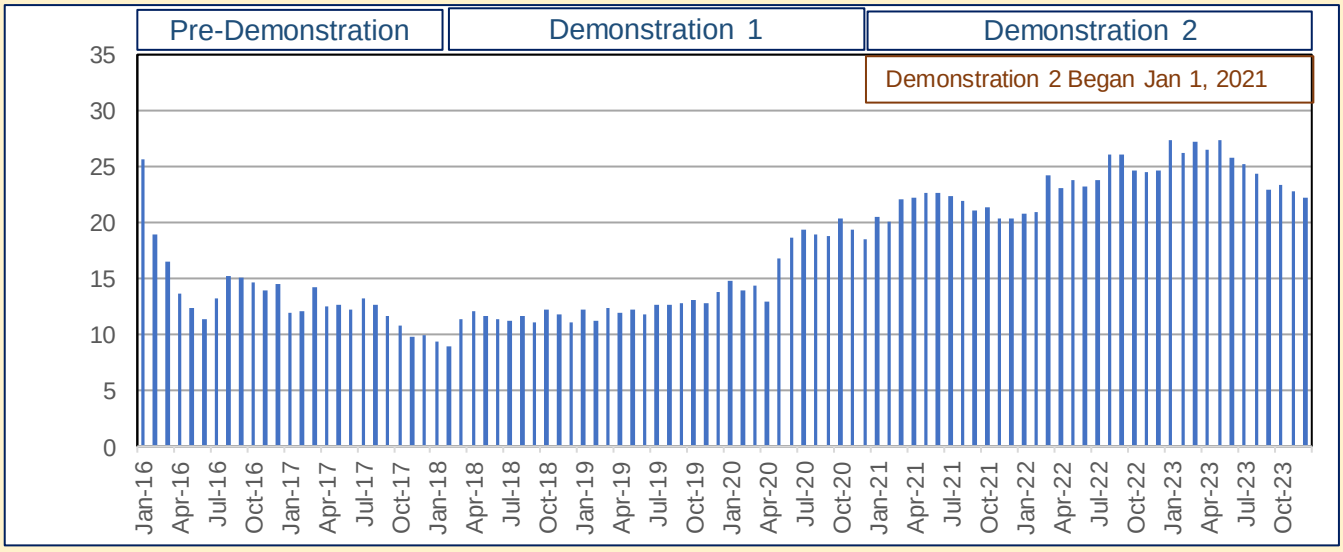
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

**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 |

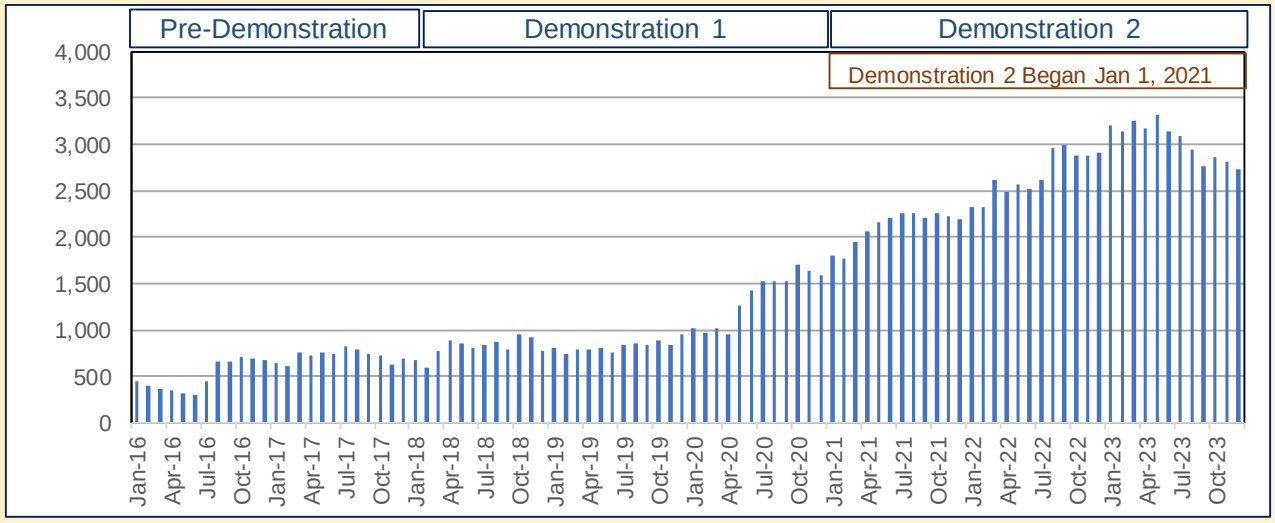
The average rate of beneficiaries with SUD using Residential and Inpatient services in the demonstration period was 24 compared to 12 during the pre-demonstration period, an increase of 100.7 percent.

## 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) |

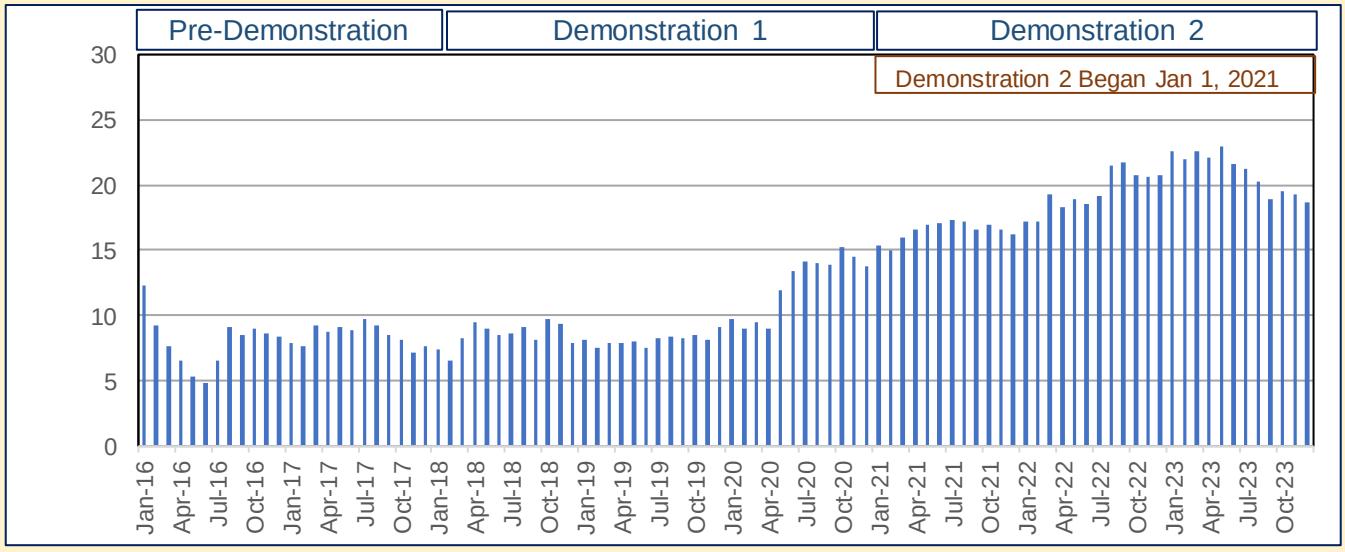
The average number of beneficiaries with SUD using withdrawal management in the demonstration period was 2,829 compared to 839 during the pre-demonstration period, an increase of 237.3 percent. Overall volume is low for this service. Results for multiple regions and subpopulations could not be reported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

| | 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.

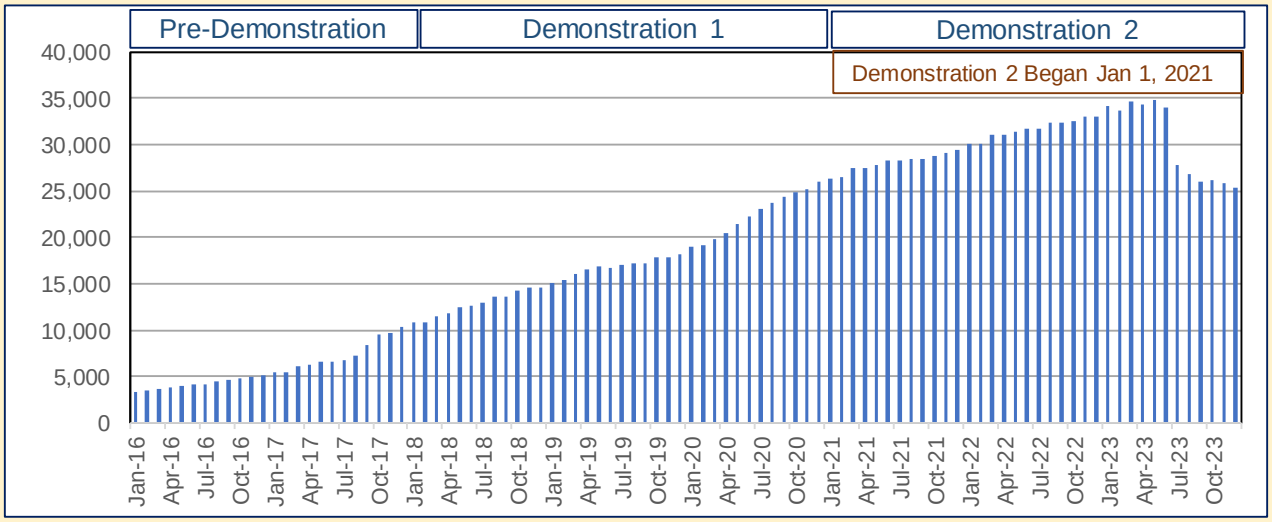
## Exhibit 26. Results from CMS Metric #12: Count of Medicaid beneficiaries with an SUD diagnosis receiving Medication-Assisted Treatment (MAT)

**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:**

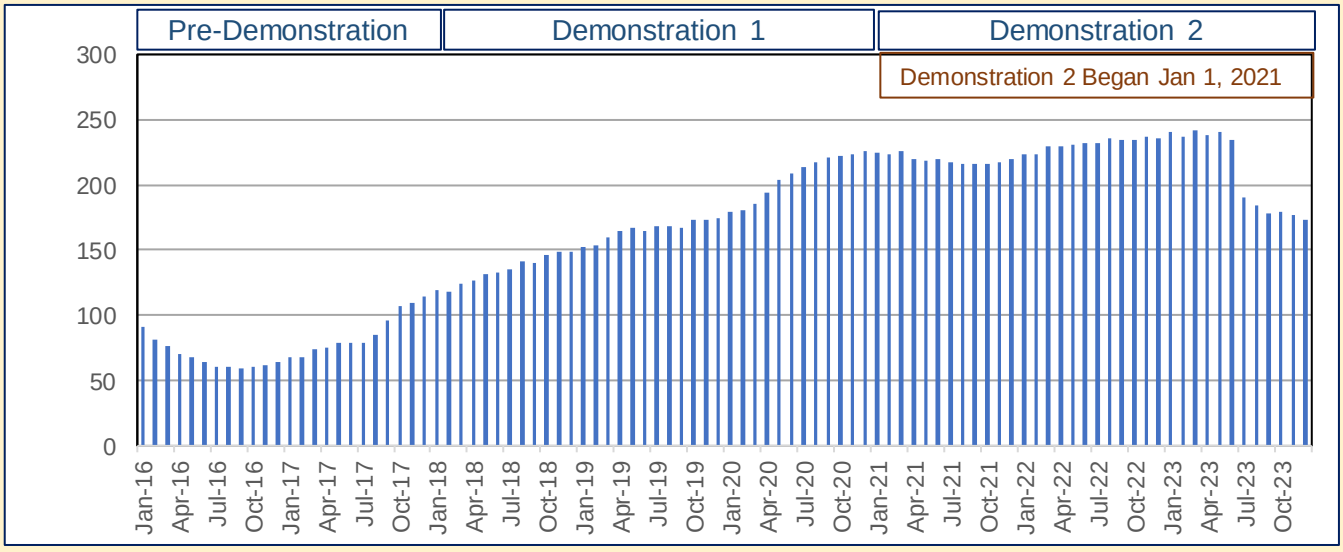
Does the demonstration increase the percentage of beneficiaries who initiate and engage in treatment for OUD and other SUDs?

**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:** Interrupted Time Series

| | 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 |

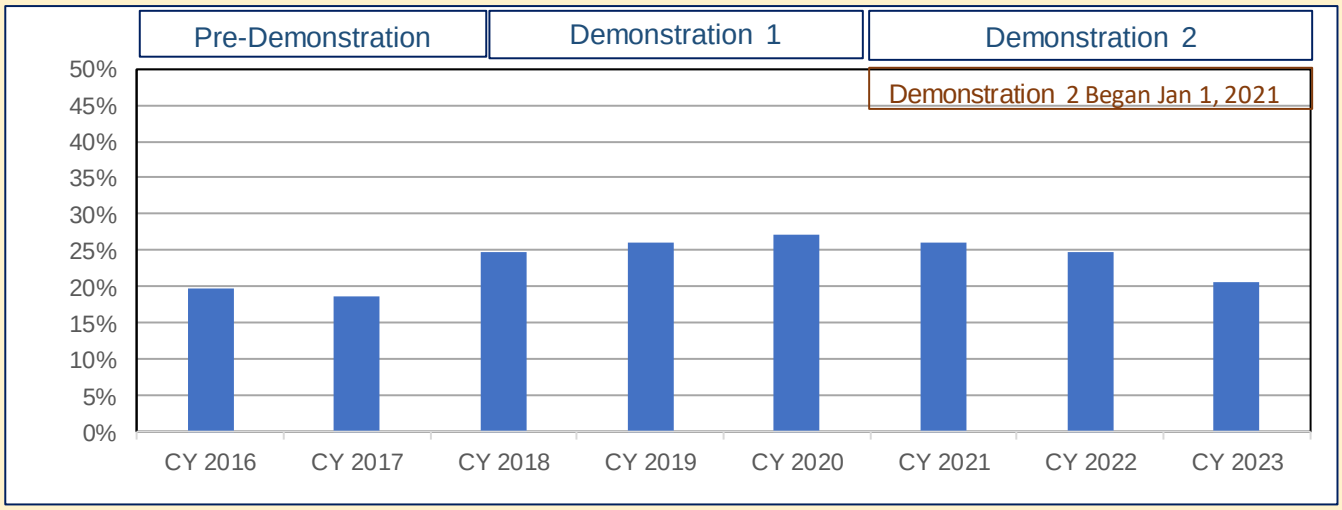
The average rate of beneficiaries with SUD using MAT services in the demonstration period was 220 compared to 154 during the pre-demonstration period, an increase of 43.4 percent.

## 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 25.4% | **Probability:** | < .0001 |
| CY2022-2023 average | 22.7% | **Finding:** | Significant |
| Percent Change, Demonstration | -10.8% | | |

**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) |

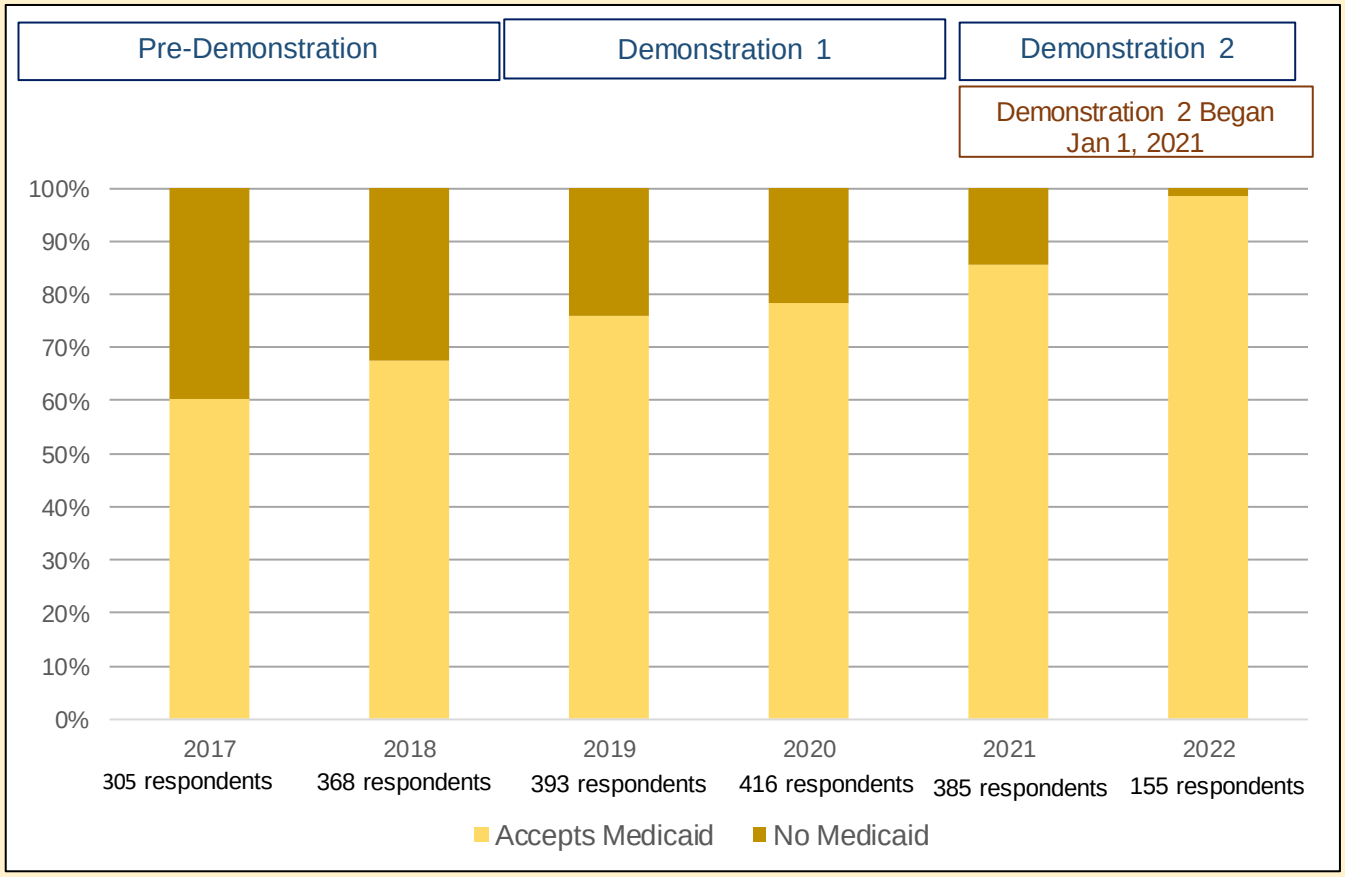
The average rate of continuity of pharmacotherapy for opioid use disorder among the OUD population decreased 9.3 percentage points, or 10.8 percent between the pre- and post-demonstration period. The criminally involved subpopulation was the only subpopulation that increased for the CY 2022-2023 period. 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 proivders. 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 or 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 | *Beneficiaries continue to not have a good understanding of the SUD benefits offered by Medicaid.* 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 | *Beneficiaries continue to not have a good understanding of the SUD benefits offered by Medicaid.* 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 | *Members find out about services from a variety of resources.* 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 | *Access has improved over the past year specifically in MAT, OTP and IOP.* 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 | *The demonstration has resulted in improved access.* All of the MCEs were complimentary regarding the demonstration and the resulting improved access. |
| | MCEs | Recommendation | *Utilization of early intervention services is low but could improve with provider education.* 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 | *Utilization of early intervention services is low but could improve with provider education.* 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 | *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.* 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 | *Telehealth has had a positive effect on access but the unwinding of the PHE policies has created some confusion with providers* . 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 | *Beneficiaries report receiving almost all services in person over the past year.* 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**

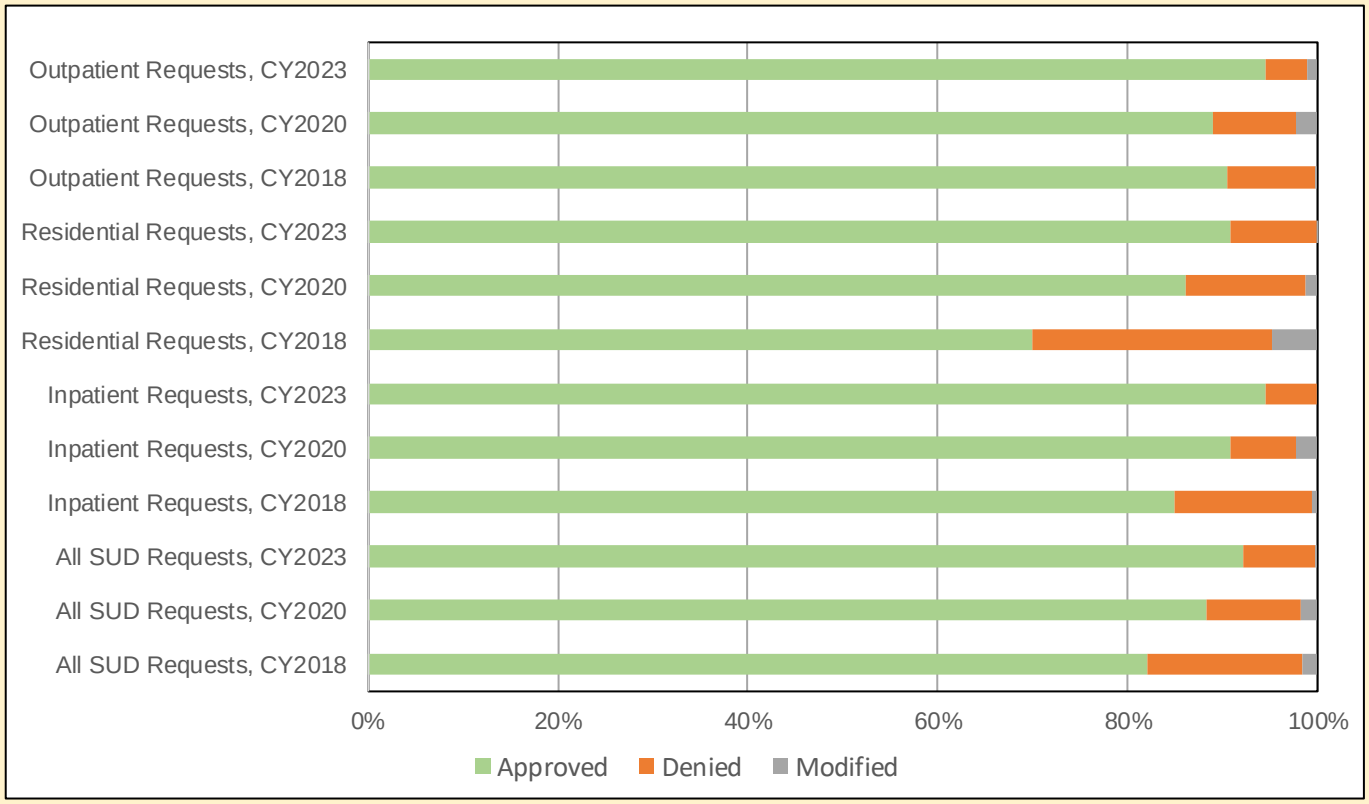
| | Measure Examined | Desired Outcome | Outcome Met? | Statistical Test | Statistically Significant? | P-Value |
|---|---|---|---|---|---|---|
| 1 | Authorization Denial Rate for SUD Services | Decrease | Yes | no test run | N/A | |
| 2 | Authorized residential treatment days as a percentage of total 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.

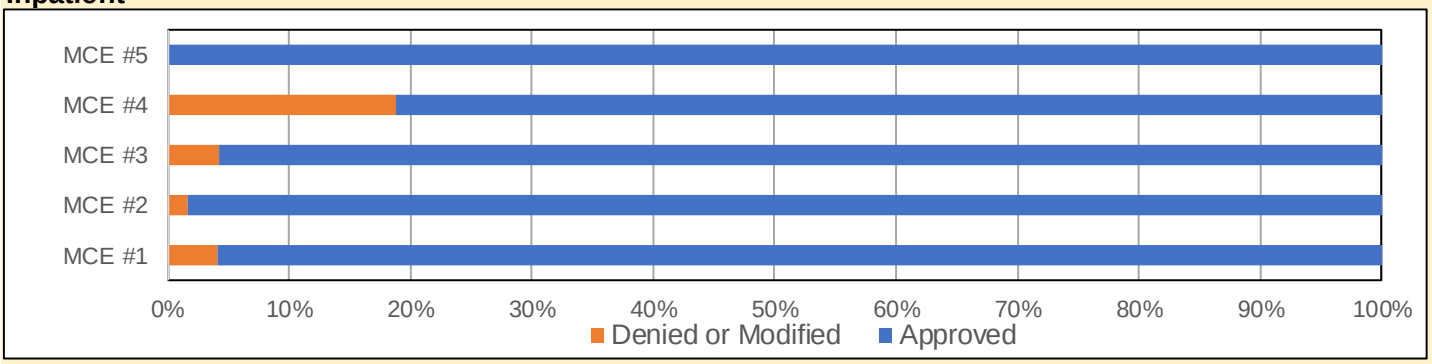
## Exhibit 35. Authorized Residential Treatment Days as a Percentage of Requested Days – CY 2023

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

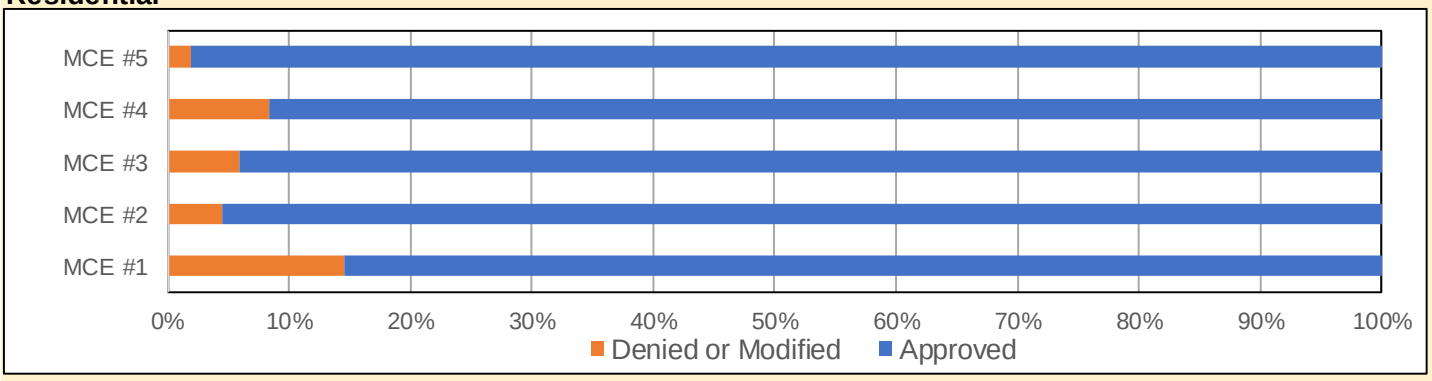
**Measure(s) Used to Answer Question:**
Authorized residential treatment days as a percentage of total requested days
**Measure Steward:** HMA-Burns **Data Source:** Data reported by managed care entities to the evaluators

**Results**

**Inpatient**




**Residential**




**Desired Trend:** Increase
**Finding:** Baseline data; study to be repeated for Summative Evaluation
**Statistical Review:** Descriptive

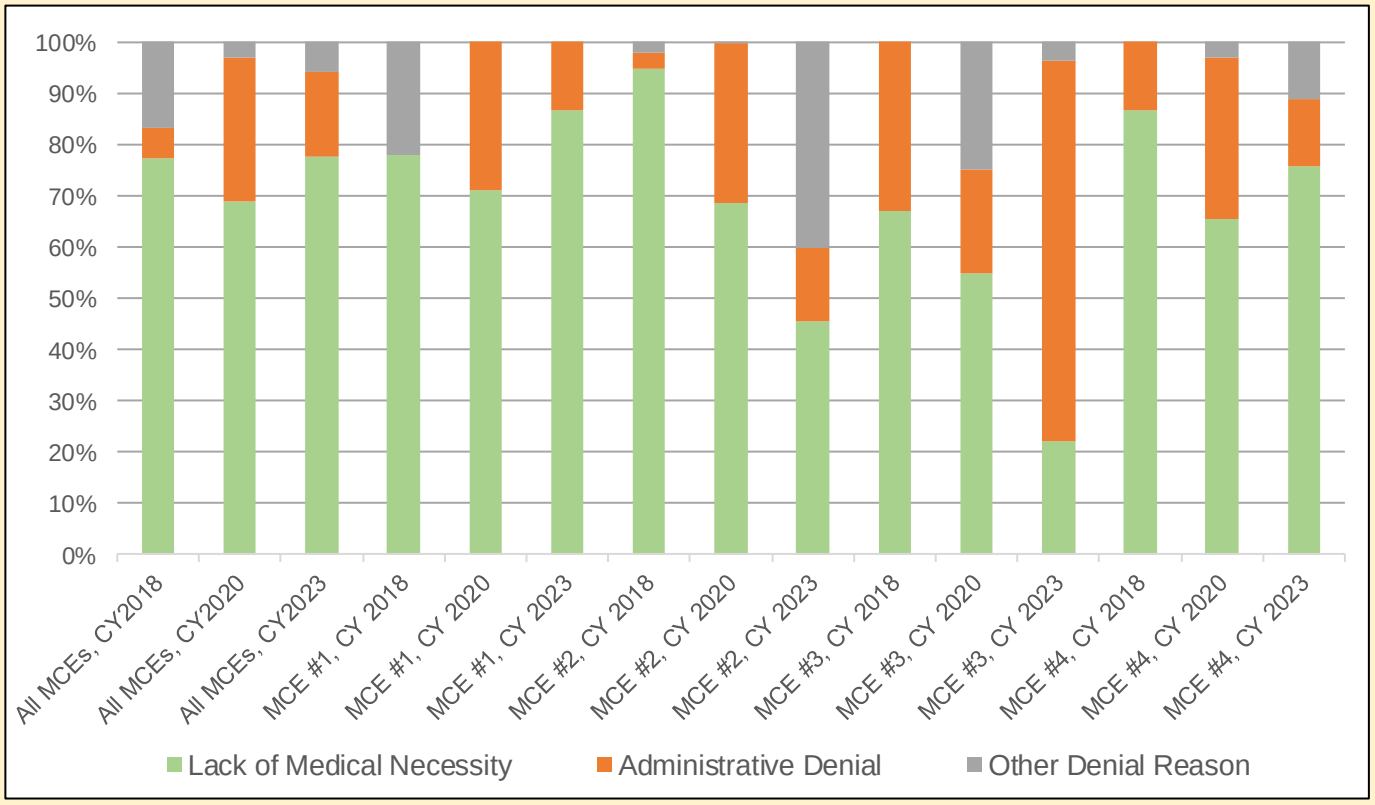
In CY 2023, the proportion of days approved was 95 percent for inpatient services and 89 percent for residential treatment centers. Only 5 percent of requested inpatient days and 11 percent of requested residential treatment days were denied or modified. This study will be repeated for the Summative 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 | *There is room for improvement to standardize authorization processes and forms across all applicable ASAM levels of care.* 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 | *There is room for improvement to standardize authorization processes and forms across all applicable ASAM levels of care. W*hile 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 | *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* . 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 | *Confusion regarding authorization requirements, billing and general knowledge of SUD demonstration.* 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 | *PHE changes contributed to provider confusion.* 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**

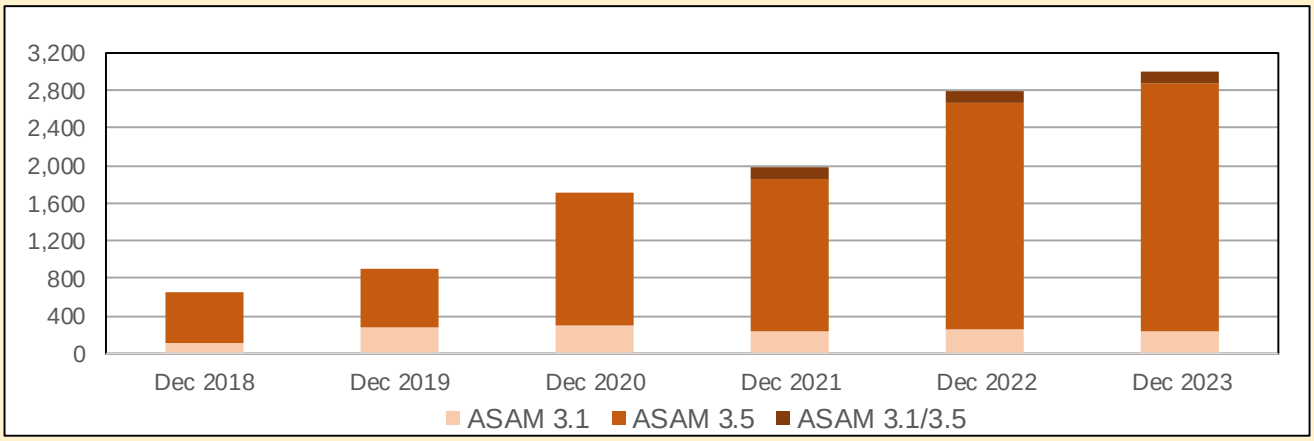
| | Measure Examined | Desired Outcome | Outcome Met? | Statistical Test | Statistically Significant? | P-Value |
|---|---|---|---|---|---|---|
| 1 | Number of Licensed SUD Residential Treatment Beds | Increase | Yes | no test run | N/A | |
| 2 | Number of Licensed SUD Residential Treatment Locations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

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

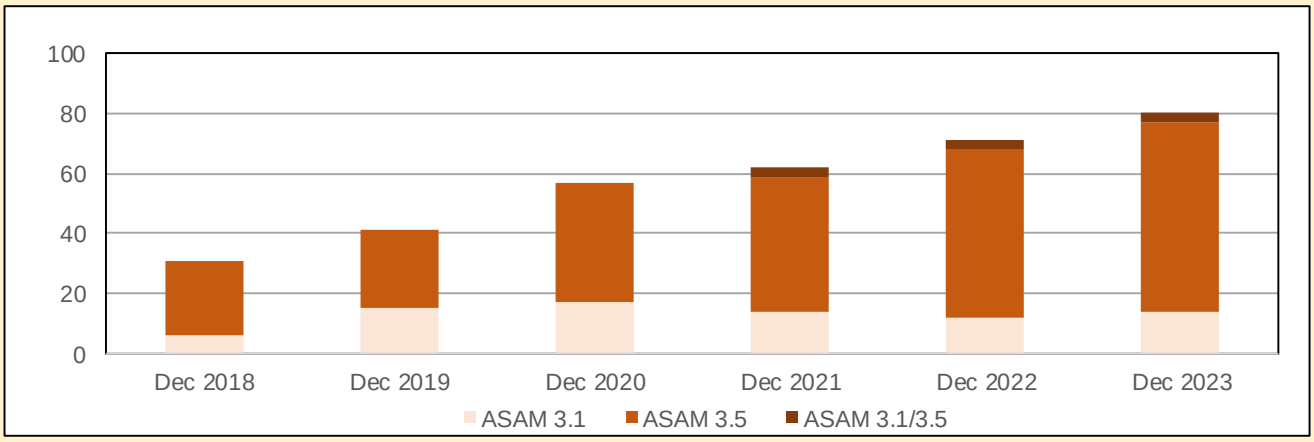
**Research Question:**
Do the number of locations and residential treatment beds for SUD licensed by the state increase during the demonstration?

**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 | *No licensure for ASAM 3.7*. 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 | *No licensure for ASAM 3.7.* 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 | *No significant change in interactions with MCEs over the past year.* 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 | *PHE policies have meant reeducation of providers on authorization and ASAM level of care requirements.* 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.

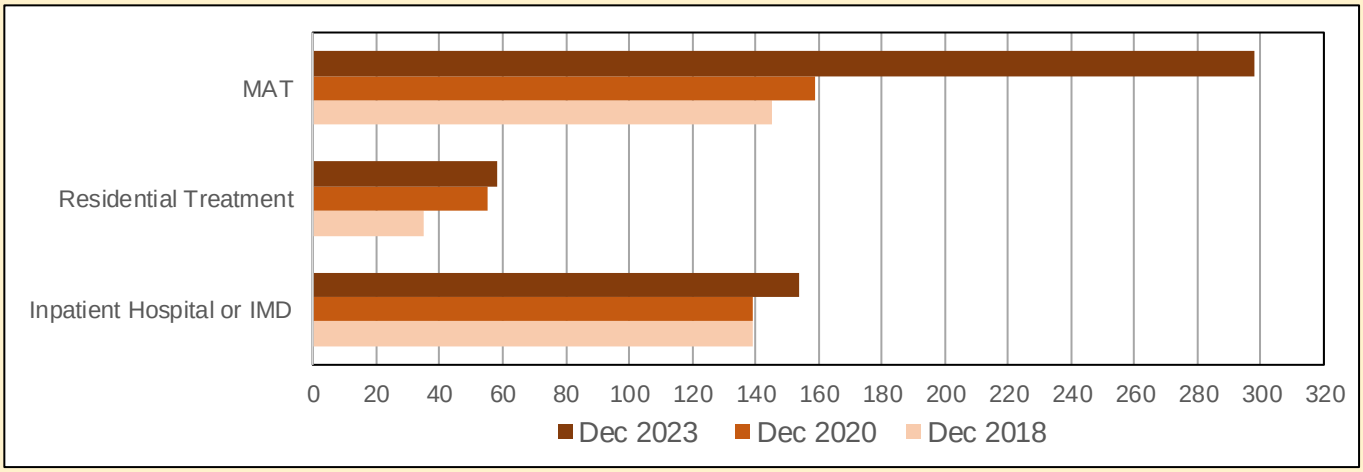
Exhibit 52 shows the location of SUD residential treatment facilities and the 20-mile radius around each facility to show coverage. From December 2020 than in December 2023, coverage has improved with more counties having some or all of the county within 20-miles of a residential treatment facility.

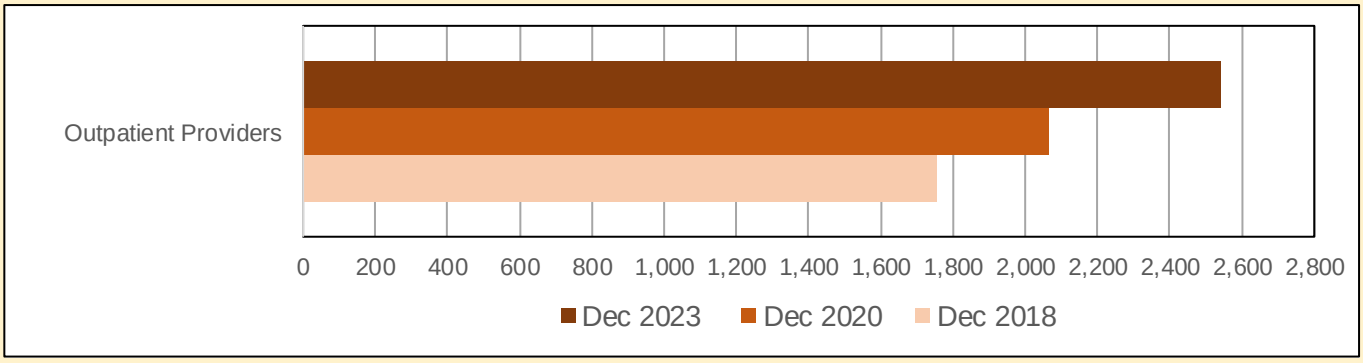
## Exhibit 44. Active SUD Providers as of December 2018, 2020 and 2023

**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 catagories
**Statistical Review:** No statistical tests were run on this measure

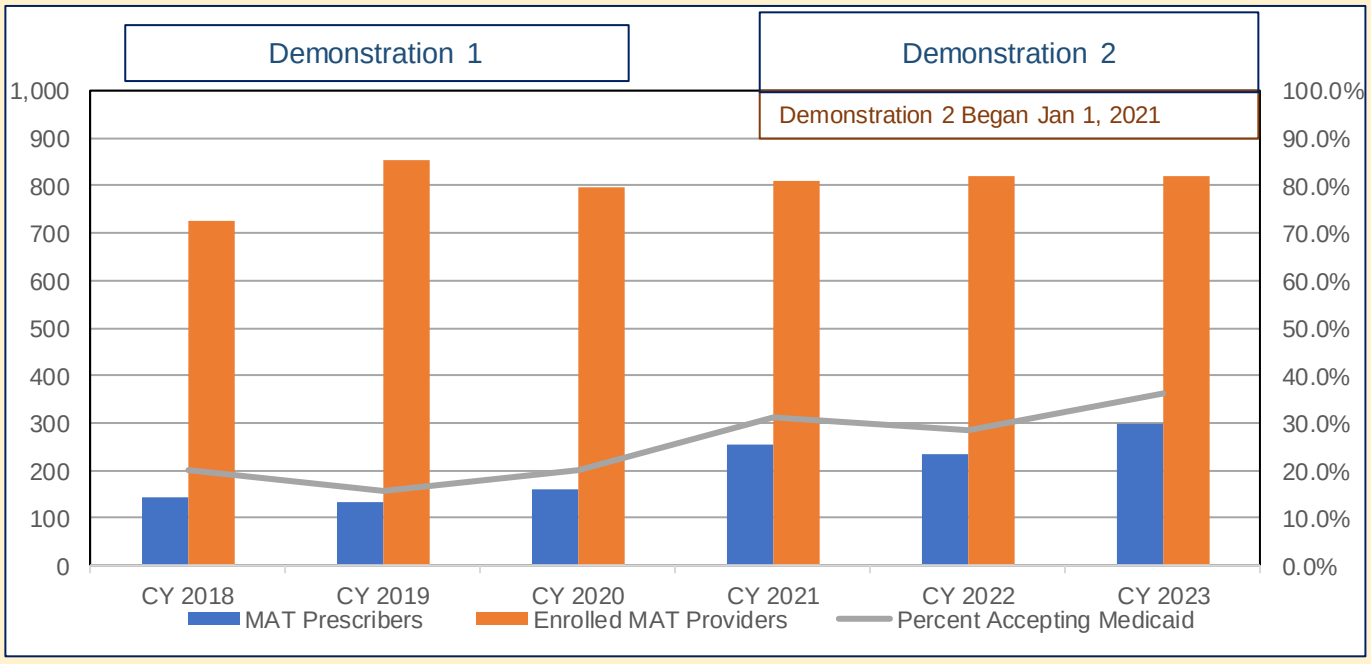
HMA-Burns used CMS Metrics 7 through 12 to compute the unique number of SUD providers serving Indiana Medicaid beneficiaries. From the initial demonstration through December 2023, Indiana continued to experience growth in unique counts or providers serving Medicaid beneficiaries across all ASAM levels.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

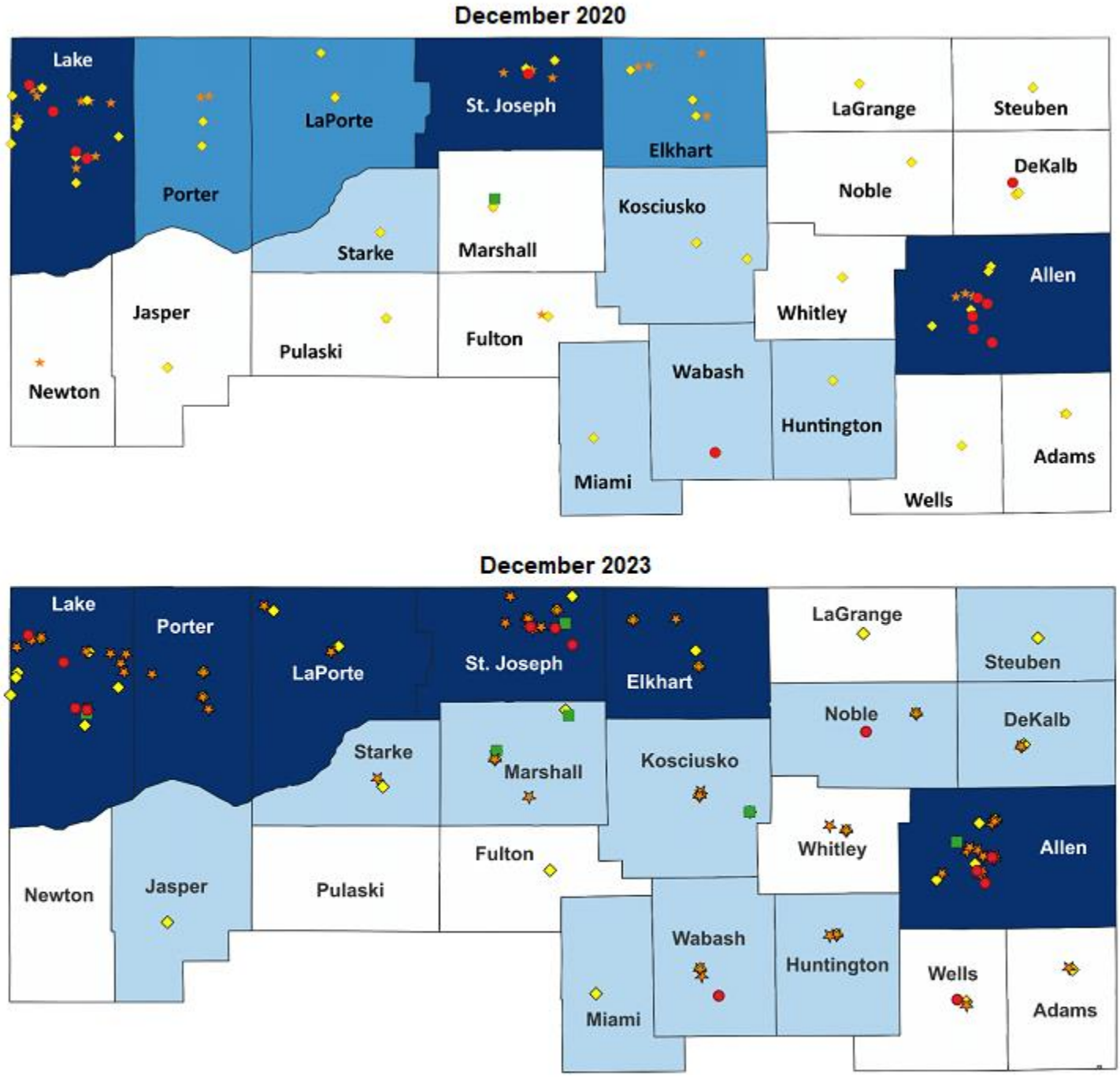
**Results for the Demonstration Population, for SUD visits**



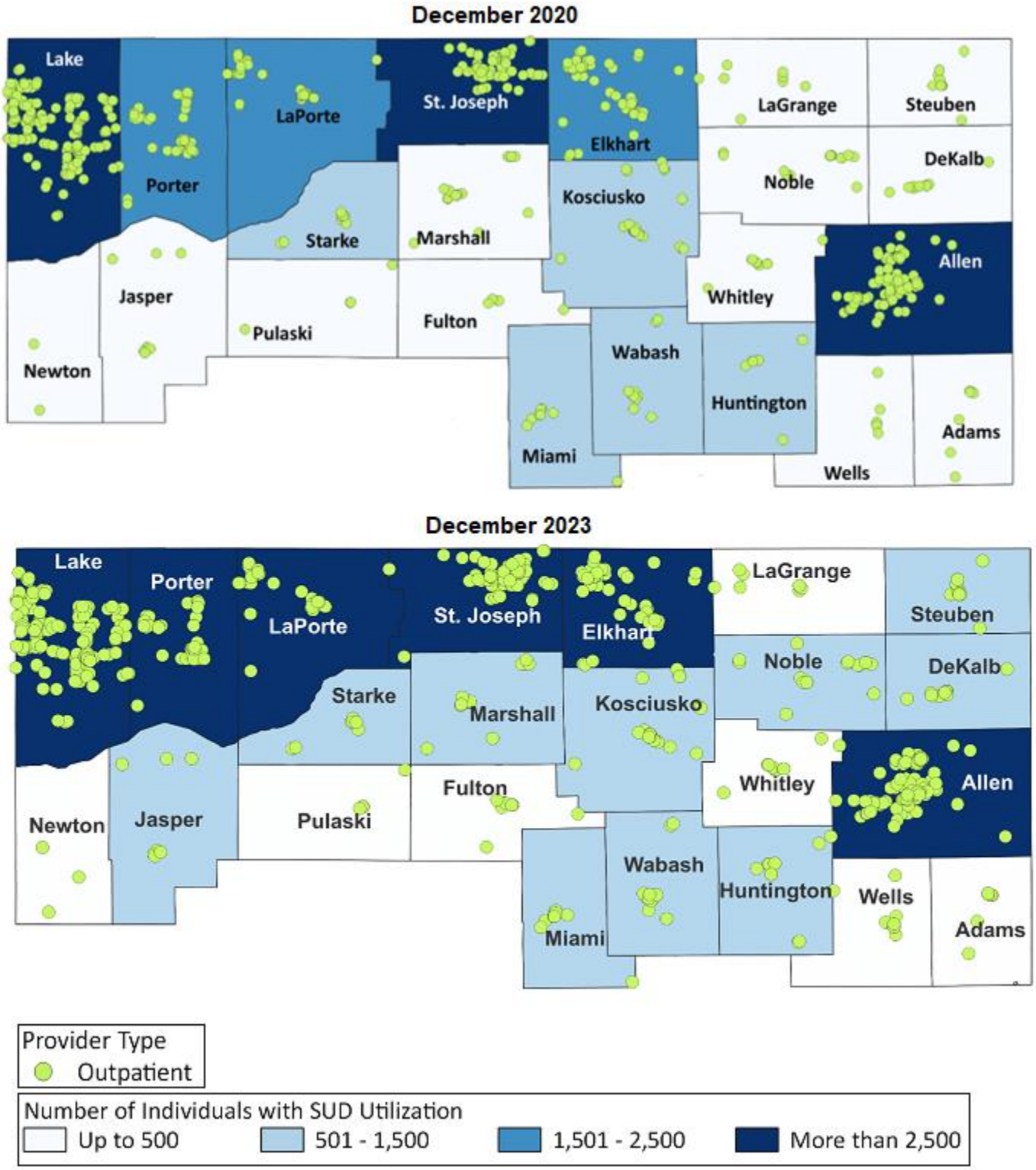

**Desired Trend:** Increase
**Statistical Review:** No statistical tests were run on this measure
**Finding:** Increase in MAT providers accepting Medicaid clients

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.

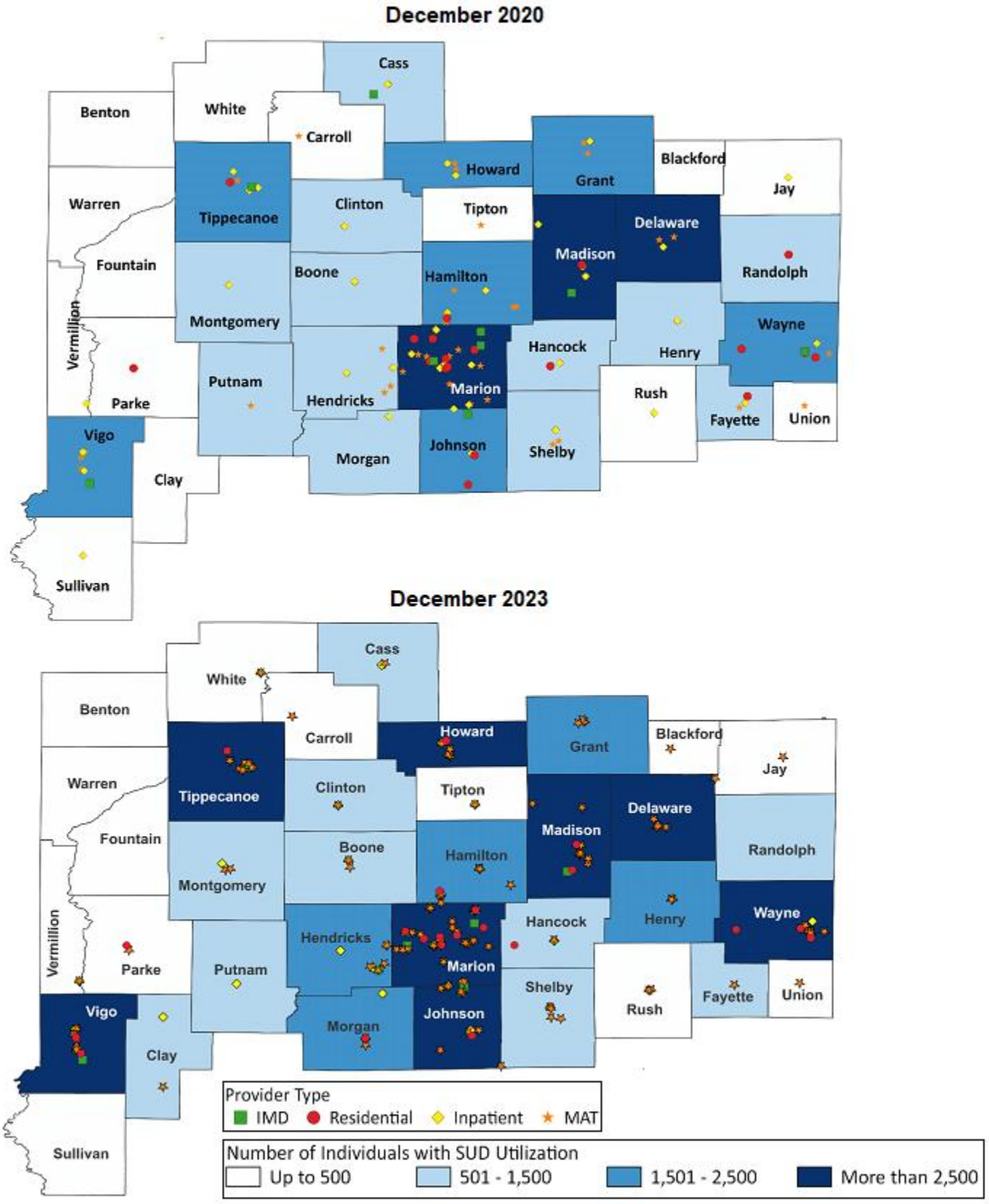
## Exhibit 46
## Location of SUD Providers in the Northern Regions of the State
## December 2020 vs December 2023



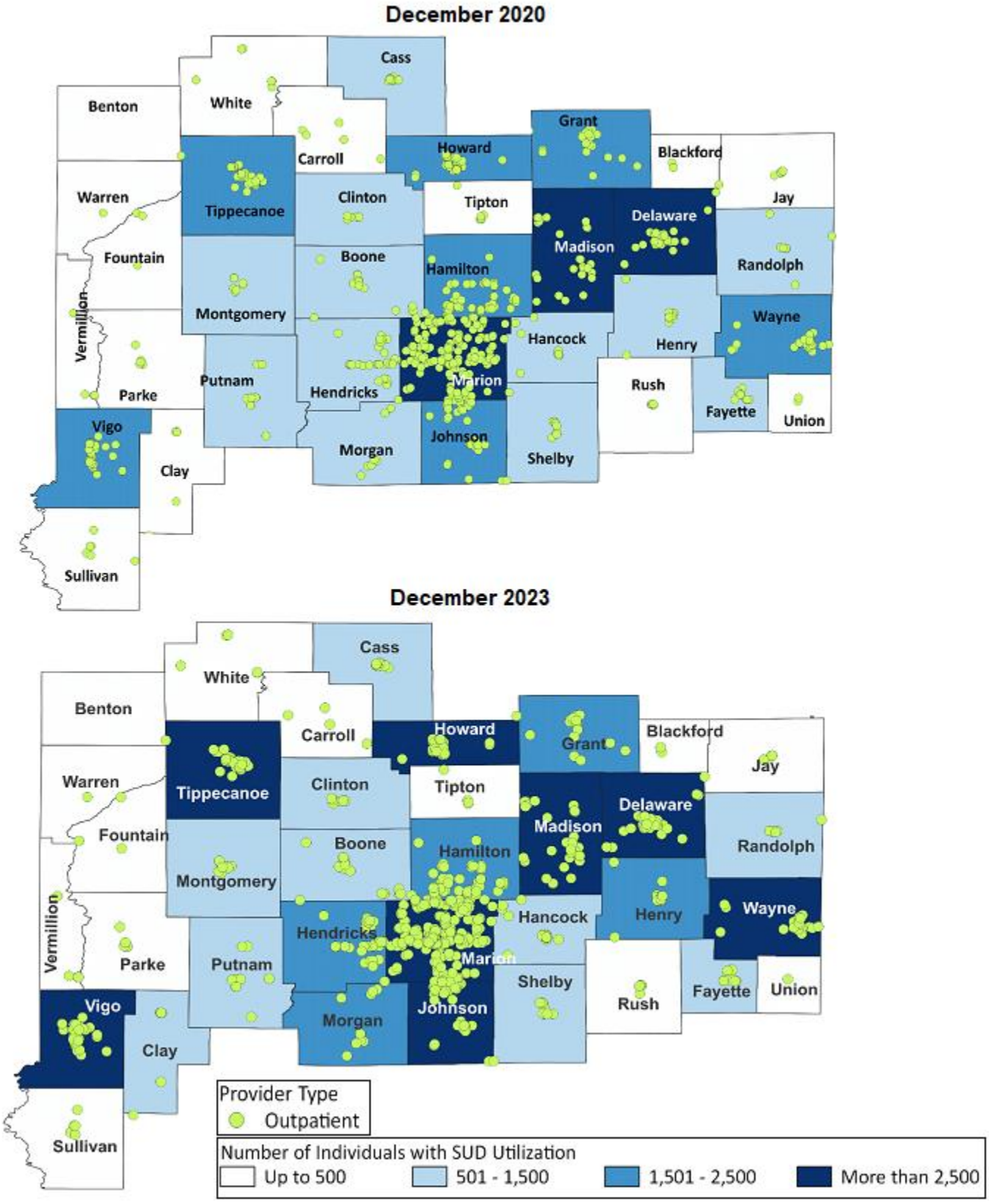
## Exhibit 47
## Location of SUD Outpatient Providers in the Northern Regions of the State
## December 2020 vs December 2023



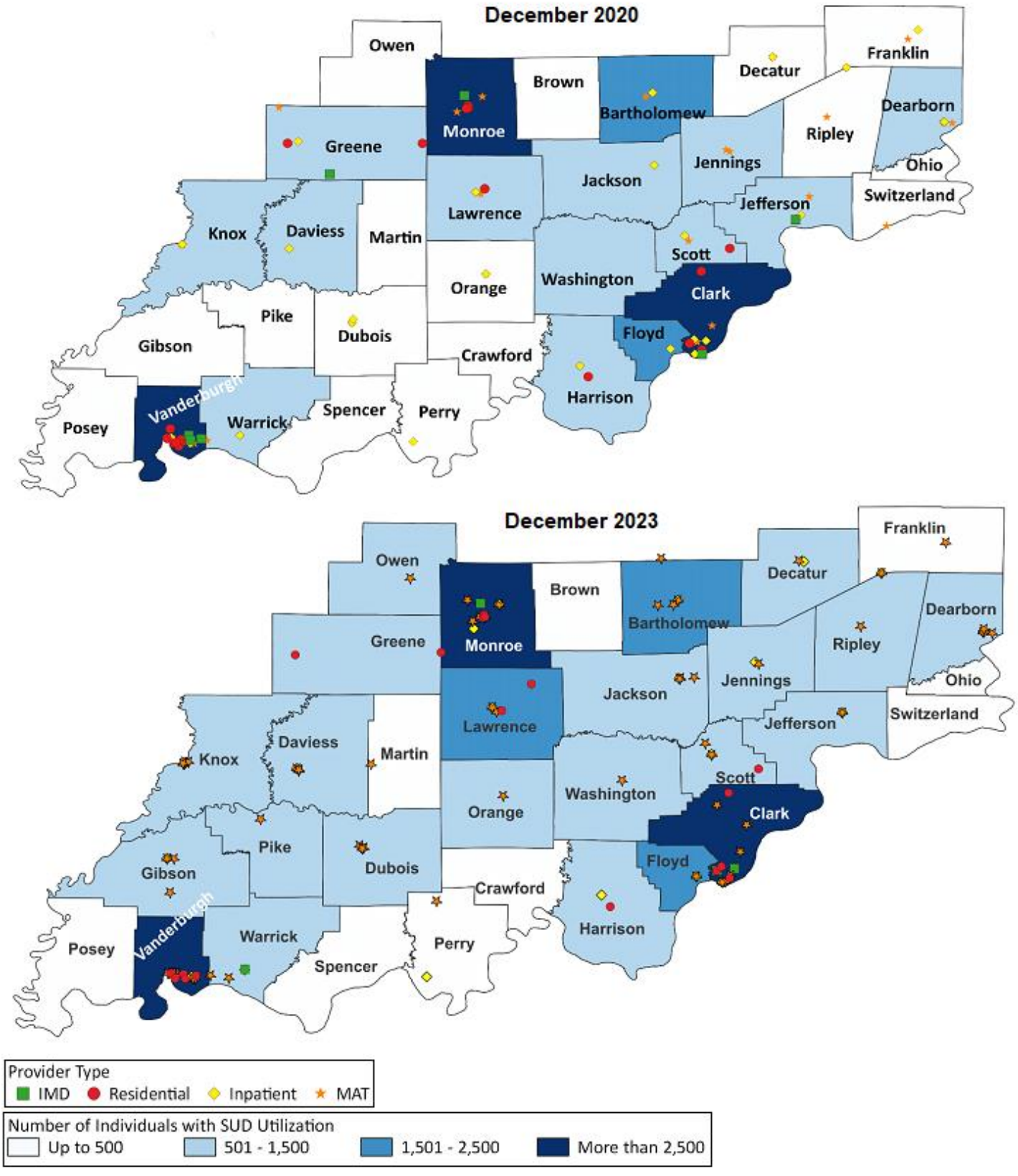
## Exhibit 48
## Location of SUD Providers in the Central Regions of the State
## December 2020 vs December 2023



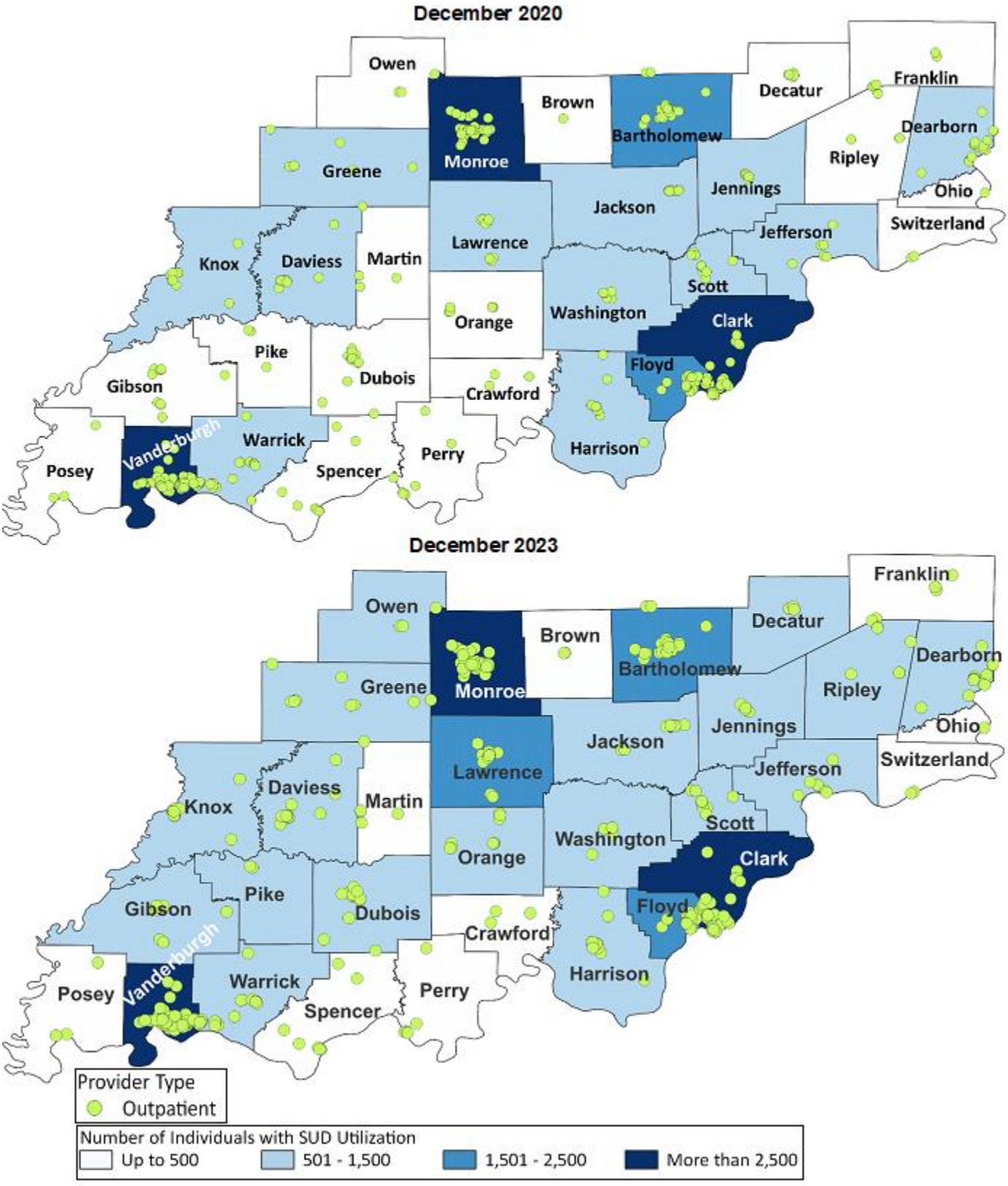
## Exhibit 49
## Location of SUD Outpatient Providers in the Central Regions of the State
## December 2020 vs December 2023



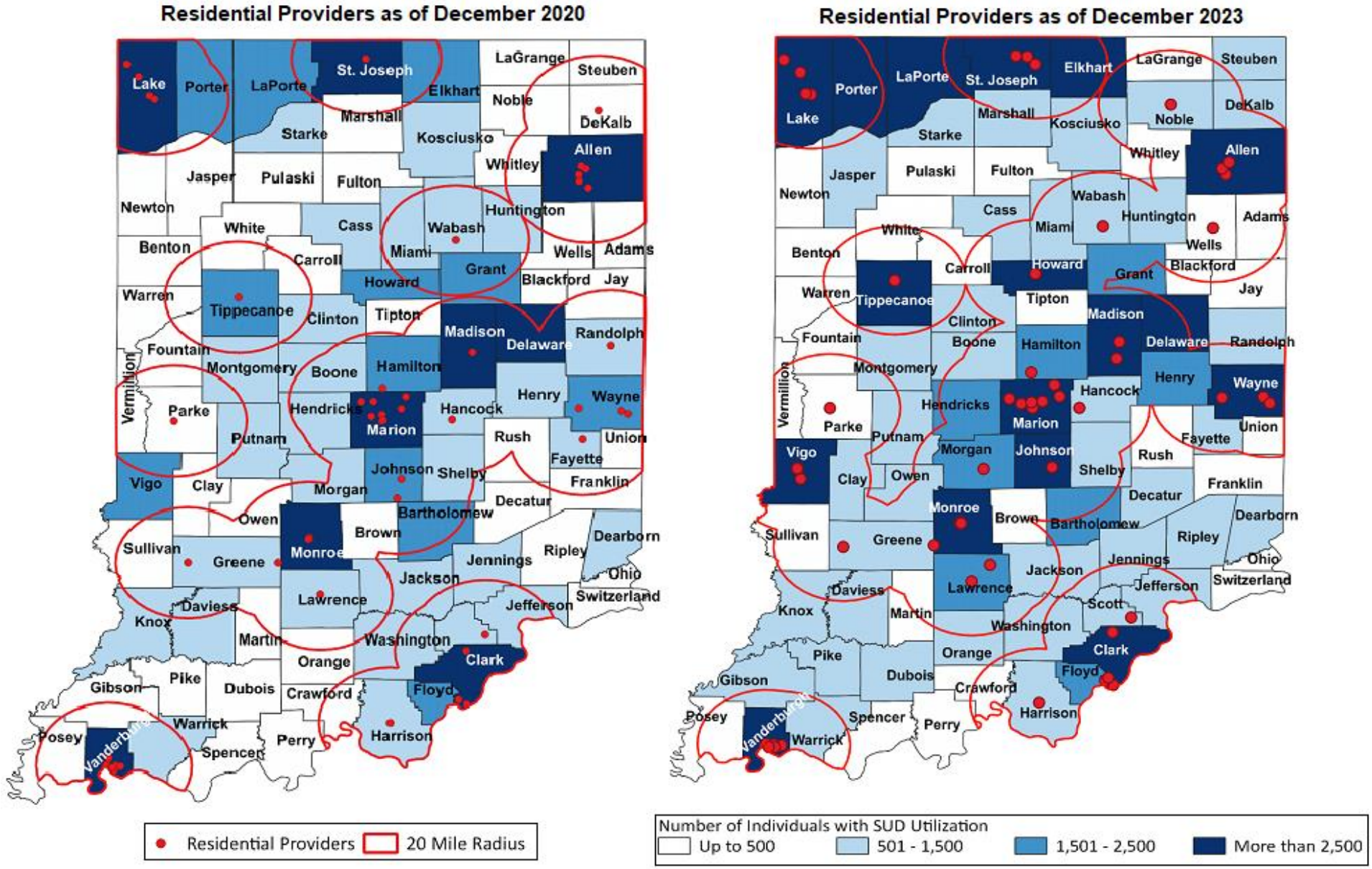
## Exhibit 50
## Location of SUD Providers in the Southern Regions of the State



## 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



### 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 | *Of those responding, most beneficiaries reported is was mostly not difficult to find treatment.* 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 | *Of those responding, most beneficiaries reported is was mostly not difficult to find providers.* 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 | *Providers observe improvements in the provider network since January 2021.* 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 | *Opportunities for improvement in the provider network.* 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 | *Opportunities for improvement in the provider network.* 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

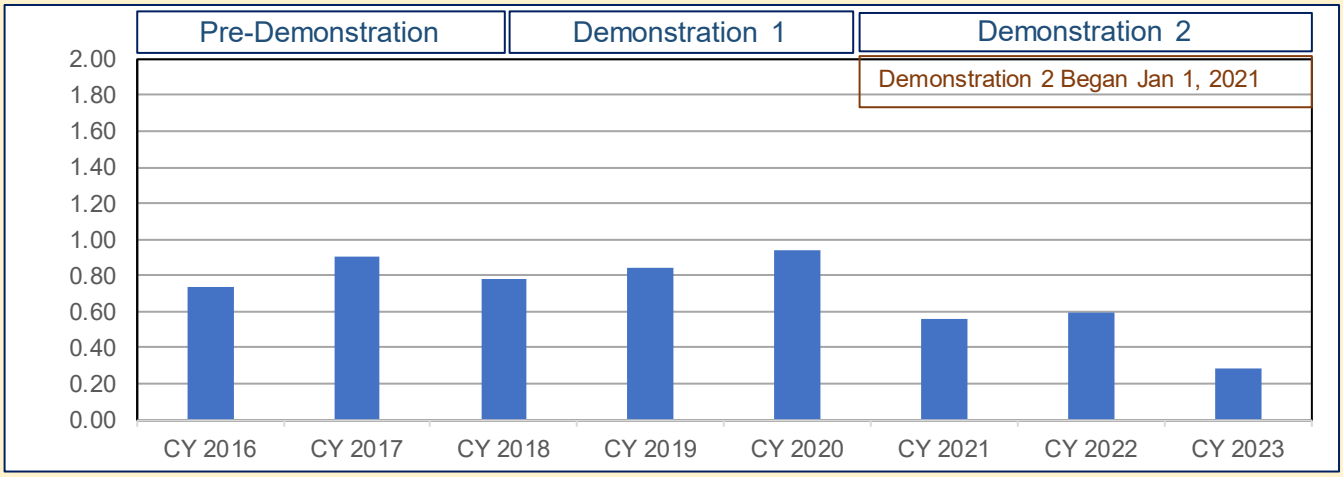
| | Measure Examined | Desired Outcome | Outcome Met? | Statistical Test | Statistically Significant? | P-Value |
|---|---|---|---|---|---|---|
| 1 | Rate of overdose deaths per 1,000 adult Medicaid beneficiaries | Decrease | Yes | T-test | Yes | <.0001 |
| 2 | Use of Opioids at High Dosage in Persons 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:** | Decrease | **Statistical Review:** | T-test |
| CY2018-2019 average | 0.810 | **Probability > [t]:** | <.0001 |
| CY2022-2023 average | 0.444 | **Finding:** | Significant |
| Change | -45.3% | | |

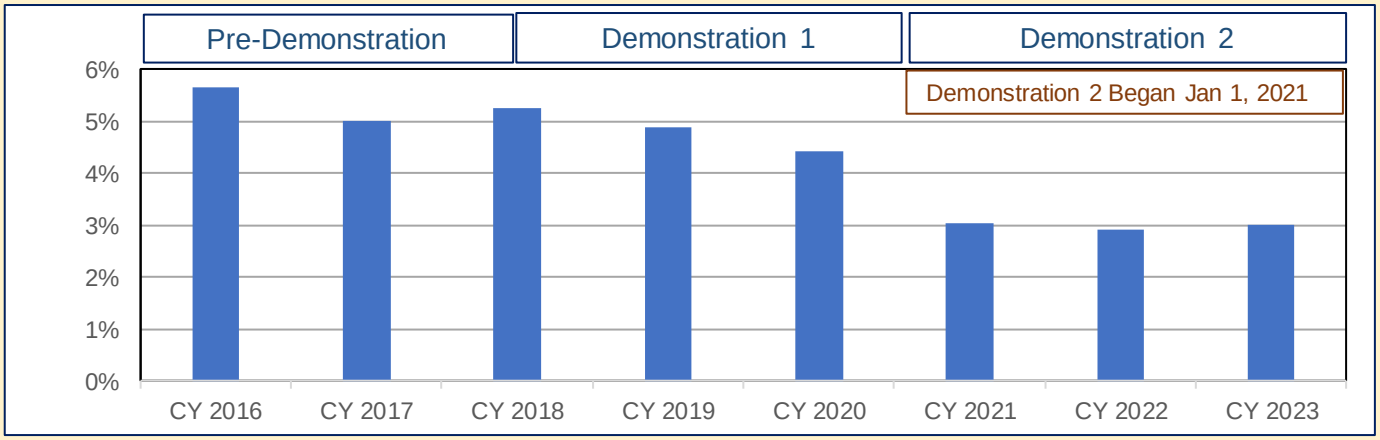
While the number and rate of overdose deaths among Indiana Medicaid beneficiaries increased during the initial demonstration period, since CY 2021, the rate and number of overdose deaths have declined. The rate was at its peak in CY 2020 at 0.94 beneficiaries per 1,000 and at its lowest rate at 0.29 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:** | Decrease | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 5.1% | **Probability:** | <.0001 |
| CY2022-2023 average | 3.0% | **Finding:** | Significant |
| Change | -41.8% | | |

**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) |

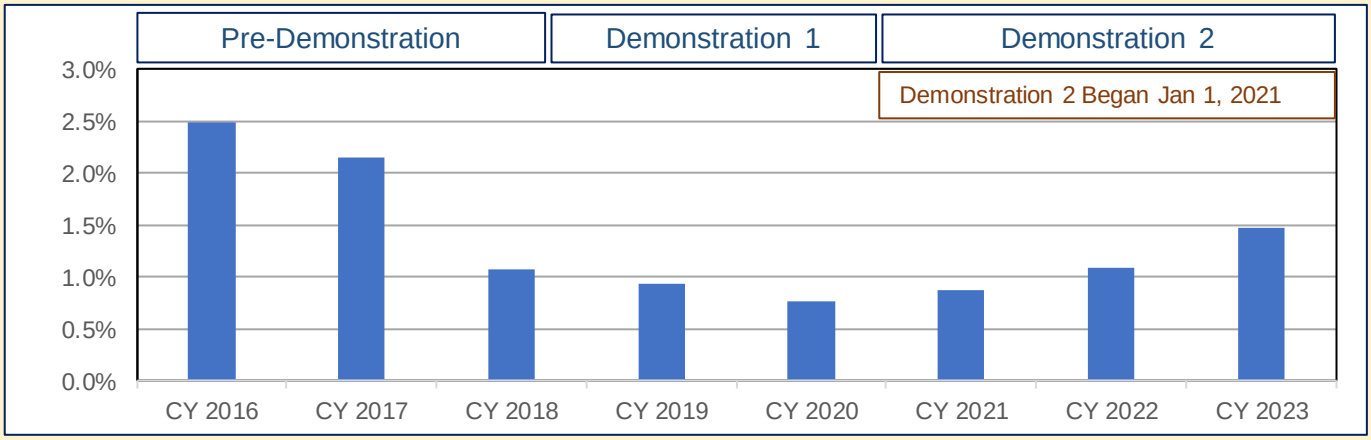
The use of opioids at high dosage in persons without cancer decreased 41.8 percent during the demonstration, from a pre-demonstration average of 5.1 percent to a demonstration average of 3.0 percent. Percentage change values varied by subpopulation and region. The absolute average rate during the demonstration 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:** | Decrease | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 1.0% | **Probability:** | <.0001 |
| CY2022-2023 average | 1.3% | **Finding:** | Significant |
| Change | 27.7% | | |

**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) |

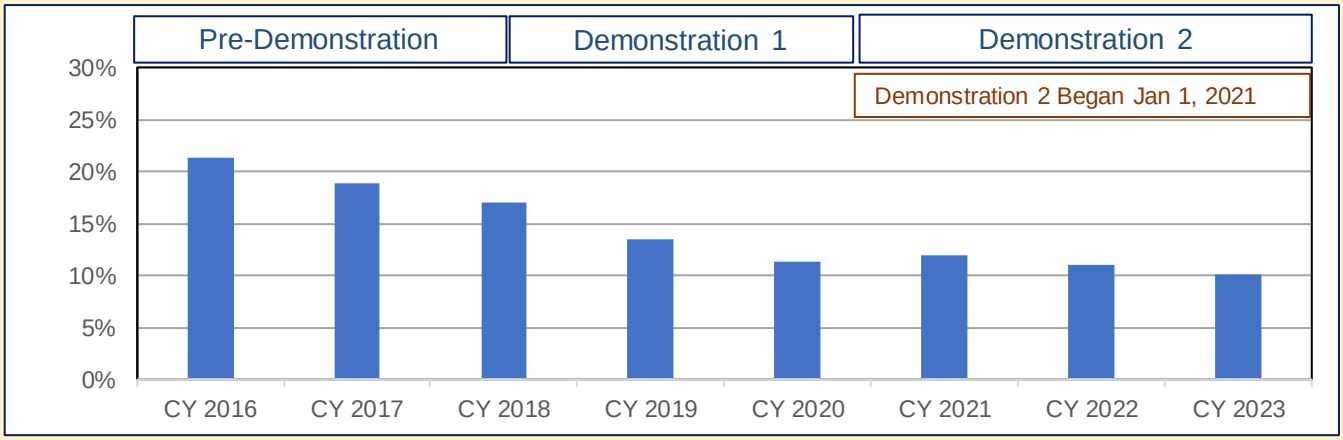
The use of opioids from multiple providers in persons without cancer increased 27.7 percent during the demonstration, from a pre-demonstration average of 1.0 percent to a demonstration average of 1.3 percent. The three subpopulations that did not have low sample data, all had increases. The Northwest, 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:** | Decrease | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 15.3% | **Probability:** | <.0001 |
| CY2022-2023 average | 10.5% | **Finding:** | Significant |
| Change | -31.1% | | |

**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) |

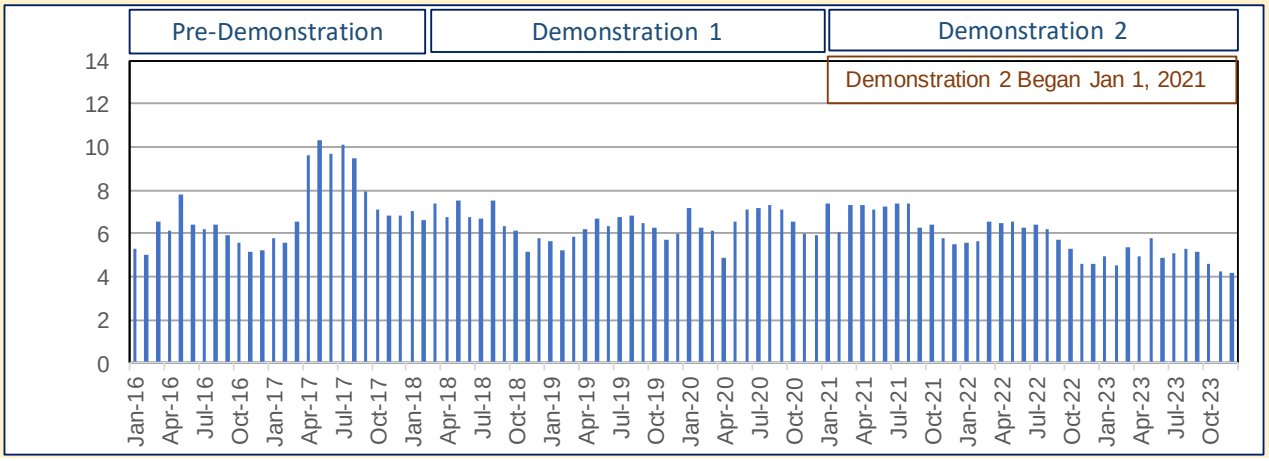
The concurrent use of opioids and benzodiazepines decreased 31.1 percent during the demonstration, from a pre-demonstration average of 15.3 percent to a demonstration average of 10.5 percent. Improvement was seen in all subpopulations and regions (the sample for criminally involved was too small to report 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 | Guidance from the FSSA regarding implementation of the demonstration | MCEs | Critique | *While the MCEs were largely complimentary of FSSAs guidance and communication, they felt more could have been done during unwinding of PHE policies.* 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 | *The MCEs recommended improved guidance related to SUD demonstration efforts.* 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 | *Guidance from FSSA has been helpful but has been lacking since the unwinding of the PHE.* 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 | *Most providers have attended the ASAM trainings.* 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 | *FSSA bulletins and meetings are helpful in supporting participation and provision of SUD services.* 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 | *Providers recommend SUD focused communications* . 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

| | Topic | From Whom | Type of Feedback | Feedback |
|---|---|---|---|---|
| 4 | Other modes of communication | Providers | Recommendation | *The majority of providers (28 of 48) would like a dedicated contact person at FSSA and the MCEs to call with clarifying questions* . |
| | | Beneficiaries | Recommendation | *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. |
| 5 | FSSA initiatives | MCEs | Compliment | *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. |
| 6 | Effects of the demonstration | MCEs | Recommendation | *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. |
| | | Providers | Compliment | *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. |
| | | Providers | Critique | *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. |
| | | Providers | Recommendation | *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. |

## 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**

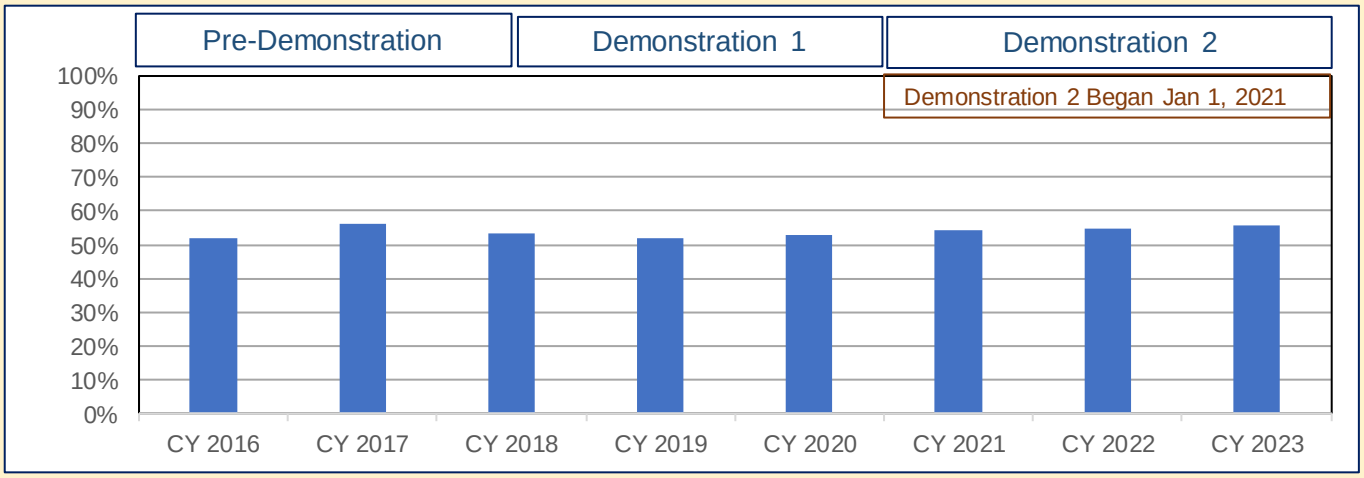
| | Measure Examined | Desired Outcome | Outcome Met? | Statistical Test | Statistically Significant? | P-Value |
|---|---|---|---|---|---|---|
| 1 | Initiation of Alcohol and Other Drug Dependence Treatment, Total AOD Population | Increase | Yes | Chi-square | Yes | <.0001 |
| 2 | Initiation of Alcohol 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 in14 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 Leve 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 52.7% | **Probability:** | <.0001 |
| CY2022-2023 average | 55.3% | **Finding:** | Significant |
| Change | 5.0% | | |

**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) |

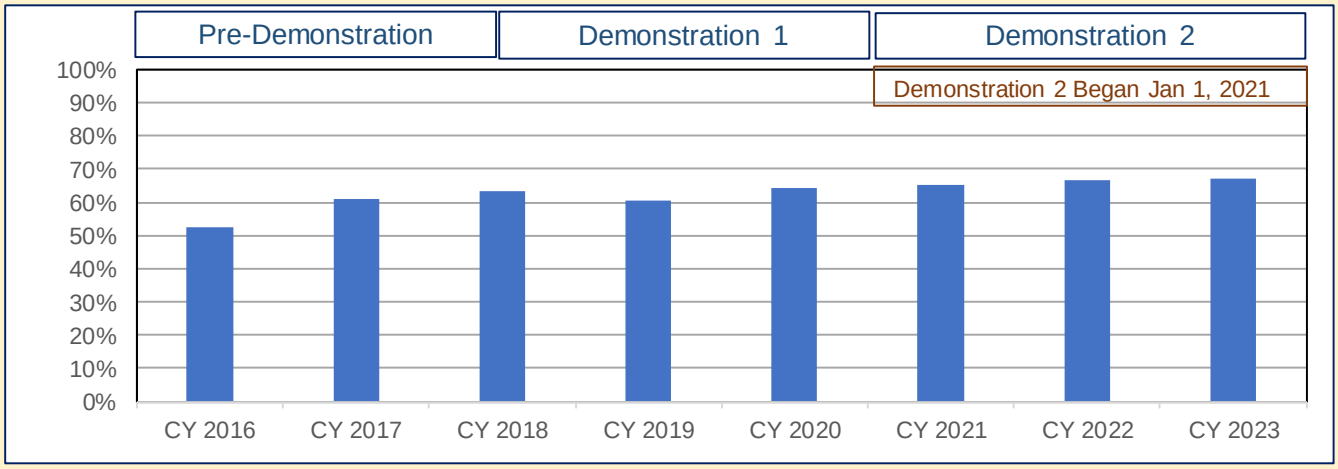
The rate of initiation of treatment for the population specific to alcohol abuse increased 5.0 percent during the demonstration, from a pre-demonstration average of 52.7 percent to a demonstration average of 55.3 percent. The dual eligible and the pregnant women subpopulations were the only subpopulations 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 62.0% | **Probability:** | <.0001 |
| CY2022-2023 average | 66.9% | **Finding:** | 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) |

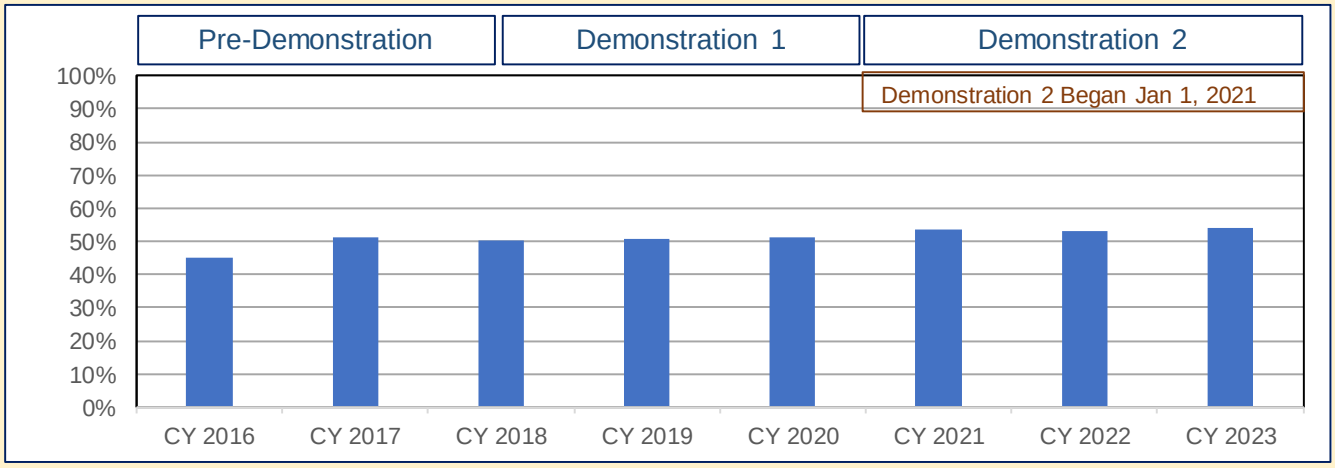
The rate of initiation of treatment for the population specific to opioid abuse increased 7.9 percent during the demonstration, from a pre-demonstration average of 62.1 percent to a demonstration average of 66.9 percent. The greatest improvement was seen among the population enrolled in criminally involved, 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) |

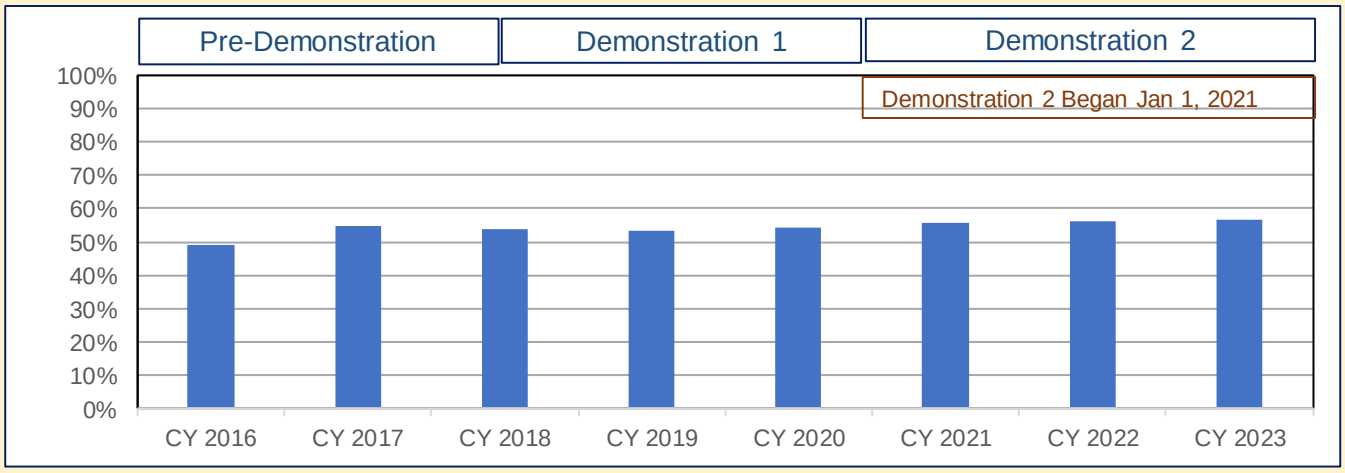
The rate of initiation of treatment for the population specific to abuse other than alcohol or opioids increased 6.7 percent during the demonstration, from a pre-demonstration average of 50.4 percent to a demonstration average of 53.8 percent. The greatest improvement is seen in the Northwest and Northeast 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 53.5% | **Probability:** | <.0001 |
| CY2022-2023 average | 56.2% | **Finding:** | Significant |
| Change | 5.1% | | |

**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) |

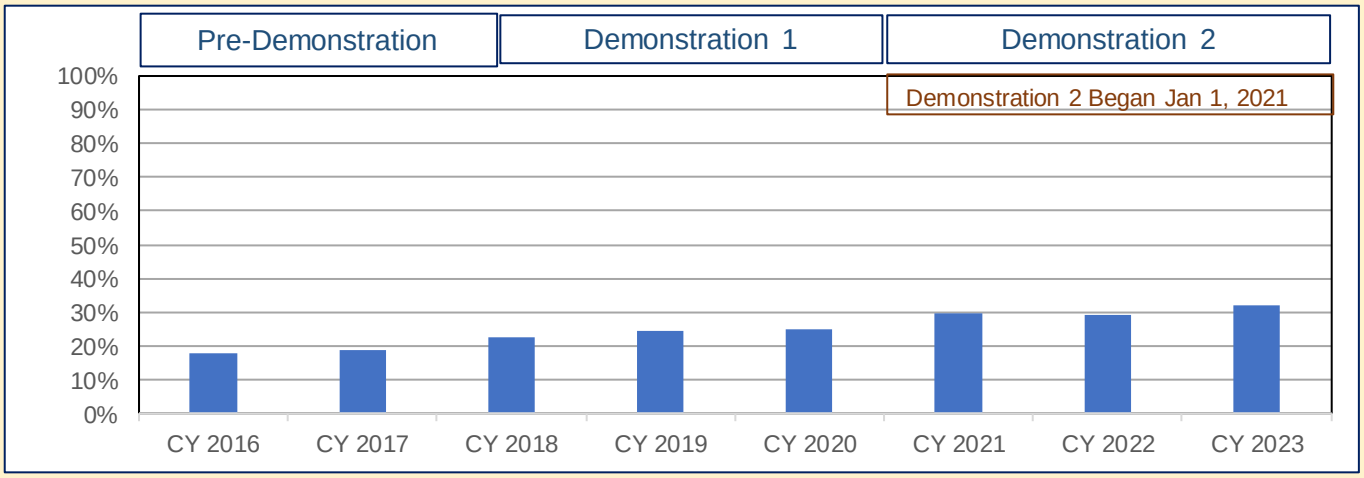
The rate of initiation of treatment for the total AOD population increased 5.1 percent during the demonstration, from a pre-demonstration average of 53.5 percent to a demonstration average of 56.2 percent. Improvement was seen in all subpopulations with the exception of dual eligibles and pregnant women. 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 23.7% | **Probability:** | <.0001 |
| CY2022-2023 average | 30.7% | **Finding:** | Significant |
| Change | 29.8% | | |

**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) |

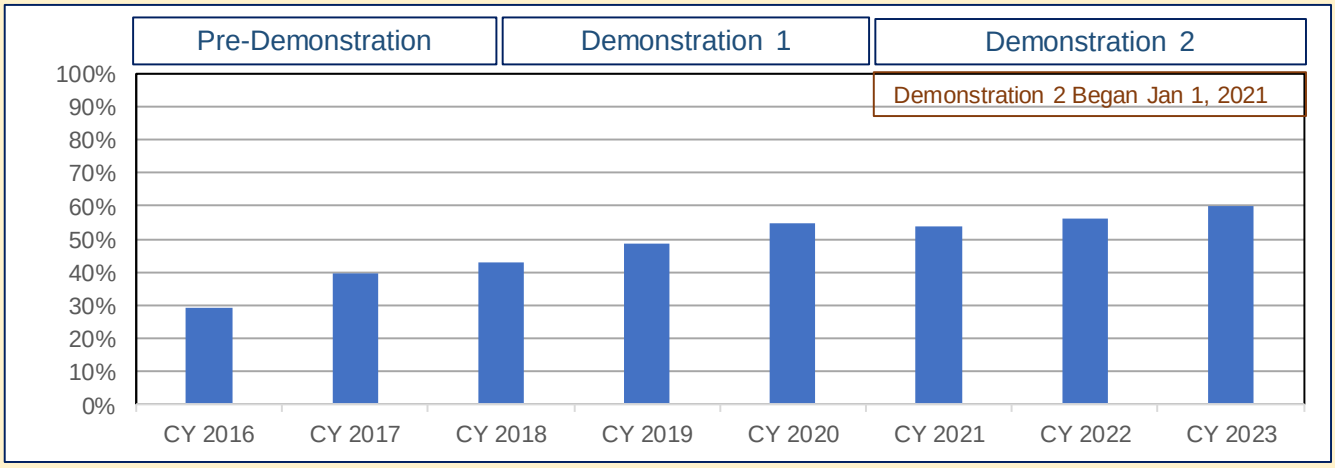
The rate of engagement in treatment for the population specific to alcohol abuse increased 29.8 percent during the demonstration, from a pre-demonstration average of 23.7 percent to a demonstration average of 30.7 percent. There was improvement seen among all subpopulations and regions examined. Five 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 45.9% | **Probability:** | <.0001 |
| CY2022-2023 average | 58.1% | **Finding:** | Significant |
| Change | 26.7% | | |

**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) |

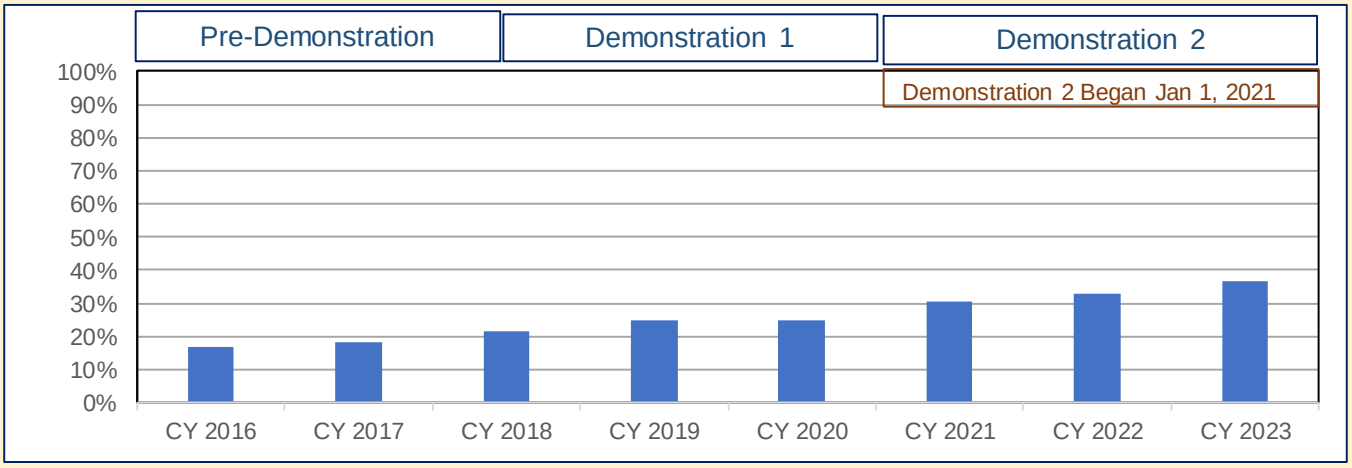
The rate of engagement in treatment for the population specific to opioid abuse increased 26.7 percent during the demonstration, from a pre-demonstration average of 45.9 percent to a demonstration average of 58.1 percent. All subpopulations and regions examined saw improvement during the demonstration, 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 23.2% | **Probability:** | <.0001 |
| CY2022-2023 average | 34.7% | **Finding:** | Significant |
| Change | 50.0% | | |

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

| | Pct Change | 2022-23 Avg | | Pct Change | 2022-23 Avg |
|---|---|---|---|---|---|
| Model | 47.7% | 36.9% | Northwest Region | 53.3% | 32.2% |
| OUD | 104.9% | 49.1% | North Central Region | 59.3% | 32.4% |
| Dual Eligible | 78.5% | 21.1% | Northeast Region | 41.7% | 36.1% |
| Pregnant Women | 23.1% | 34.9% | West Central Region | 49.6% | 35.4% |
| Criminally Involved | 62.7% | 46.8% | Central Region | 63.8% | 33.3% |
| MRO | 13.3% | 49.6% | East Central Region | 98.6% | 36.4% |
| | | | Southwest Region | 25.6% | 36.9% |
| | | | Southeast Region | 82.5% | 37.9% |

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) |

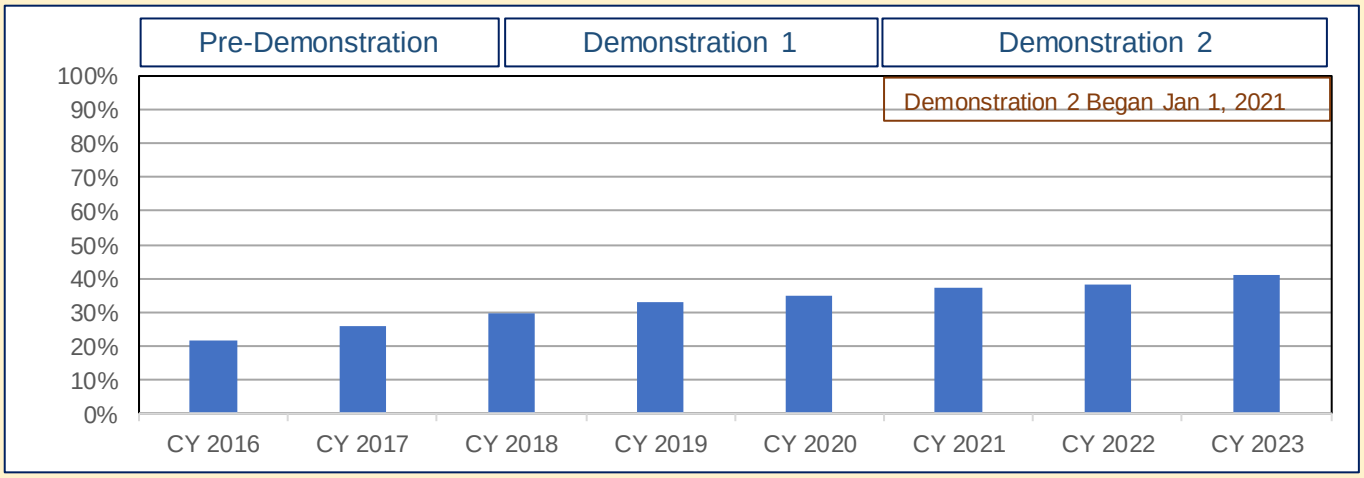
The rate of engagement in treatment for the population specific to abuse other than alcohol or opioids increased 50.0 percent during the demonstration, from a pre-demonstration average of 23.2 percent to a demonstration average of 34.7 percent. All subpopulations and regions of the state saw an increase 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 31.5% | **Probability:** | <.0001 |
| CY2022-2023 average | 39.5% | **Finding:** | Significant |
| Change | 25.2% | | |

**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) |

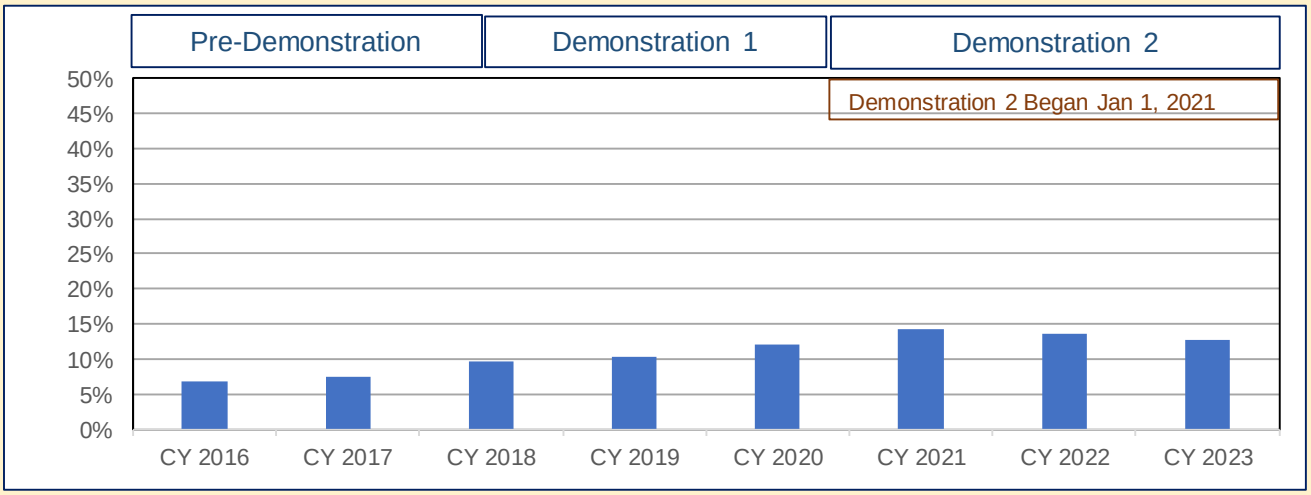
The rate of engagement in treatment for the total AOD population increased 25.2 percent during the demonstration, from a pre-demonstration average of 31.5 percent to a demonstration average of 39.5 percent. Improvement was seen in all subpopulations and regions. Similar to the rate of initiation, the 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 10.0% | **Probability:** | <.0001 |
| CY2022-2023 average | 13.2% | **Finding:** | Significant |
| Change | 32.0% | | |

**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) |

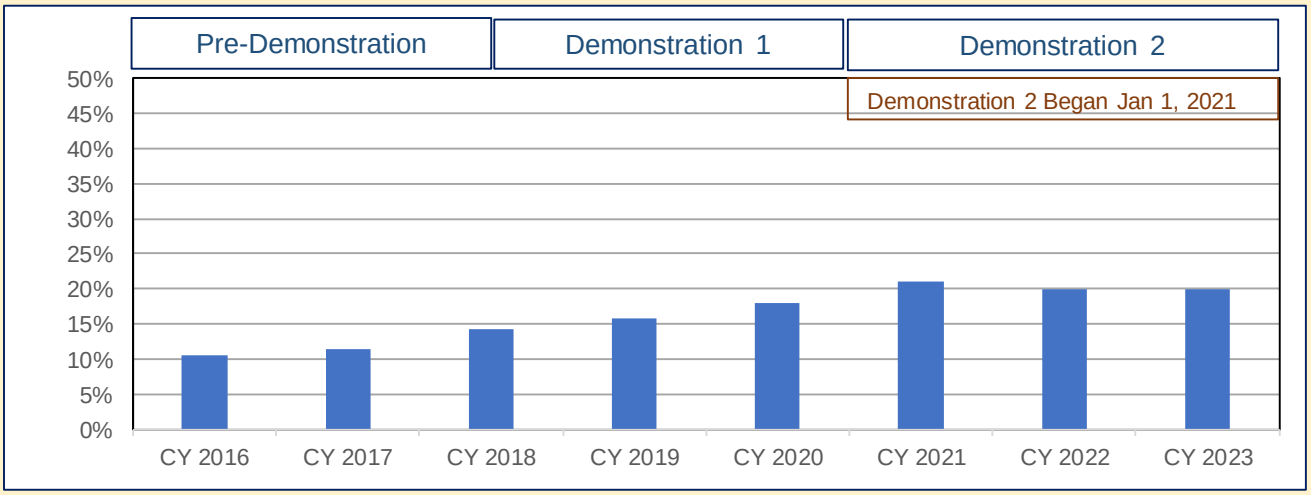
The rate of follow-up within 7 days after an ED visit for alcohol or drug dependence among the SUD beneficiaries increased 32.0 percent during the demonstration, from a pre-demonstration average of 10.0 percent to a demonstration average of 13.2 percent. There was improvement seen among all subpopulations 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 15.0% | **Probability:** | <.0001 |
| CY2022-2023 average | 20.0% | **Finding:** | Significant |
| Change | 33.3% | | |

**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% | 16.2% |
| OUD | 33.7% | 35.3% | North Central Region | 23.8% | 12.6% |
| Dual Eligible | 49.9% | 14.5% | Northeast Region | 60.7% | 16.5% |
| Pregnant Women | 13.0% | 23.1% | West Central Region | 3.0% | 18.1% |
| Criminally Involved | low sample | | Central Region | 56.3% | 21.6% |
| MRO | 13.6% | 31.7% | East Central Region | 87.0% | 23.1% |
| | | | Southwest Region | 26.3% | 23.2% |
| | | | 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) |

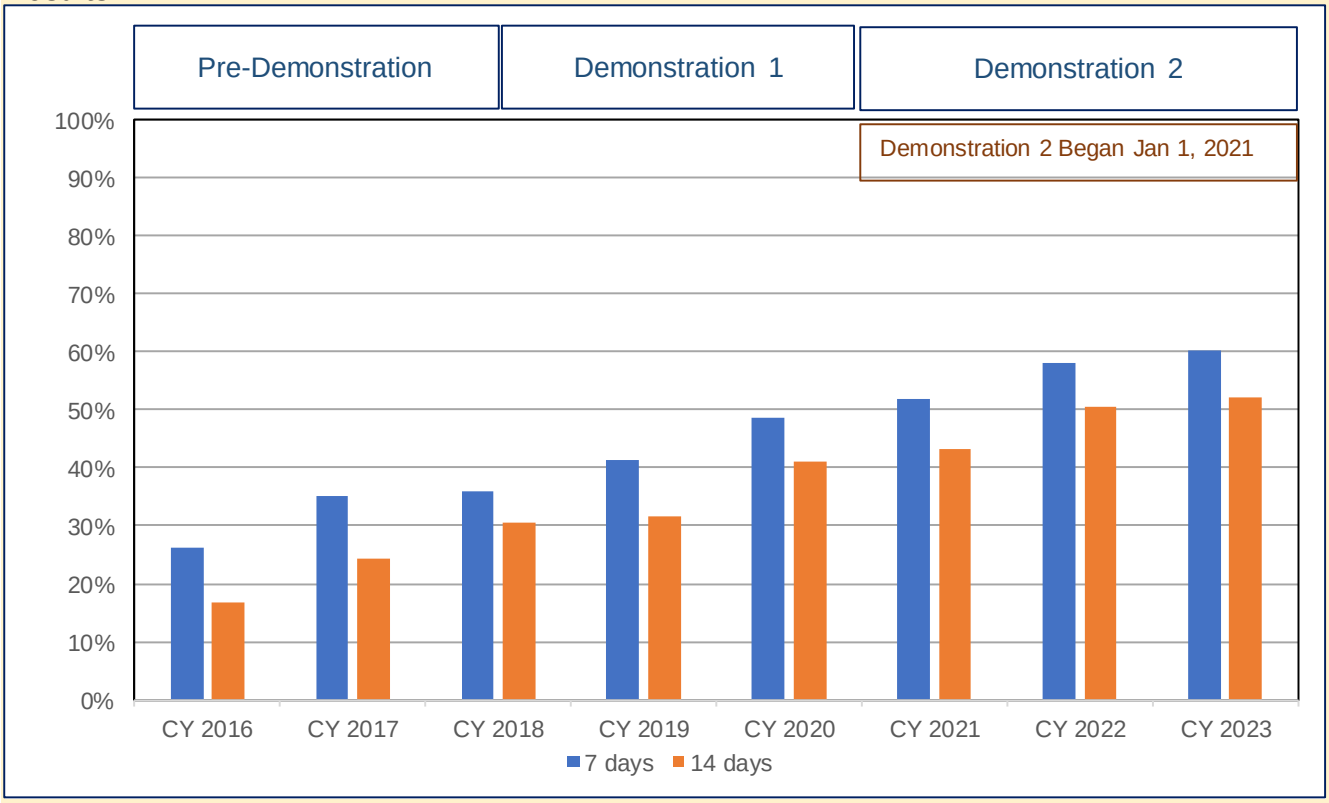
The rate of follow-up within 30 days after an ED visit for alcohol or drug dependence among the SUD beneficiaries increased 33.3 percent during the demonstration, from a pre-demonstration average of 15.0 percent to a demonstration average of 20.0 percent. There was improvement seen among all subpopulations 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

**Finding:** Increase in both

| | 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

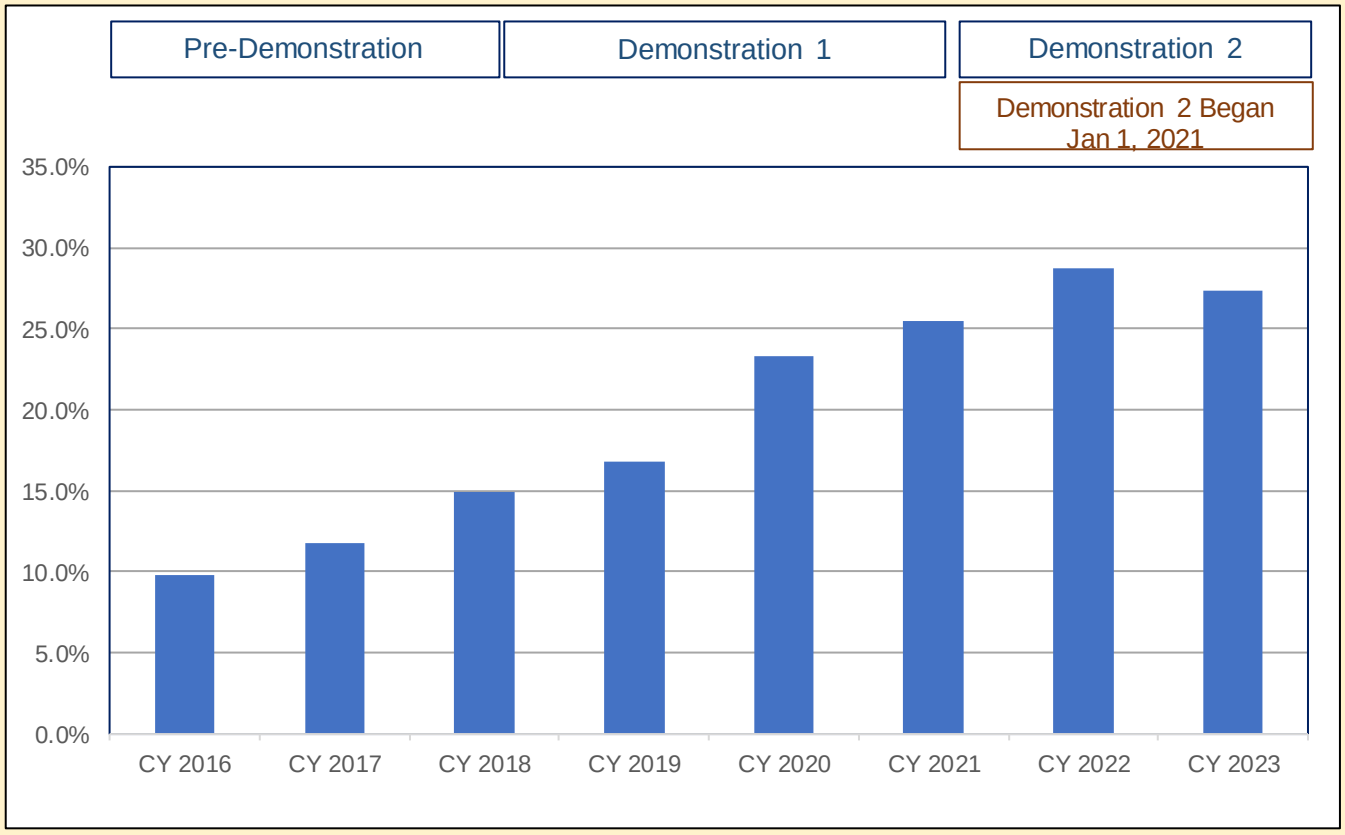
The percentage of discharges from inpatient or residential treatment for SUD for Medicaid beneficiaries that were followed by a SUD treatment within 7 days and 14 days increased in each year since the initial demonstration period. Follow-up occurring within 7 days of the discharge increased by 53.0 percent 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 **Finding:** Increase

| | |
|---|---|
| CY2018-2019 average | 15.8% |
| CY2022-2023 average | 28.0% |
| Change | 77.1% |

**Statistical Review:** No statistical tests were run on this measure

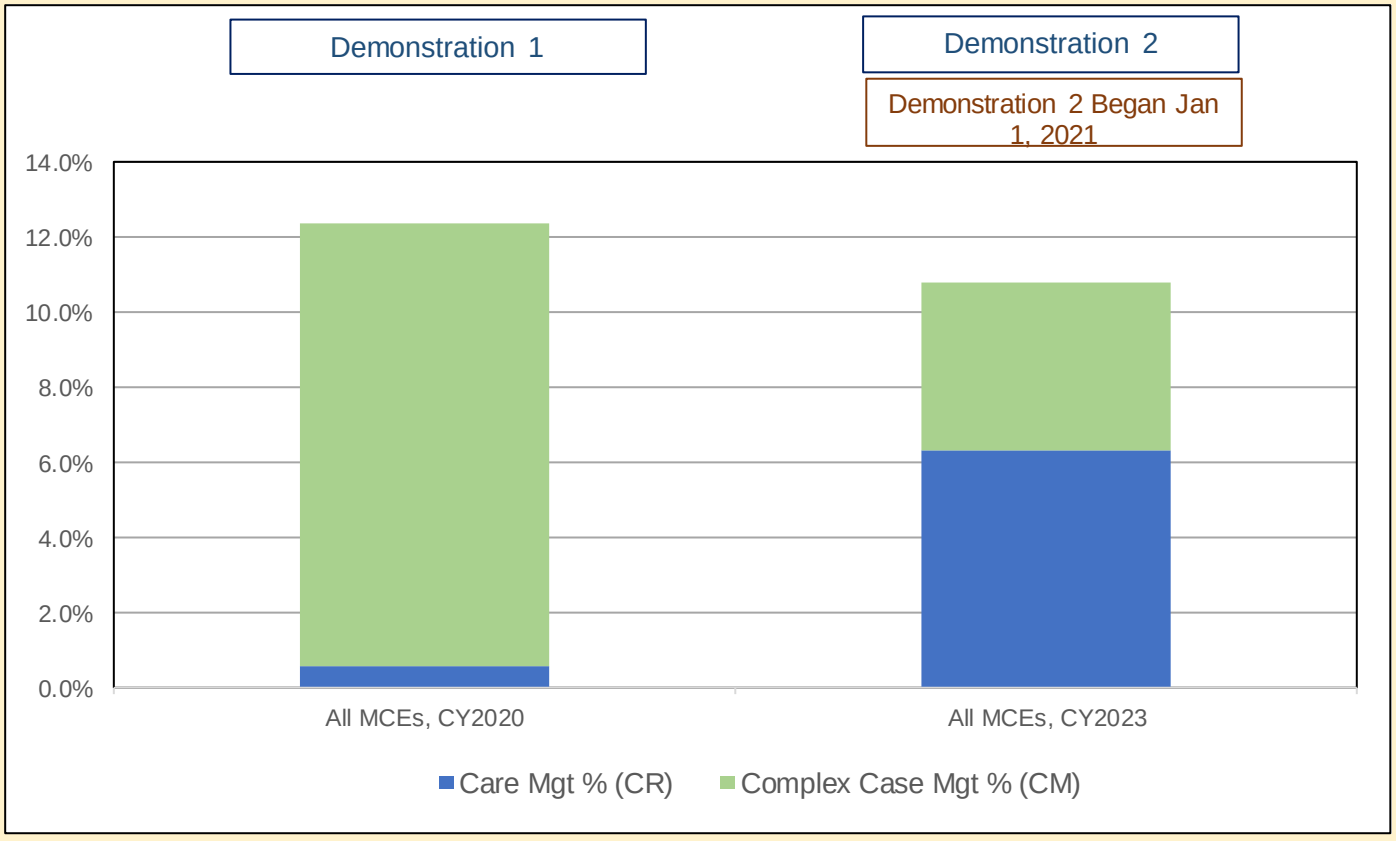
The percentage of discharges from inpatient or residential treatment for SUD that readmit for inpatient or residential treatment within 180 days of initial discharge for Medicaid beneficiaries age 18-64 increased from the pre-demonstration period to the current demonstration period by 77.1 percent.

## 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 n = 7,446 clients | | Anchor Service Jan - June 2023 n = 9,154 clients | |
|---|---|---|---|---|
| | 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 | *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. |
| | | MCEs | Recommendation | *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. |
| 2 | Housing options | Providers | Neutral | *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, |

## 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

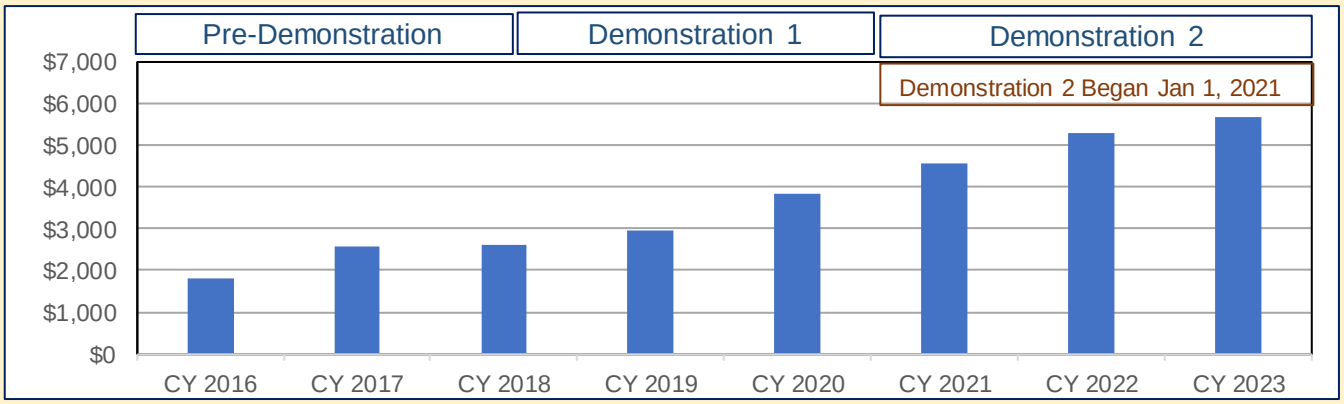
| | Measure Examined | Desired Outcome | Outcome Met? | Statistical Test | Statistically Significant? | P-Value |
|---|---|---|---|---|---|---|
| 1 | Rate of per capita expenditures for SUD services among the SUD population | Increase | Yes | Interrupted Time Series | No | 0.1621 |
| 2 | Rate of per 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

| | Estimate | P-Value | Significant |
|---|---|---|---|
| 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 |

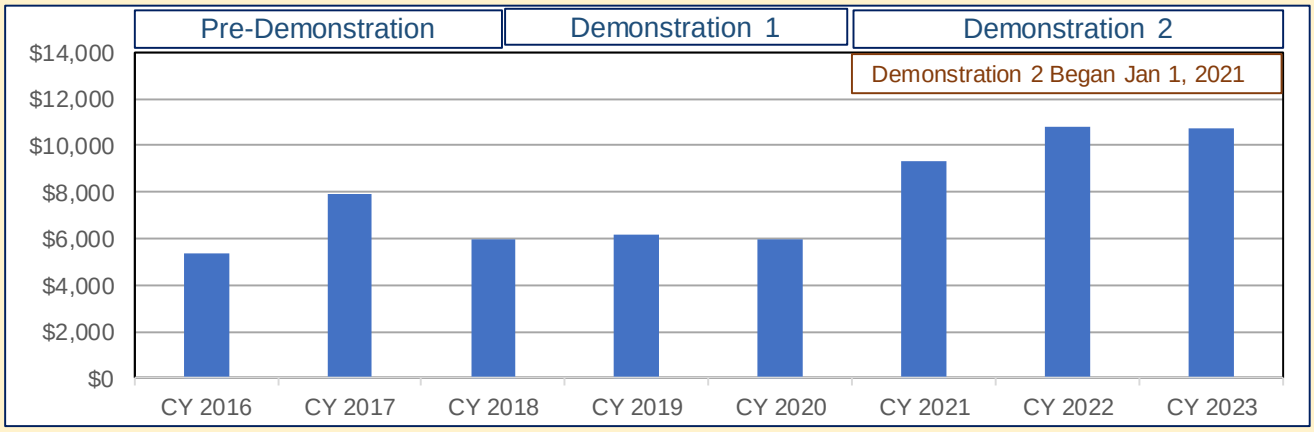
The interrupted time series test was run using the CMS-defined denominator and monthly values from January 2016 to December 2023. The average per capita payment for SUD services for the 25 months pre-demonstration (January 2016 - January 2018) was compared to the average for the 25 months post-demonstration (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

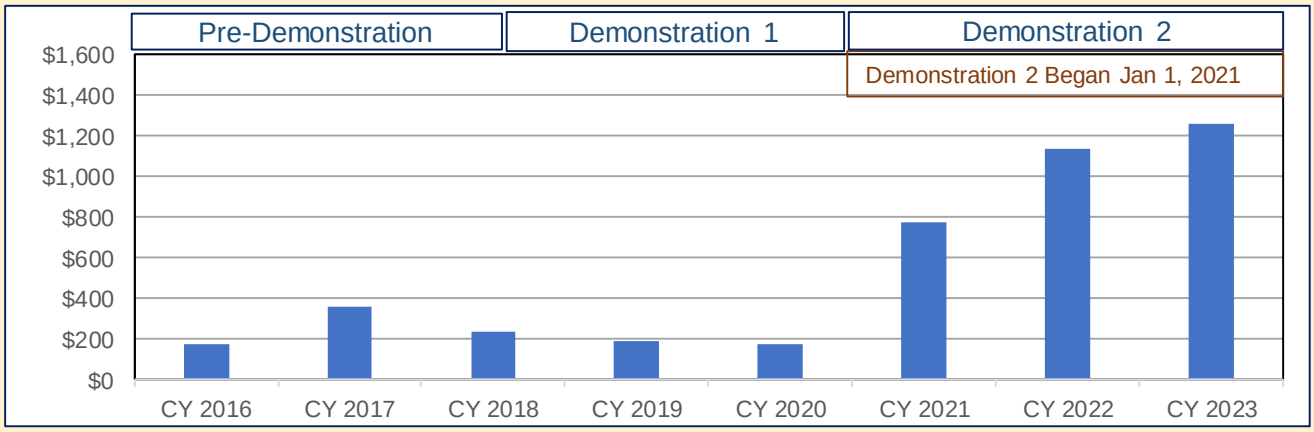
**Research Question:**
Does the demonstration rebalance Medicaid expenditures for SUD treatment away from institutional toward community-based care?

**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.

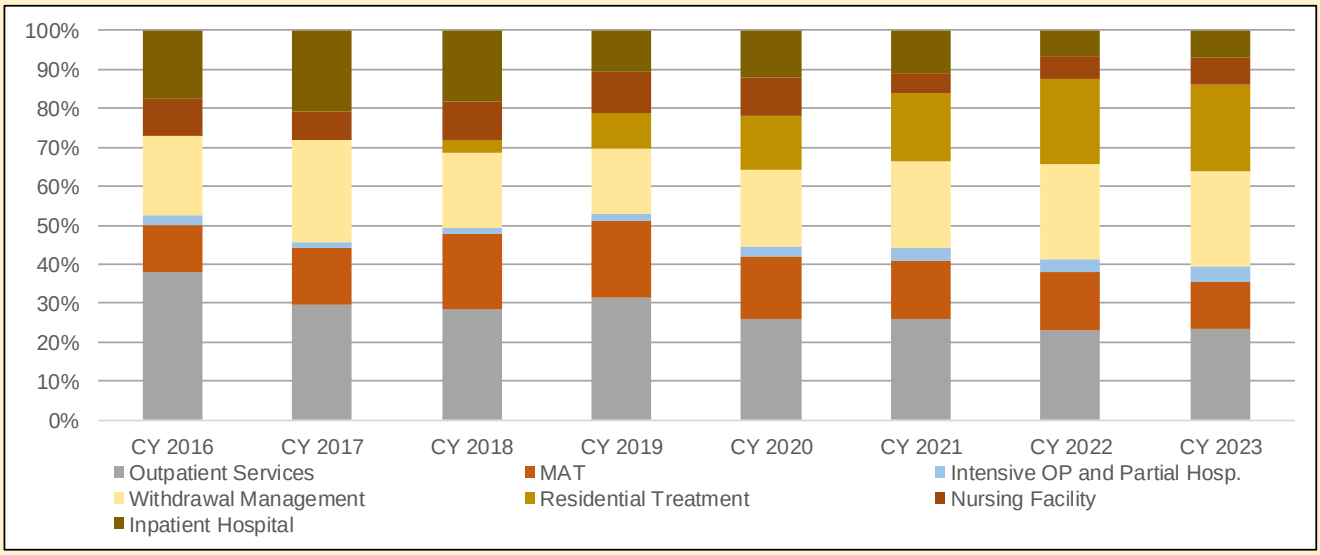
## Exhibit 83. Results from HMA-Burns Metric: Distribution of Per Capita SUD Spending

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

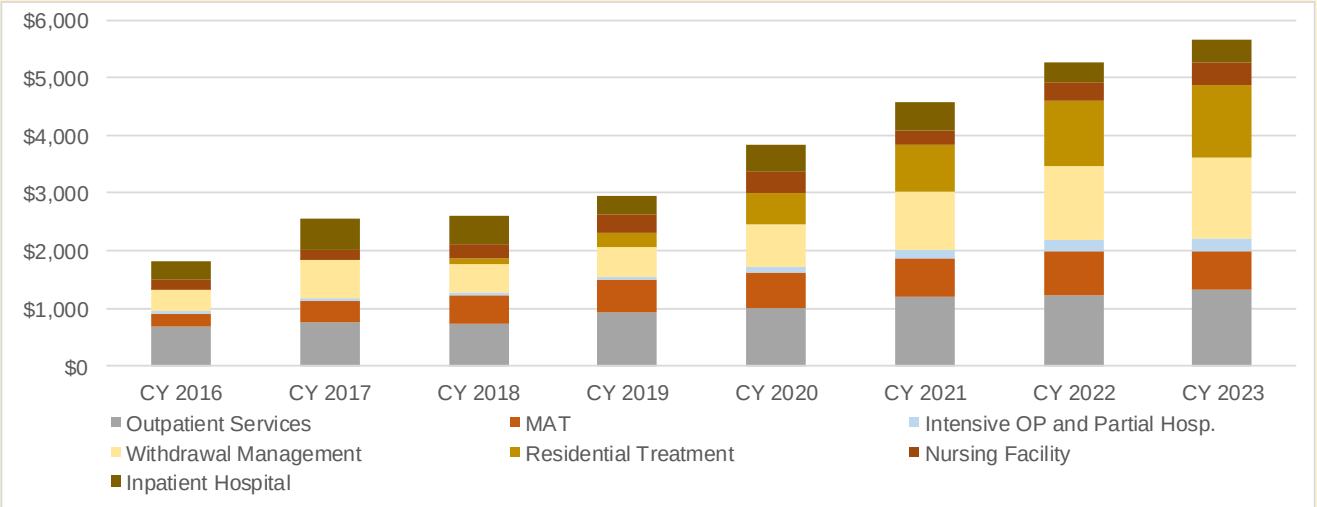
**Measure(s) Used to Answer Question:** Distribution of Per Capita SUD Spending
**Measure Steward:** HMA-Burns
**Data Source:** State claims/encounters and enrollment data

**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

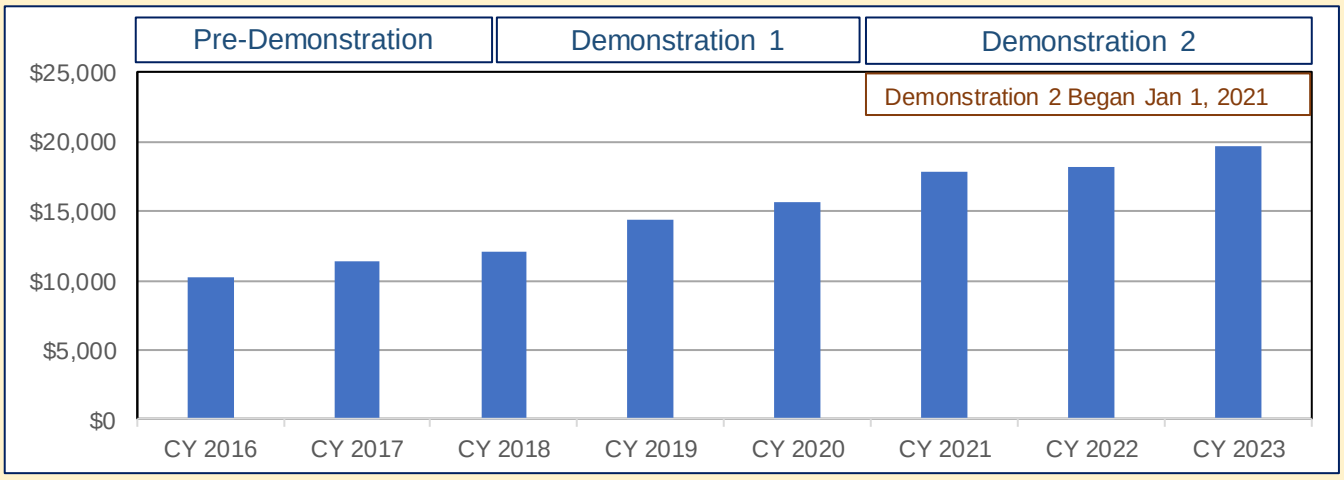
Per capita spending on SUD services for individuals with SUD increased from $1,814 in CY2016 to $3,843 in CY2020 and $5,649 in CY2023. The per capita expenditures for inpatient hospital remained steady, while expenditures continued to move to community-based services including residential treatment. 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.

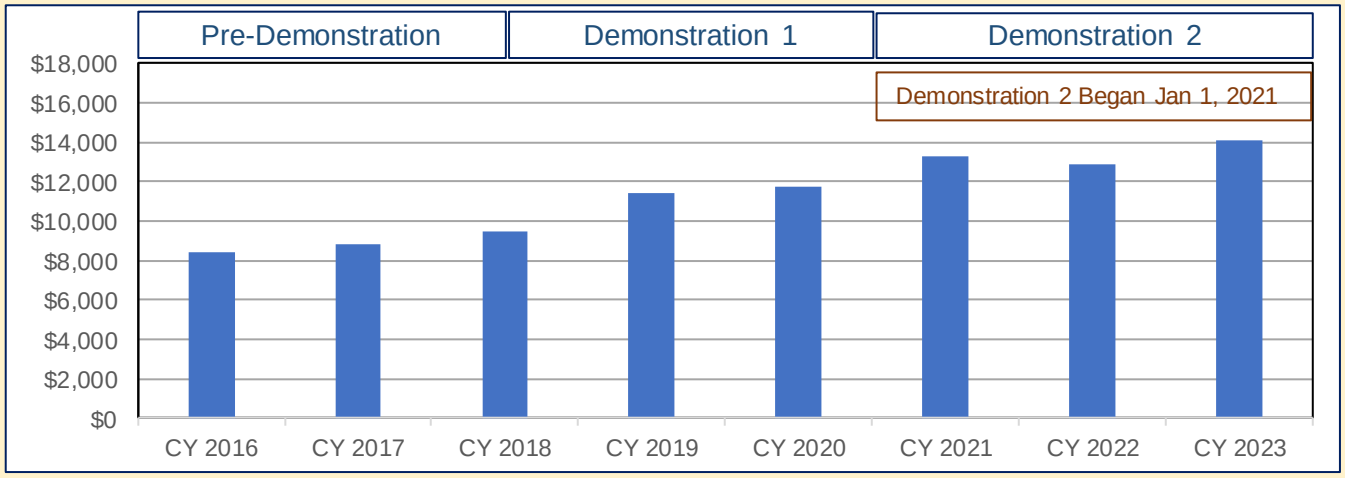
Total per capita expenditures for individuals with SUD increased during the demonstration compared to the pre-demonstration period. These expenditures increased each year of the demonstration, from $17,852 in CY 2021 to $19,709 in CY 2023, a 10.4 percent increase during the current demonstration period. 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.

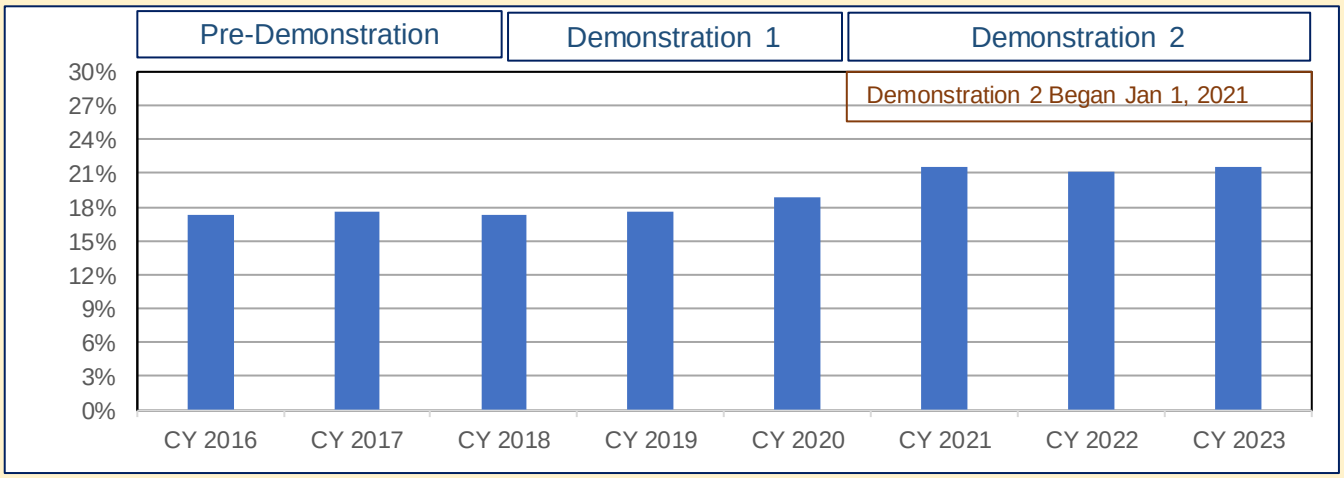
Total per capita expenditures excluding SUD services for individuals with SUD increased in almost all years since the beginning of the demonstration (CY 2018) through December 2023. The only exception is a 3.1 percent decrease between CY 2021 to CY 2022. Overall, expenditures increased 5.9 percent during 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:** | Decrease | **Statistical Review:** | Chi-Square |
| CY2016-2017 average | 17.5% | **Probability:** | <.0001 |
| CY2022-2023 average | 21.4% | **Finding:** | Significant |
| Change | 22.3% | | |

**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 | |

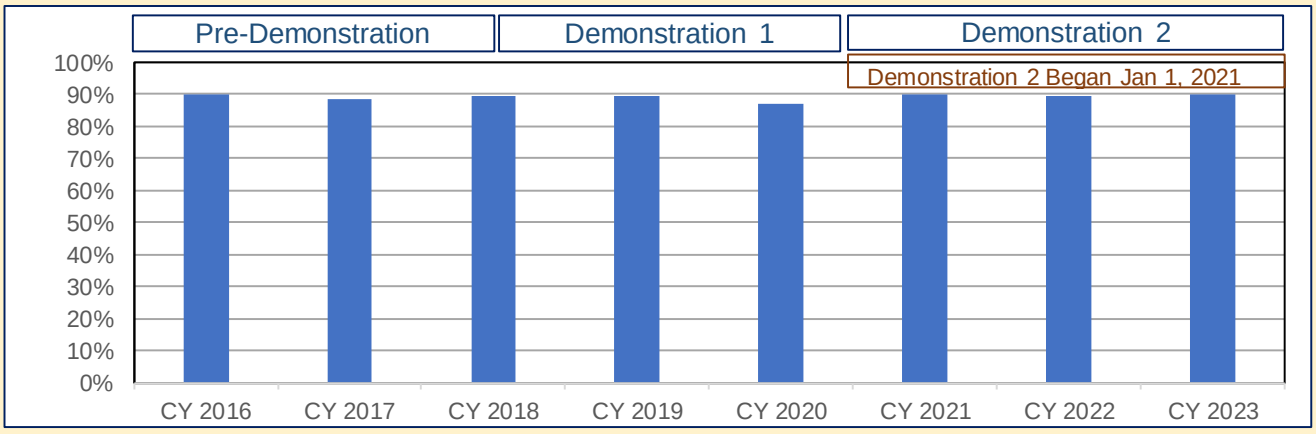
The rate of hospital readmissions among beneficiaries with SUD increased to 22.3 percent between the pre-demonstration and demonstration period. During the demonstration, there was a 30.7 percent increase for the OUD subpopulation with an absolute rate of 24.7 percent. At the region level, all regions 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:** | Increase | **Statistical Review:** | Chi-Square |
| CY2018-2019 average | 89.2% | **Probability:** | <.0001 |
| CY2022-2023 average | 89.9% | **Finding:** | Significant |
| Change | 0.7% | | |

**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) |

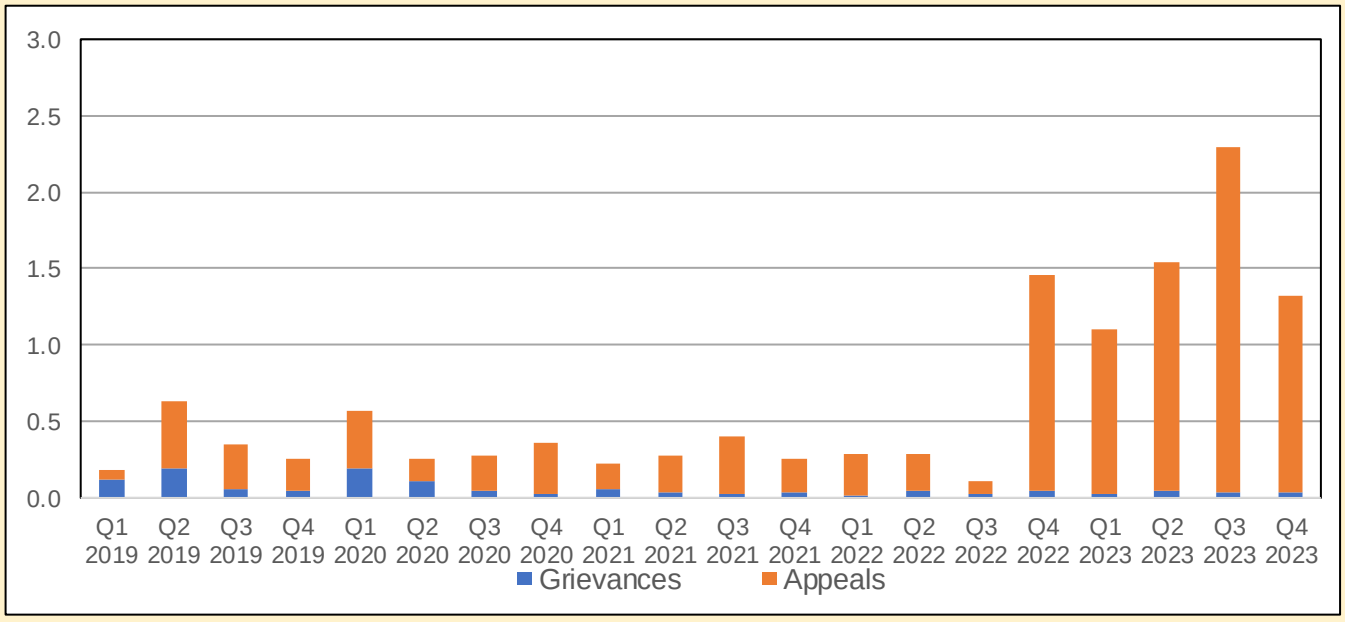
The rate of access on this measure increased 0.7 percent between the pre-demonstration and demonstration period at an average rate of 89.9 percent. There was also little percentage change observed among all of the subpopulations and regions analyzed. The absolute rate of access was higher in the demonstration 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

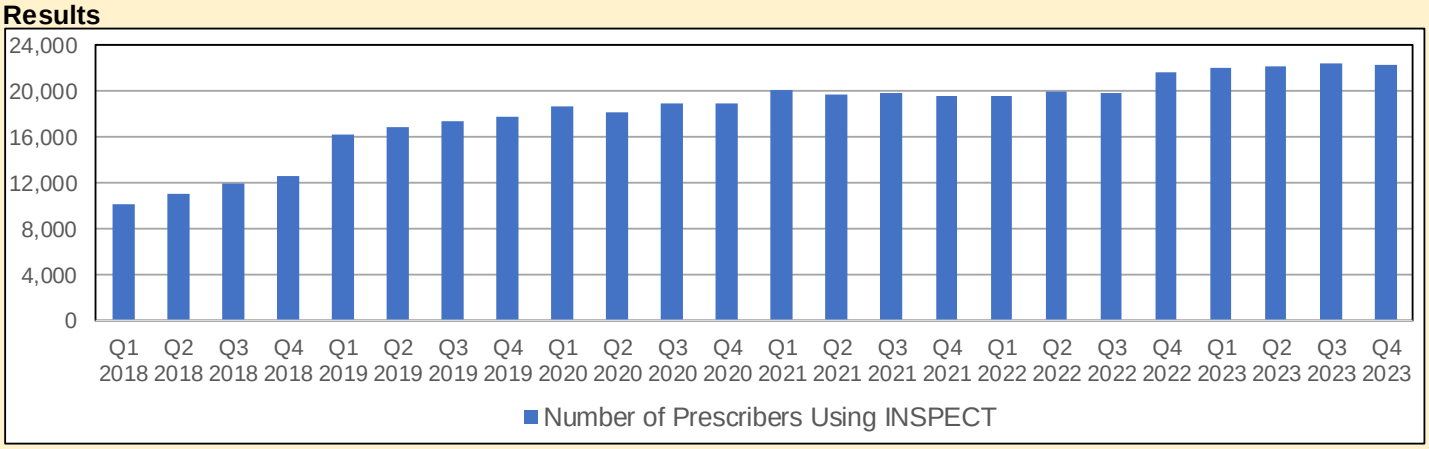
**Research Questions:**
Is the rate of drug overdose deaths in Indiana impacted by the demonstration?

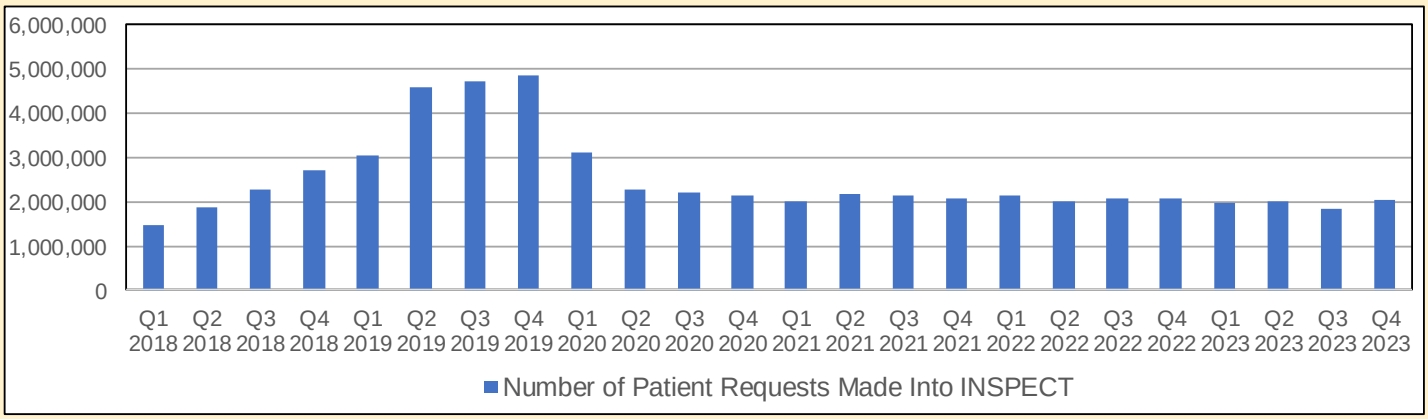
**Measure(s) Used to Answer Question:**
Number of prescribers accessing INSPECT
Number of patient requests made into INSPECT
Number of hospitals that have integrated INSPECT into their health care system's electronic health record

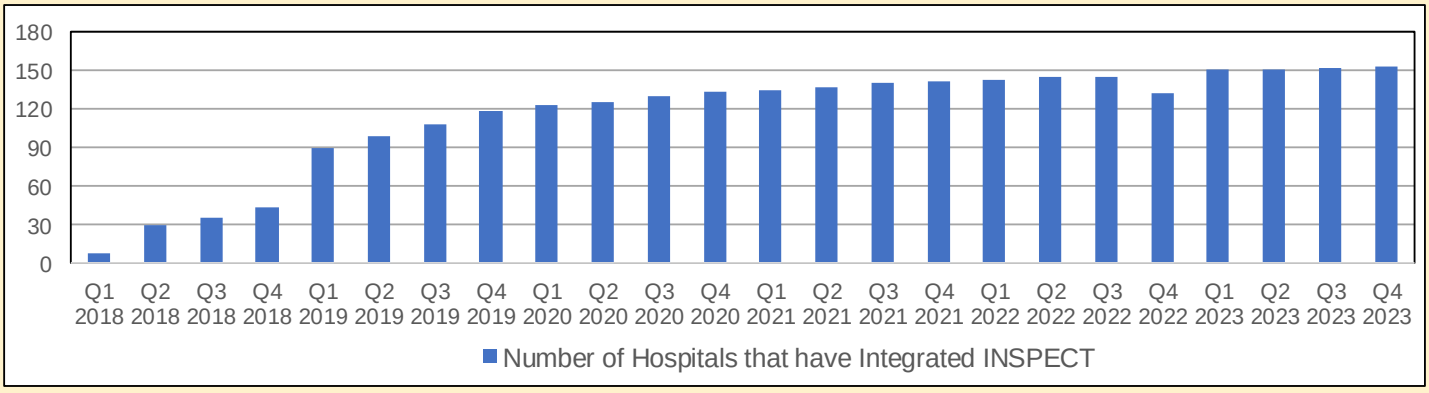
**Data Source:** Indiana Professional Licensing Agency's prescription drug monitoring database (named INSPECT)

| | | | |
|---|---|---|---|
| **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**



# 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 | Implementa-tion 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 | 12 |
| Number of Measures Where Desired Outcome Was Met | **46** | 11 | 2 | 2 | 5 | 4 | 14 | 8 |
| Number of Measures Where Outcome Was Statistically Significant | **25** | 8 | none tested | none tested | none tested | 5 | 10 | 2 |
| **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 Fourthth 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 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

# TABLE OF CONTENTS

## Listing of Exhibits



## Abbreviations List

| Abbreviation | Meaning |
|---|---|
| AOD | Alcohol or Other Drug |
| ASAM | American Society for Addiction Medicine |
| B&A | Burns & Associates, Inc. |
| CMS | Centers for Medicare and Medicaid Services |
| CY | Calendar Year |
| DMHA | Division of Mental Health and Addiction |
| DOS | Date of Service |
| DR | Desk Review |
| DS | Descriptive Statistics |
| ED | Emergency Department |
| EDW | Enterprise Data Warehouse |
| FFS | Fee-For-Service |
| FQHC | Federally Qualified Health Center |
| FSSA | Indiana Family and Social Services Administration |
| FI | Facilitated Interviews |
| HIP | Healthy Indiana Plan |
| HMA-Burns | Burns & Associates, a Division of Health Management Associates |
| IDOC | Indiana Department of Corrections |
| IMD | Institution for Mental Disease |
| IPLA | Indiana Professional Licensing Agency |

| Abbreviation | Meaning |
|---|---|
| ISDH | Indiana State Department of Health |
| ITS | Single Segment Interrupted Time Series |
| MAT | Medication-Assisted Treatment |
| MCE | Managed Care Entity |
| MMIS | Medicaid Management Information System |
| NCQA | National Committee for Quality Assurance |
| NQF | National Quality Forum |
| OMPP | Office of Medicaid Policy and Planning |
| OR | Onsite Reviews |
| OUD | Opioid Use Disorder |
| PHE | Public Health Emergency |
| PDMP | Prescription Drug Monitoring Program |
| PQA | Pharmacy Quality Assurance |
| RCT | Randomized Control Trials |
| RHC | Rural Health Clinic |
| SAS | Statistical Analysis System |
| ST | Statistical Tests |
| STC | Special Terms and Conditions |
| SUD | Substance Use Disorder |
| | |

# 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, 2021[1]. 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 in appropriate 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) CMS Approval- Extension Request, Indiana. October 26, 2020

– December 31, 2025.[2] In its, SUD Implementation Plan Protocol, Indiana is focusing on the following areas to supports 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.

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

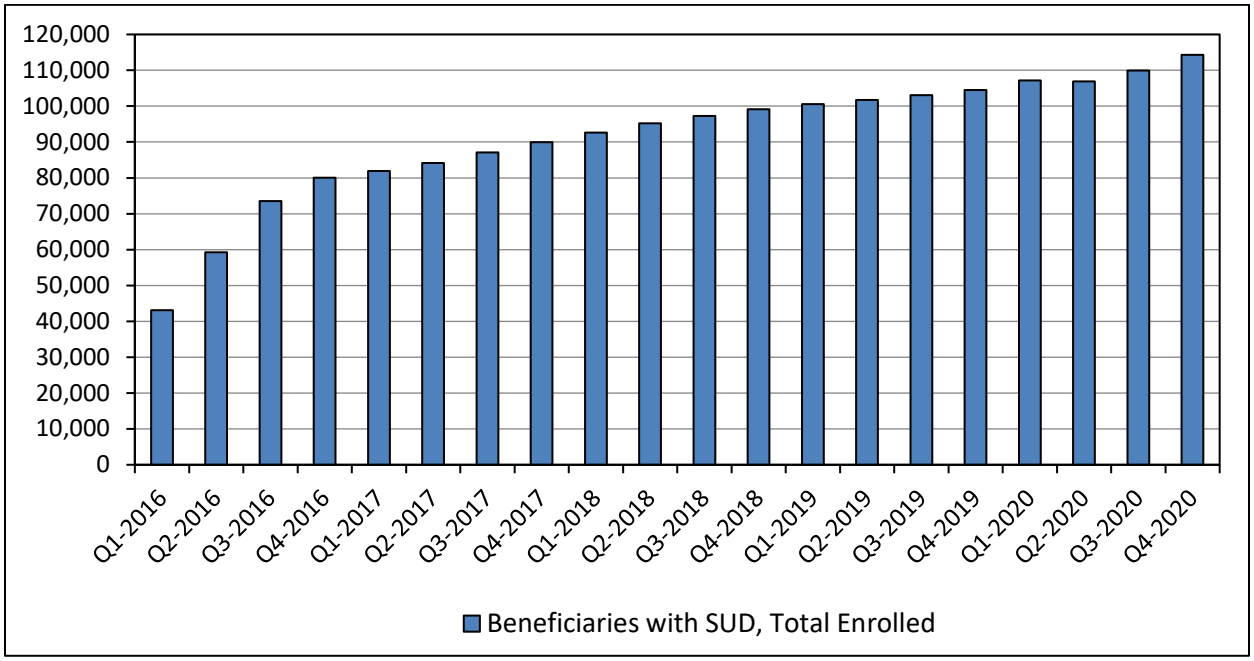
[5] https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm National Vital Statistics System, information retrieved July 20, 2021

[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) 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

| | February 2018 start of demonstration period | | | December 2020 end of demonstration period | | |
|---|---|---|---|---|---|---|
| **Category** | **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.

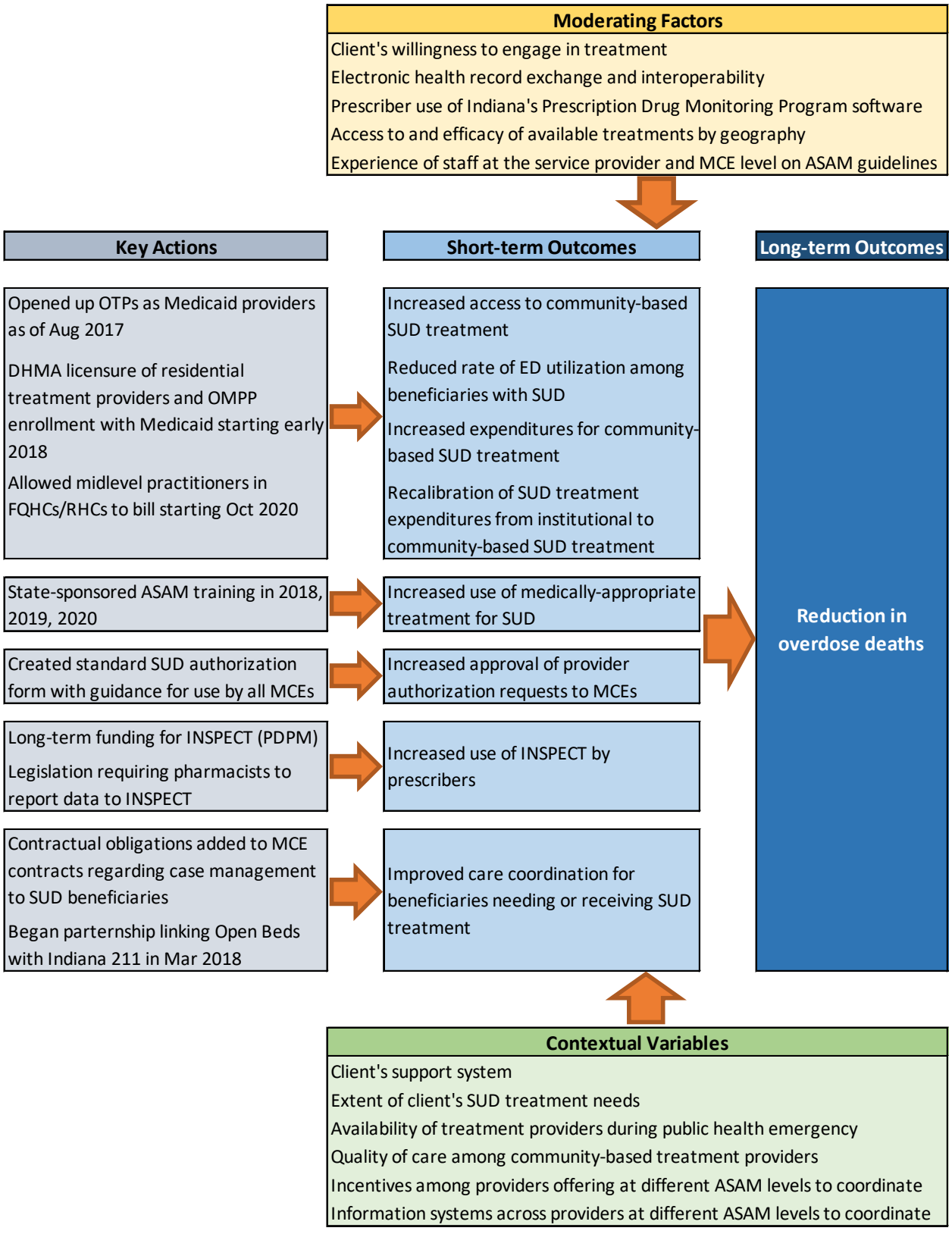
The short-term outcomes all tie to eight hypotheses and eight research questions which are introduced in Section II.C.

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? |

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 |
| | | Increase identi-fication, initiation, engagement | Increase adherence to and retention in treatment | Reductions in overdose deaths, particularly opioids | Reduced utilization of ED and hospital settings | Fewer readmits to same or higher level of care | Improved access to care for physical health conditions |
| **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.

### 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-wavier 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

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.

- 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.

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

H = Hypothesis

| H | Research Question (RQ) / Measures Associated with Each RQ | | Measure Steward | CMS Metric | Interrupted Time Series Test | Sensitivity to ITS Tested | Chi-square Test |
|---|---|---|---|---|---|---|---|
| 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 | |

H = Hypothesis

| H | Research Question (RQ) / Measures Associated with Each RQ | | Measure Steward | CMS Metric | Interrupted Time Series Test | Sensitivity to ITS Tested | Chi-square Test |
|---|---|---|---|---|---|---|---|
| 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 as[10]:

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

- $Y_t$ 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
- *time_after_intervention* is 0 in the pre-intervention segment and counts the quarters in the post-intervention segment at time t
- $\beta_0$ estimates the base level of the outcome at the beginning of the series
- $\beta_1$ estimates the base trend, i.e. the change in outcome in the pre-intervention segment
- $\beta_2$ estimates the change in level from the pre- to post-intervention segment
- $\beta_3$ 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.

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 verses 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

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) |

| 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 | ***For both measures*** : Analysis will be conducted on all 4 sub-populations (total, alcohol only, opioid only, other than alcohol or opioid). Descriptive statistics, chi-square tests. |
| 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 | ***For both measures*** : Descriptive statistics, chi-square tests |
| | 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 |

| 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 |

| 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 inappopriate. | | | | | |
| **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 |

| 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. |

| 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) |

| 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.<br>Categories include inpatient, outpatient, pharmacy, long term care, IMDs and other. | 1. Total member months for beneficiaries with an SUD diagnosis.<br>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.<br>Categories include residential treatment, intensive outpatient, outpatient, assessment. | 1. Total member months for beneficiaries with an SUD diagnosis.<br>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 conduced 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.

# 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.

**FINAL VERSION**

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

| | | CY 2021 | | | | CY 2022 | | | | CY 2023 | | | | CY 2024 | | | | CY 2025 | | | | CY 2026 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Major Task** | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| **A** | **Ongoing Tasks to Support Engagement** | | | | | | | | | | | | | | | | | | | | | | | | |
| A.1 | Monthly project mgmt/status mtg with FSSA | | | | | | | | | | | | | | | | | | | | | | | | |
| A.2 | Read in, validate, and incorporate claims data | | | | | | | | | | | | | | | | | | | | | | | | |
| A.3 | Read in, validate, and incorporate enrollment data | | | | | | | | | | | | | | | | | | | | | | | | |
| **B** | **Develop Evaluation Design Document** | | | | | | | | | | | | | | | | | | | | | | | | |
| B.1 | Create draft Evaluation Design to submit to CMS | | | | | | | | | | | | | | | | | | | | | | | | |
| B.2 | Finalize Evaluation Design based on CMS feedback | | | | | | | | | | | | | | | | | | | | | | | | |
| **C** | **Prepare Mid-Point Assessment** | | | | | | | | | | | | | | | | | | | | | | | | |
| C.1 | Conduct focus study on member access to services | | | | | | | | | | | | | | | | | | | | | | | | |
| C.2 | Conduct focus study on service auth requests | | | | | | | | | | | | | | | | | | | | | | | | |
| C.3 | Conduct focus study on transitions to care | | | | | | | | | | | | | | | | | | | | | | | | |
| C.4 | Conduct focus study on care coordination | | | | | | | | | | | | | | | | | | | | | | | | |
| C.5 | Conduct interviews with beneficiaries | | | | | | | | | | | | | | | | | | | | | | | | |
| C.6 | Conduct interviews with service providers | | | | | | | | | | | | | | | | | | | | | | | | |
| C.7 | Conduct interviews with managed care entities | | | | | | | | | | | | | | | | | | | | | | | | |
| C.8 | Submit draft Mid-Point Assessment to FSSA | | | | | | | | | | | | | | | | | | | | | | | | |
| C.9 | Submit Mid-Point Assessment to CMS | | | | | | | | | | | | | | | | | | | | | | | | |
| **D** | **Prepare Interim Evaluation** | | | | | | | | | | | | | | | | | | | | | | | | |
| D.1 | Compile data measures for all subpopulations | | | | | | | | | | | | | | | | | | | | | | | | |
| D.2 | Perform statistical tests on results, if applicable | | | | | | | | | | | | | | | | | | | | | | | | |
| D.3 | Assess FSSA status against SUD Implementation Plan | | | | | | | | | | | | | | | | | | | | | | | | |
| D.4 | Submit draft Interim Evaluation to FSSA | | | | | | | | | | | | | | | | | | | | | | | | |
| D.5 | Submit Interim Evaluation to CMS | | | | | | | | | | | | | | | | | | | | | | | | |
| **E** | **Prepare Summative Evaluation** | | | | | | | | | | | | | | | | | | | | | | | | |
| E.1 | Conduct member access focus study, Round 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| E.2 | Conduct service auth focus study, Round 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| E.3 | Conduct transitions focus study, Round 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| E.4 | Conduct care coordination focus study, Round 2 | | | | | | | | | | | | | | | | | | | | | | | | |
| E.5 | Conduct Round 2 interviews with beneficiaries | | | | | | | | | | | | | | | | | | | | | | | | |
| E.6 | Conduct Round 2 interviews with service providers | | | | | | | | | | | | | | | | | | | | | | | | |
| E.7 | Conduct Round 2 interviews with MCEs | | | | | | | | | | | | | | | | | | | | | | | | |
| E.8 | Compile data measures for all subpopulations | | | | | | | | | | | | | | | | | | | | | | | | |
| E.9 | Perform statistical tests on results, if applicable | | | | | | | | | | | | | | | | | | | | | | | | |
| E.10 | Submit draft Summative Evaluation to FSSA | | | | | | | | | | | | | | | | | | | | | | | | |
| E.11 | Submit Summative Evaluation to CMS | | | | | | | | | | | | | | | | | | | | | | | | |

# 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 | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

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 | ❒ Lake, Porter, LaPorte, Newton, Jasper |
| North Central | ❒ St. Joseph, Elkhart, Starke, Marshall, Pulaski, Fulton |
| Northeast | ❒ LaGrange, Steuben, Noble, DeKalb, Kosciusko, Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams |
| West Central | ❒ Benton, White, Carroll, Warren, Tippecanoe, Clinton, Fountain, Montgomery, Vermillion, Parke, Vigo, Clay, Sullivan |
| Central | ❒ Boone, Hamilton, Madison, Putnam, Hendrick, Marion, Hancock, Morgan, Johnson, Shelby, Rush |
| East Central | ❒ Cass, Howard, Tipton, Grant, Blackford, Jay, Delaware, Randolph, Henry, Wayne, Fayette, Union |
| Southwest | ❒ Owen, Monroe, Brown, Greene, Knox, Daviess, Martin, Lawrence, Orange, Gibson, Pike, Dubois, Posey, Vanderburgh, Warrick, Spencer, Perry |
| Southeast | ❒ 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 | ❒ |
| CareSource | ❒ |
| MDwise | ❒ |
| MHS (Managed Health Services) | ❒ |
| UHC (United Healthcare) | ❒ |

**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 <u>today</u>? 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 <u>today</u>? 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?

13. Do you have recommendations related to the delivery of treatment for SUD that you would like communicated in the 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 ❒
   - Friend ❒
   - Sponsor ❒
   - Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings ❒
   - Healthcare provider (doctor, nurse, physician assistant, hospital, clinic) ❒
   - Court/jail/prison/law enforcement/parole office ❒
   - Website ❒
   - Homeless shelter ❒

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 ❒
   - Found a provider, but they have a waiting list ❒
   - Provider won't take Medicaid ❒

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 ❒
   - Radio or television ❒
   - Billboards ❒
   - AA/NA meeting locations ❒
   - Healthcare provider (doctor, nurse, physician assistant, hospital, clinic) ❒
   - Court/jail/prison/law enforcement/parole office ❒
   - Targeted outreach (e.g., schools) ❒
   - Government offices (e.g., WIC, welfare, county) ❒
   - Homeless shelter ❒

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 | ❒ |
| Psychiatrist or Psychologist | ❒ |
| Counselor | ❒ |
| Outpatient Clinic/Office (not residential) | ❒ |
| Peer Support Professional | ❒ |
| Peer Recovery Coach | ❒ |

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 | ❑ | ❑ | ❑ | ❑ |
| Psychiatrist or Psychologist | ❑ | ❑ | ❑ | ❑ |
| Counselor | ❑ | ❑ | ❑ | ❑ |
| Residential treatment | ❑ | ❑ | ❑ | ❑ |
| Treatment in an office setting (not residential) | ❑ | ❑ | ❑ | ❑ |
| Methadone | ❑ | ❑ | ❑ | ❑ |
| Suboxone/Subutex | ❑ | ❑ | ❑ | ❑ |
| Transportation to/from services | ❑ | ❑ | ❑ | ❑ |
| Other | ❑ | ❑ | ❑ | ❑ |

   a. [Optional] If other, what specifically?

## 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 | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

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 | ❒ Lake, Porter, LaPorte, Newton, Jasper |
| North Central | ❒ St. Joseph, Elkhart, Starke, Marshall, Pulaski, Fulton |
| Northeast | ❒ LaGrange, Steuben, Noble, DeKalb, Kosciusko, Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams |
| West Central | ❒ Benton, White, Carroll, Warren, Tippecanoe, Clinton, Fountain, Montgomery, Vermillion, Parke, Vigo, Clay, Sullivan |
| Central | ❒ Boone, Hamilton, Madison, Putnam, Hendrick, Marion, Hancock, Morgan, Johnson, Shelby, Rush |
| East Central | ❒ Cass, Howard, Tipton, Grant, Blackford, Jay, Delaware, Randolph, Henry, Wayne, Fayette, Union |
| Southwest | ❒ Owen, Monroe, Brown, Greene, Knox, Daviess, Martin, Lawrence, Orange, Gibson, Pike, Dubois, Posey, Vanderburgh, Warrick, Spencer, Perry |
| Southeast | ❒ 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 | ❒ |
| CareSource | ❒ |
| MDwise | ❒ |
| MHS (Managed Health Services) | ❒ |
| UHC (United Healthcare) | ❒ |

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 | ❒ |
| Somewhat helpful and supported participation/provision of SUD services | ❒ |
| Not helpful but still able to participate/provide SUD services | ❒ |
| Not helpful and made it difficult to participate/provide SUD services | ❒ |
| Caused my organization to stop providing some SUD services | ❒ |
| Caused my organization to elect to not provide or expand some SUD services | ❒ |

    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 | ❒ |
| Online Training | ❒ |
| In Person Training | ❒ |
| Meetings with State Staff | ❒ |
| Meetings with MCEs | ❒ |

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 | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

b. If you think improvements are needed, for which services? Select all that apply.

| | |
|---|---|
| Opioid Treatment Program | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

c. If you think improvements are needed, for which regions? Select all that apply.

| | |
|---|---|
| Northwest | ❒ Lake, Porter, LaPorte, Newton, Jasper |
| North Central | ❒ St. Joseph, Elkhart, Starke, Marshall, Pulaski, Fulton |
| Northeast | ❒ LaGrange, Steuben, Noble, DeKalb, Kosciusko, Whitley, Allen, Miami, Wabash, Huntington, Wells, Adams |
| West Central | ❒ Benton, White, Carroll, Warren, Tippecanoe, Clinton, Fountain, Montgomery, Vermillion, Parke, Vigo, Clay, Sullivan |
| Central | ❒ Boone, Hamilton, Madison, Putnam, Hendrick, Marion, Hancock, Morgan, Johnson, Shelby, Rush |
| East Central | ❒ Cass, Howard, Tipton, Grant, Blackford, Jay, Delaware, Randolph, Henry, Wayne, Fayette, Union |
| Southwest | ❒ Owen, Monroe, Brown, Greene, Knox, Daviess, Martin, Lawrence, Orange, Gibson, Pike, Dubois, Posey, Vanderburgh, Warrick, Spencer, Perry |
| Southeast | ❒ 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 | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

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 | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

    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 <u>today</u>? ❒ Easy ❒ Neutral ❒ Somewhat Difficult ❒ Difficult

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 | ❒ Yes | ❒ No |
| CareSource | ❒ Yes | ❒ No |
| MDwise | ❒ Yes | ❒ No |
| MHS | ❒ Yes | ❒ No |
| UHC | ❒ Yes | ❒ 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 | ❒ |
| Early Intervention (ASAM 0.5) | ❒ |
| Outpatient Services (ASAM 1.0) | ❒ |
| Intensive Outpatient Services (ASAM 2.1) | ❒ |
| Partial Hospitalization (ASAM 2.5) | ❒ |
| Residential: Clinically Managed Low-Intensity (ASAM 3.1) | ❒ |
| Residential: Clinically Managed High-Intensity (ASAM 3.5) | ❒ |
| Medically Monitored Intensive Inpatient Services (ASAM 3.7) | ❒ |
| Medically Managed Intensive Inpatient (ASAM 4.0) | ❒ |
| Addiction Recovery Management Services | ❒ |
| Supportive Housing Services | ❒ |
| Medication Assisted Treatment | ❒ |

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 ❒
   - Friend ❒
   - Sponsor ❒
   - Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meetings ❒
   - Healthcare provider (doctor, nurse, physician assistant, hospital, clinic) ❒
   - Court/jail/prison/law enforcement/parole office ❒
   - Website ❒
   - Homeless shelter ❒

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 ❒
   - Found a provider, but they have a waiting list ❒
   - Provider won't take Medicaid ❒

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 ❒
   - Radio or television ❒
   - Billboards ❒
   - AA/NA meeting locations ❒
   - Healthcare provider (doctor, nurse, physician assistant, hospital, clinic) ❒
   - Court/jail/prison/law enforcement/parole office ❒
   - Targeted outreach (e.g., schools) ❒
   - Government offices (e.g., WIC, welfare, county) ❒
   - Homeless shelter ❒

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 | ❒ |
| Psychiatrist or Psychologist | ❒ |
| Counselor | ❒ |
| Outpatient Clinic/Office (not residential) | ❒ |
| Peer Support Professional | ❒ |
| Peer Recovery Coach | ❒ |

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 | ❑ | ❑ | ❑ | ❑ |
| Psychiatrist or Psychologist | ❑ | ❑ | ❑ | ❑ |
| Counselor | ❑ | ❑ | ❑ | ❑ |
| Residential treatment | ❑ | ❑ | ❑ | ❑ |
| Treatment in an office setting (not residential) | ❑ | ❑ | ❑ | ❑ |
| Methadone | ❑ | ❑ | ❑ | ❑ |
| Suboxone/Subutex | ❑ | ❑ | ❑ | ❑ |
| Transportation to/from services | ❑ | ❑ | ❑ | ❑ |
| Other | ❑ | ❑ | ❑ | ❑ |

   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. Survey respondents will be anonymous.
- 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

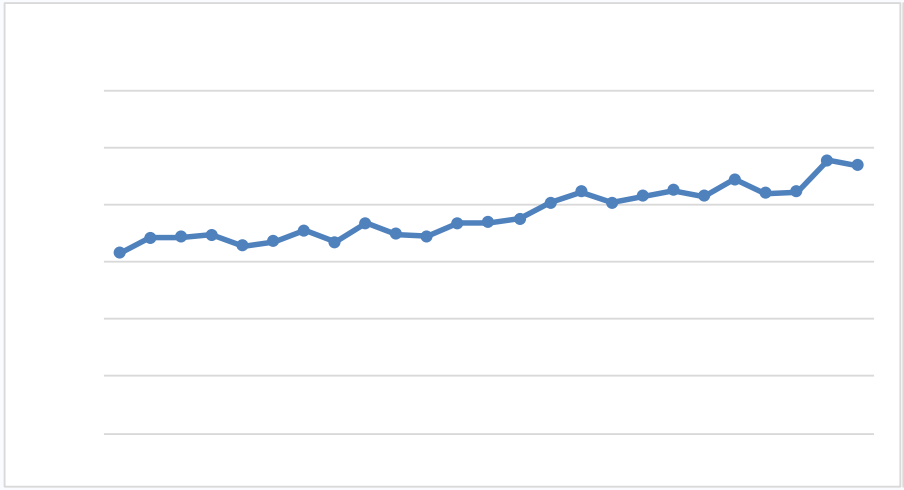
**CMS Metric #8 - Outpatient Services per 1,000 Medicaid Beneficiaries**
**Statistical Analysis: Interupted Time Series**

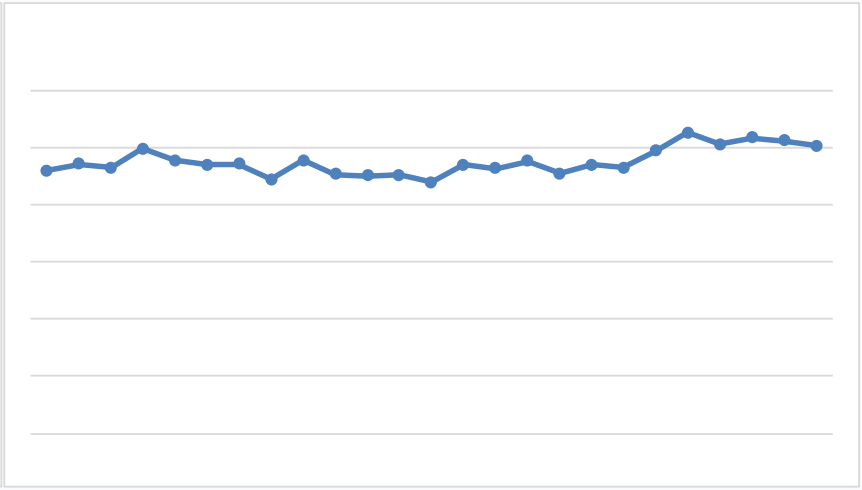
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 15.71 | 201802 | 1 | 0 | 0 |
| 17.09 | 201803 | 2 | 0 | 0 |
| 17.12 | 201804 | 3 | 0 | 0 |
| 17.33 | 201805 | 4 | 0 | 0 |
| 16.37 | 201806 | 5 | 0 | 0 |
| 16.73 | 201807 | 6 | 0 | 0 |
| 17.69 | 201808 | 7 | 0 | 0 |
| 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 |





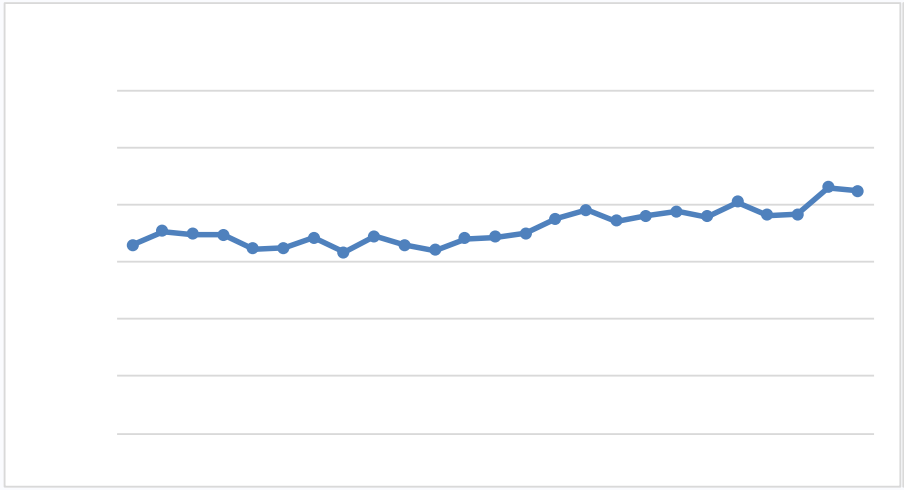
**CMS Metric #8 - Outpatient Services per 1,000 Medicaid Beneficiaries with SUD diagnosis**
**Statistical Analysis: Interupted Time Series**

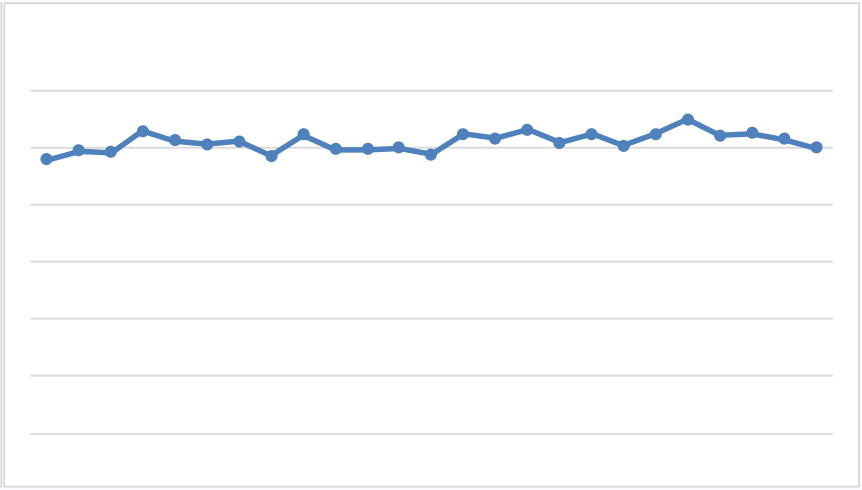
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 164.44 | 201802 | 1 | 0 | 0 |
| 176.27 | 201803 | 2 | 0 | 0 |
| 174.08 | 201804 | 3 | 0 | 0 |
| 173.36 | 201805 | 4 | 0 | 0 |
| 160.98 | 201806 | 5 | 0 | 0 |
| 161.94 | 201807 | 6 | 0 | 0 |
| 170.88 | 201808 | 7 | 0 | 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 |





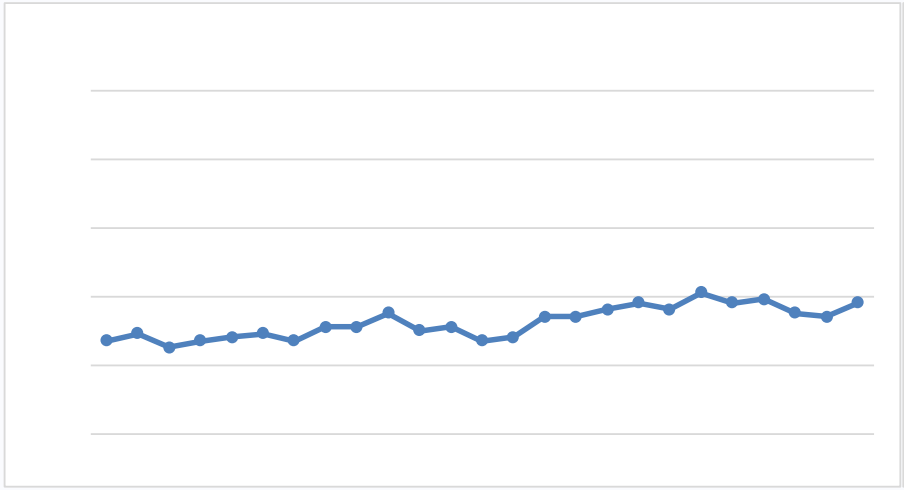
**CMS Metric #9 - Intensive Outpatient and Partial Hospitalization Services per 1,000 Medicaid Beneficiaries**
**Statistical Analysis: Interupted Time Series**

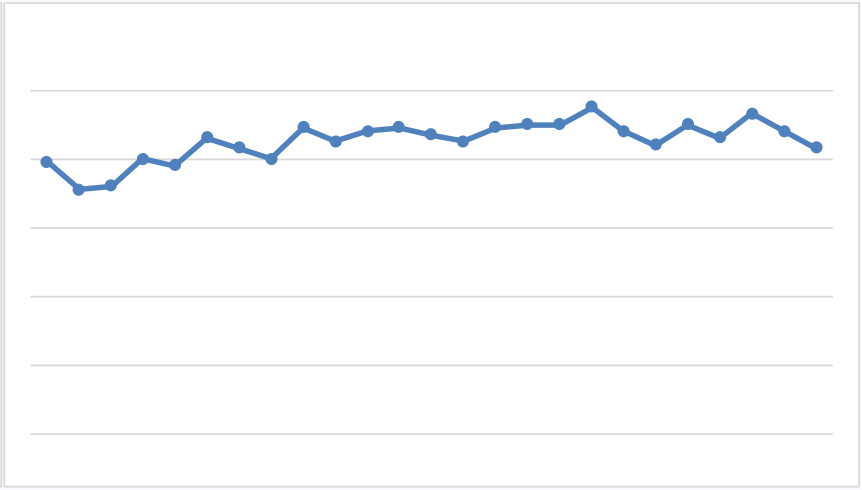
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 0.27 | 201601 | 1 | 0 | 0 |
| 0.29 | 201602 | 2 | 0 | 0 |
| 0.25 | 201603 | 3 | 0 | 0 |
| 0.27 | 201604 | 4 | 0 | 0 |
| 0.28 | 201605 | 5 | 0 | 0 |
| 0.29 | 201606 | 6 | 0 | 0 |
| 0.27 | 201607 | 7 | 0 | 0 |
| 0.31 | 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 |





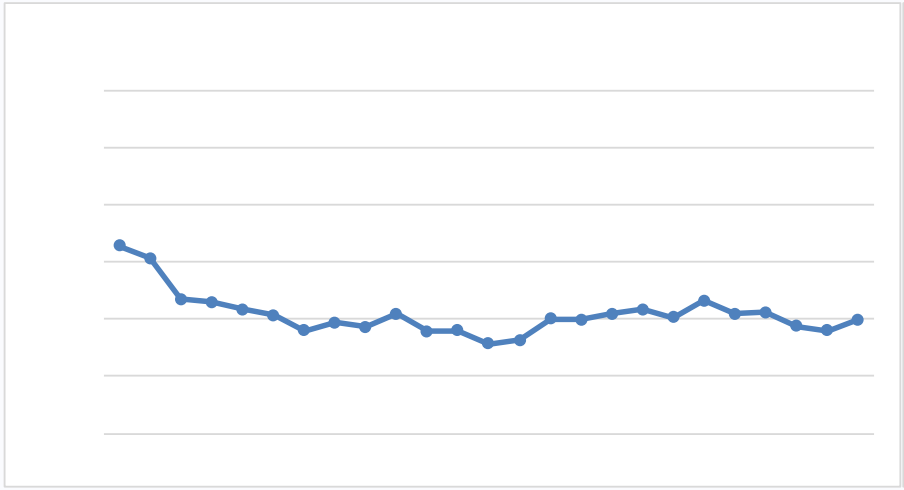
**CMS Metric #9 - Intensive Outpatient and Partial Hospitalization Services per 1,000 Medicaid Beneficiaries with SUD diagnosis**
**Statistical Analysis: Interupted Time Series**

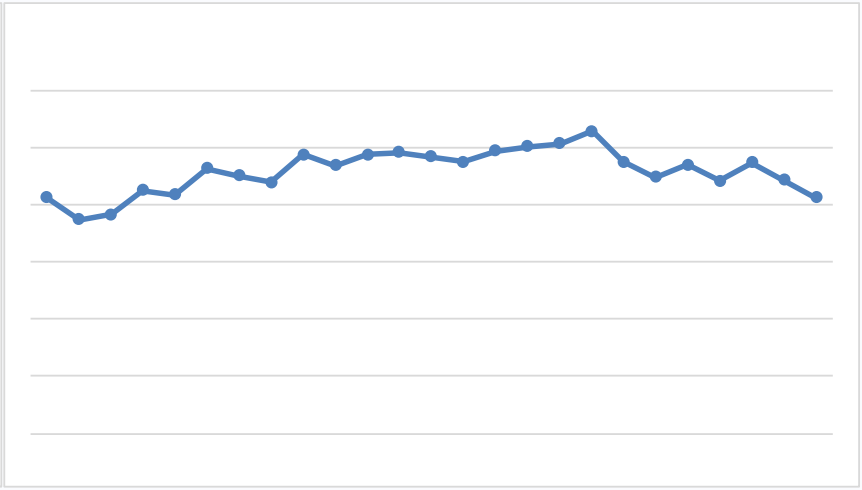
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 6.56 | 201601 | 1 | 0 | 0 |
| 6.11 | 201602 | 2 | 0 | 0 |
| 4.68 | 201603 | 3 | 0 | 0 |
| 4.59 | 201604 | 4 | 0 | 0 |
| 4.32 | 201605 | 5 | 0 | 0 |
| 4.12 | 201606 | 6 | 0 | 0 |
| 3.59 | 201607 | 7 | 0 | 0 |
| 3.87 | 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 |



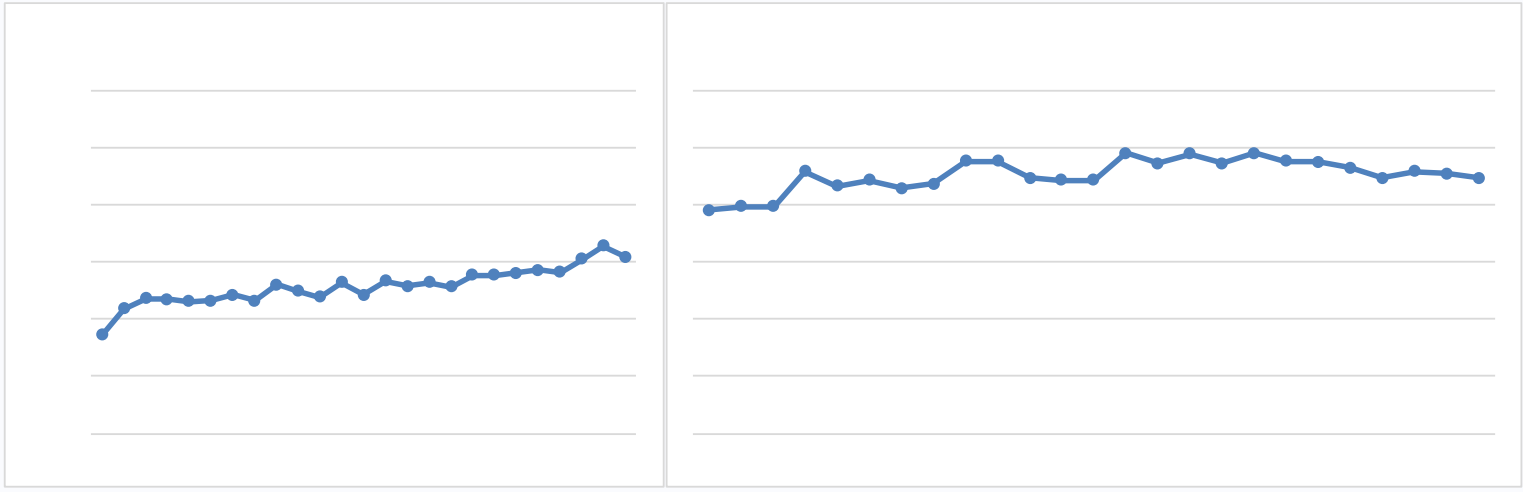


**CMS Metric #10 - Residential and Inpatient Services per 1,000 Medicaid Beneficiaries**
**Statistical Analysis: Interupted Time Series**

| 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 |

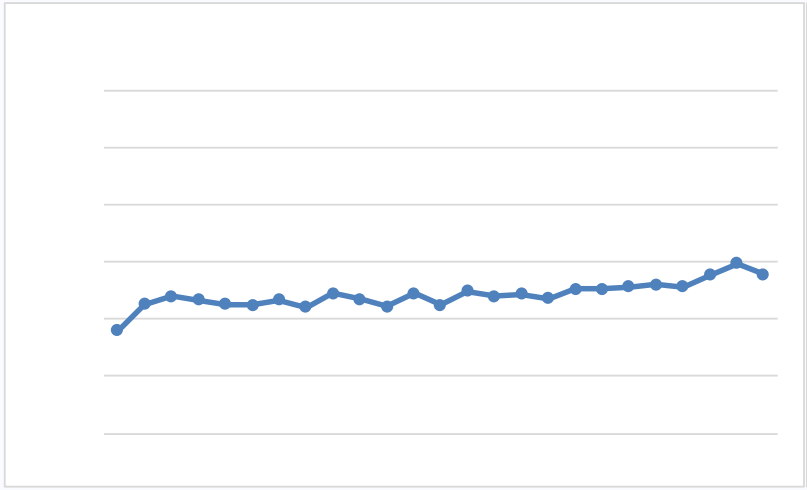


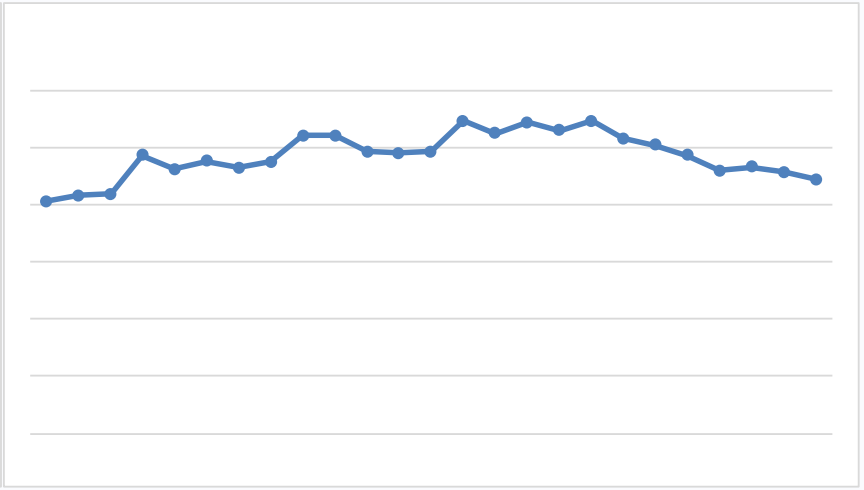
**CMS Metric #10 - Residential and Inpatient Services per 1,000 Medicaid Beneficiaries with SUD diagnosis**
**Statistical Analysis: Interupted Time Series**

| Pre-Intervention | | | | | Post-Intervention | | |
|---|---|---|---|---|---|---|---|
| OUTCOME | time | t | x | tx | OUTCOME | time | t |
| 8.98 | 201802 | 1 | 0 | 0 | 20.27 | 202112 | 26 |
| 11.28 | 201803 | 2 | 0 | 0 | 20.76 | 202201 | 27 |
| 12 | 201804 | 3 | 0 | 0 | 20.91 | 202202 | 28 |
| 11.66 | 201805 | 4 | 0 | 0 | 24.26 | 202203 | 29 |
| 11.3 | 201806 | 5 | 0 | 0 | 23.08 | 202204 | 30 |
| 11.21 | 201807 | 6 | 0 | 0 | 23.76 | 202205 | 31 |
| 11.68 | 201808 | 7 | 0 | 0 | 23.2 | 202206 | 32 |
| 11.01 | 201809 | 8 | 0 | 0 | 23.74 | 202207 | 33 |
| 12.24 | 201810 | 9 | 0 | 0 | 25.99 | 202208 | 34 |
| 11.73 | 201811 | 10 | 0 | 0 | 26.01 | 202209 | 35 |
| 11.09 | 201812 | 11 | 0 | 0 | 24.58 | 202210 | 36 |
| 12.23 | 201901 | 12 | 0 | 0 | 24.49 | 202211 | 37 |
| 11.2 | 201902 | 13 | 0 | 0 | 24.64 | 202212 | 38 |
| 12.41 | 201903 | 14 | 0 | 0 | 27.28 | 202301 | 39 |
| 11.96 | 201904 | 15 | 0 | 0 | 26.23 | 202302 | 40 |
| 12.18 | 201905 | 16 | 0 | 0 | 27.18 | 202303 | 41 |
| 11.78 | 201906 | 17 | 0 | 0 | 26.46 | 202304 | 42 |
| 12.59 | 201907 | 18 | 0 | 0 | 27.28 | 202305 | 43 |
| 12.63 | 201908 | 19 | 0 | 0 | 25.77 | 202306 | 44 |
| 12.82 | 201909 | 20 | 0 | 0 | 25.21 | 202307 | 45 |
| 13.02 | 201910 | 21 | 0 | 0 | 24.27 | 202308 | 46 |
| 12.79 | 201911 | 22 | 0 | 0 | 22.95 | 202309 | 47 |
| 13.8 | 201912 | 23 | 0 | 0 | 23.29 | 202310 | 48 |
| 14.82 | 202001 | 24 | 0 | 0 | 22.83 | 202311 | 49 |
| 13.91 | 202002 | 25 | 0 | 0 | 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 |





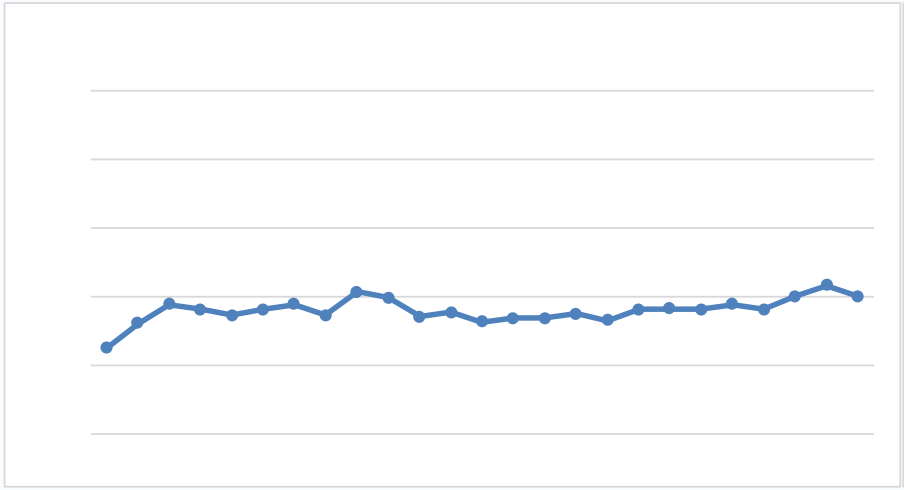
**CMS Metric #11 - Withdrawal Management per 1,000 Medicaid Beneficiaries**
**Statistical Analysis: Interupted Time Series**

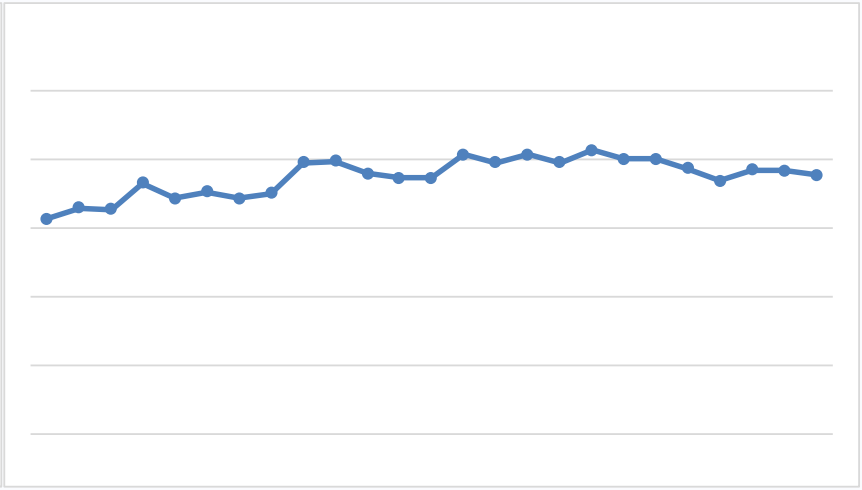
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 0.62 | 201802 | 1 | 0 | 0 |
| 0.8 | 201803 | 2 | 0 | 0 |
| 0.94 | 201804 | 3 | 0 | 0 |
| 0.9 | 201805 | 4 | 0 | 0 |
| 0.86 | 201806 | 5 | 0 | 0 |
| 0.9 | 201807 | 6 | 0 | 0 |
| 0.94 | 201808 | 7 | 0 | 0 |
| 0.86 | 201809 | 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 |





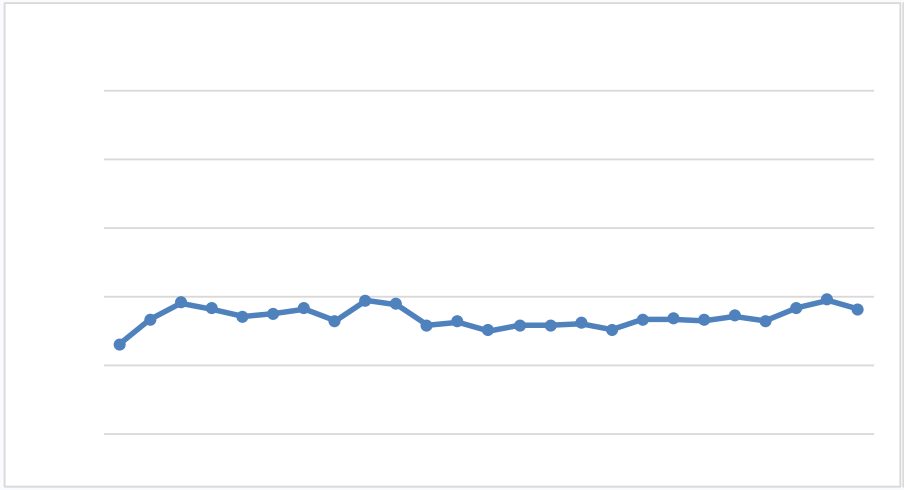
**CMS Metric #11 - Withdrawal Management per 1,000 Medicaid Beneficiaries with SUD diagnosis**
**Statistical Analysis: Interupted Time Series**

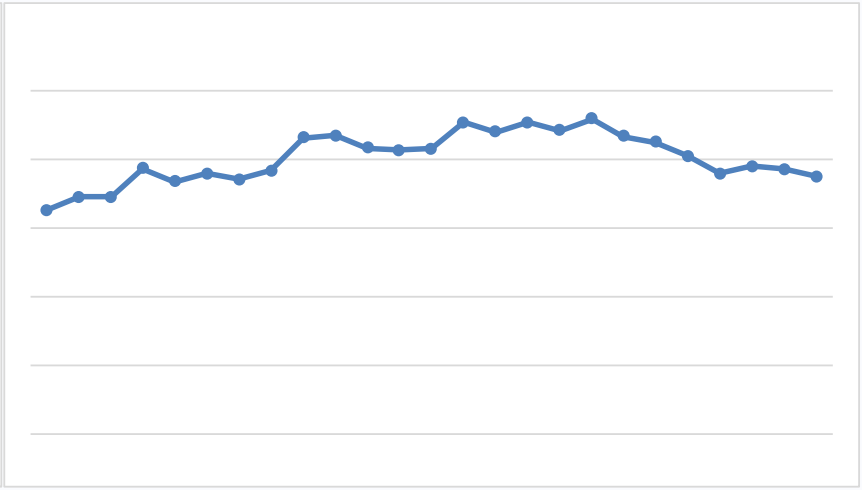
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 6.49 | 201802 | 1 | 0 | 0 |
| 8.26 | 201803 | 2 | 0 | 0 |
| 9.52 | 201804 | 3 | 0 | 0 |
| 9.05 | 201805 | 4 | 0 | 0 |
| 8.47 | 201806 | 5 | 0 | 0 |
| 8.68 | 201807 | 6 | 0 | 0 |
| 9.05 | 201808 | 7 | 0 | 0 |
| 8.16 | 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 |





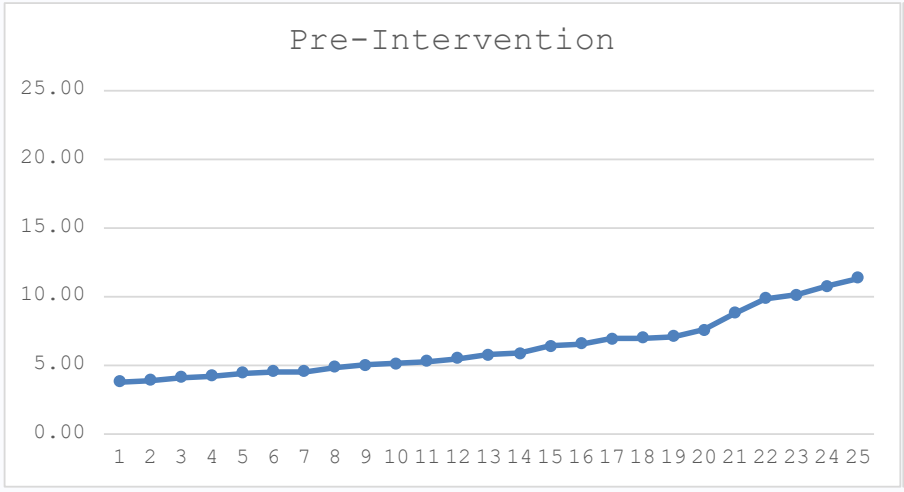
**CMS Metric #12 - Medication-Assisted Treatment per 1,000 Medicaid Beneficiaries**
**Statistical Analysis: Interupted Time Series**

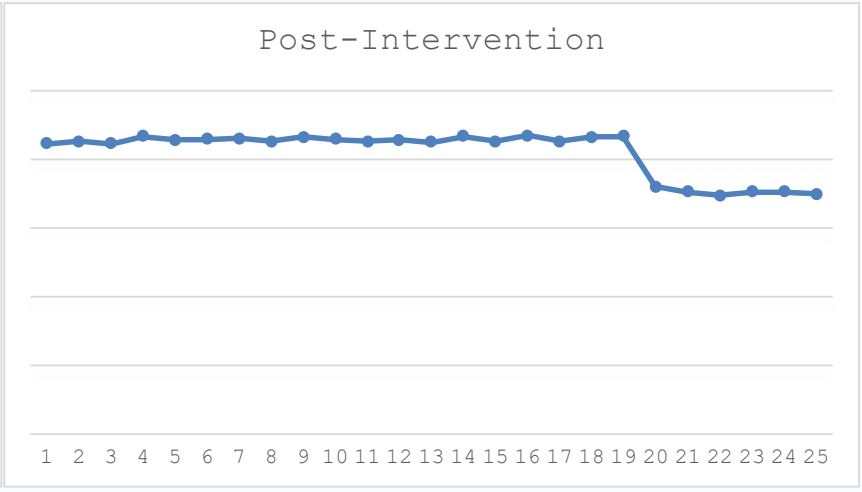
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 3.78 | 201601 | 1 | 0 | 0 |
| 3.85 | 201602 | 2 | 0 | 0 |
| 4.1 | 201603 | 3 | 0 | 0 |
| 4.19 | 201604 | 4 | 0 | 0 |
| 4.37 | 201605 | 5 | 0 | 0 |
| 4.51 | 201606 | 6 | 0 | 0 |
| 4.49 | 201607 | 7 | 0 | 0 |
| 4.83 | 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 |



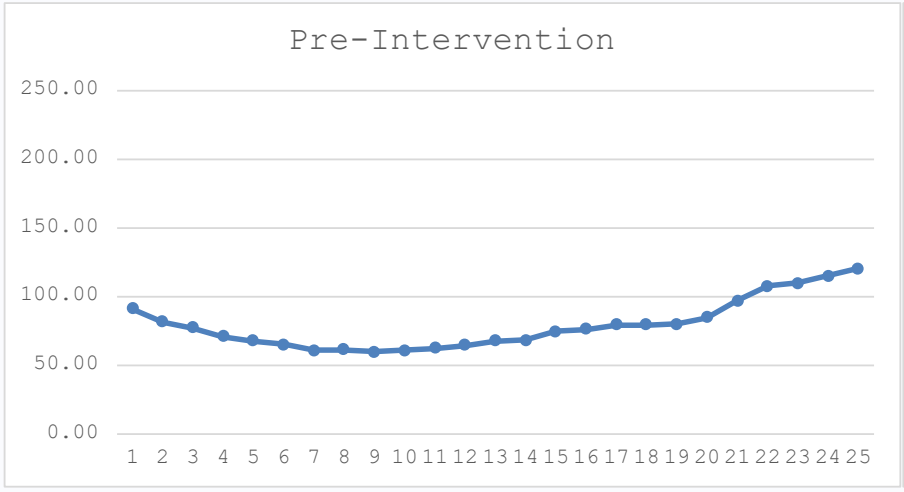
**CMS Metric #12 - Medication-Assisted Treatment per 1,000 Medicaid Beneficiaries with SUD diagnosis**
**Statistical Analysis: Interupted Time Series**

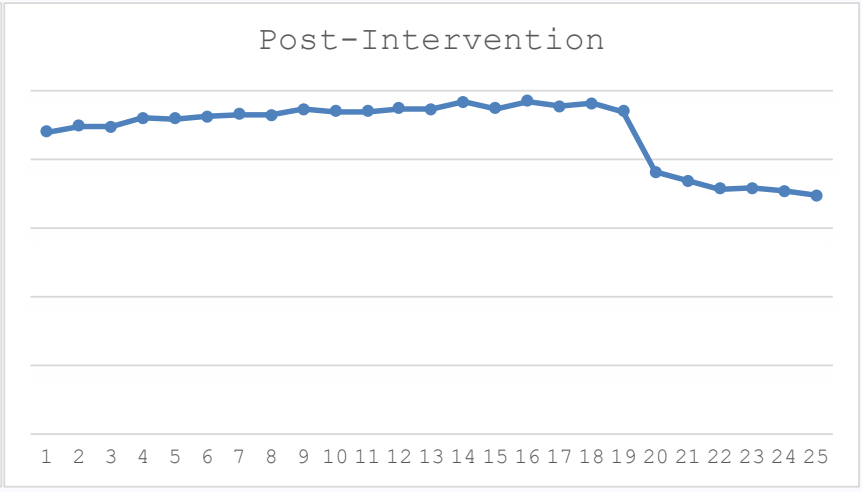
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 90.84 | 201601 | 1 | 0 | 0 |
| 80.95 | 201602 | 2 | 0 | 0 |
| 76.68 | 201603 | 3 | 0 | 0 |
| 70.77 | 201604 | 4 | 0 | 0 |
| 67.29 | 201605 | 5 | 0 | 0 |
| 64.58 | 201606 | 6 | 0 | 0 |
| 60.53 | 201607 | 7 | 0 | 0 |
| 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 |



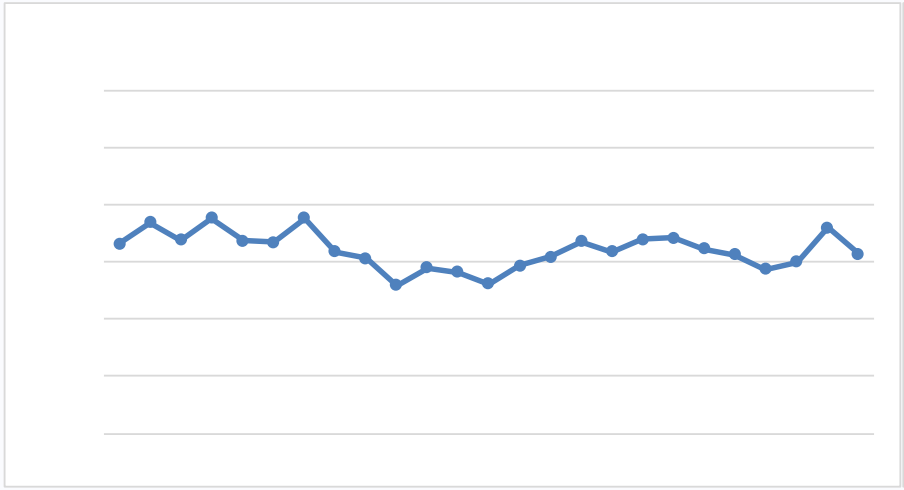
**CMS Metric #23 - ED Utilization for SUD per 1,000 Medicaid Beneficiaries**
**Statistical Analysis: Interupted Time Series**

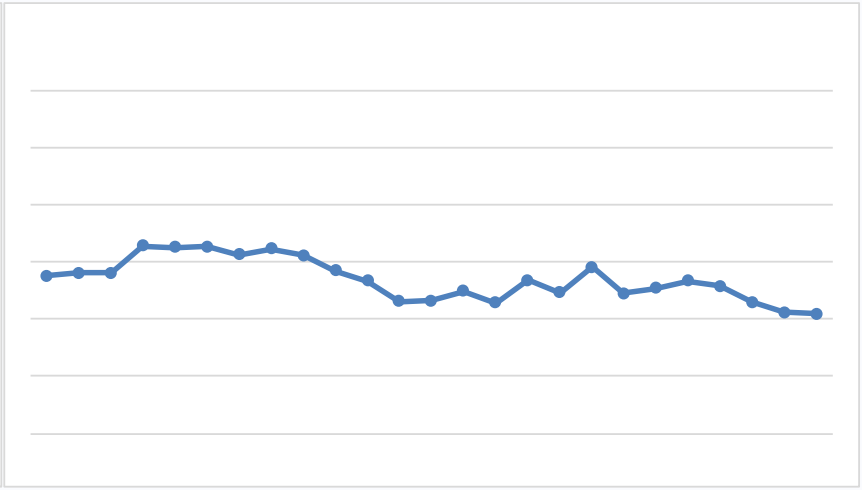
| Pre-Intervention | | | | |
|---|---|---|---|---|
| OUTCOME | time | t | x | tx |
| 6.64 | 201802 | 1 | 0 | 0 |
| 7.36 | 201803 | 2 | 0 | 0 |
| 6.75 | 201804 | 3 | 0 | 0 |
| 7.51 | 201805 | 4 | 0 | 0 |
| 6.74 | 201806 | 5 | 0 | 0 |
| 6.67 | 201807 | 6 | 0 | 0 |
| 7.52 | 201808 | 7 | 0 | 0 |
| 6.35 | 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 |



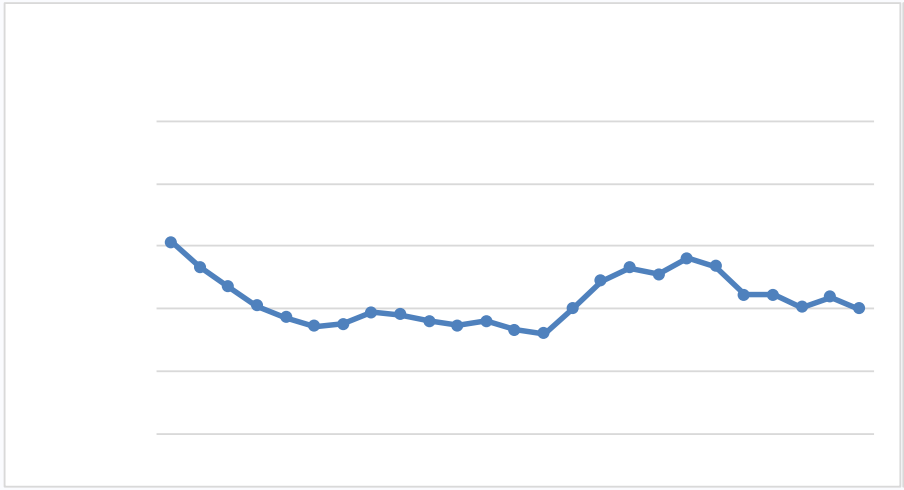


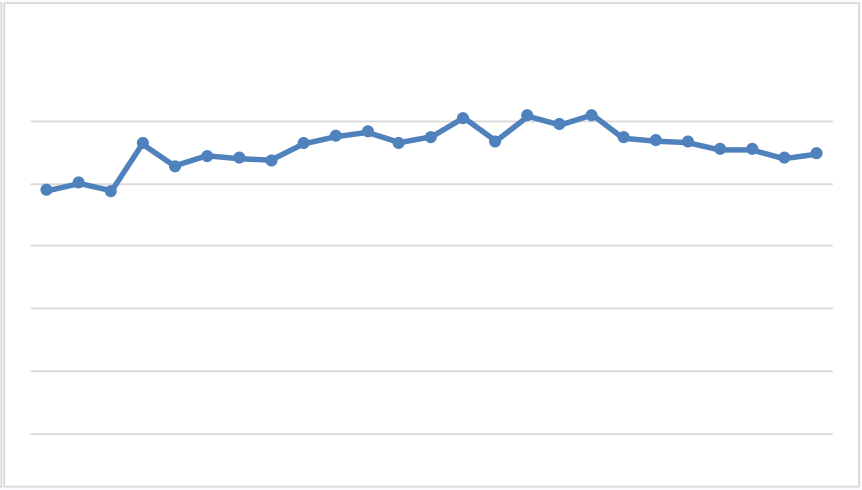
**CMS Metric #30 - Per Capita SUD Spending**
**Statistical Analysis: Interupted Time Series**

| Pre-Intervention | | | | | Post-Intervention | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OUTCOME | time | t | x | tx | OUTCOME | time | t | x | tx |
| $ 305.96 | 201601 | 1 | 0 | 0 | $ 389.55 | 202112 | 26 | 1 | 1 |
| $ 266.04 | 201602 | 2 | 0 | 0 | $ 400.81 | 202201 | 27 | 1 | 2 |
| $ 235.18 | 201603 | 3 | 0 | 0 | $ 388.28 | 202202 | 28 | 1 | 3 |
| $ 203.81 | 201604 | 4 | 0 | 0 | $ 463.58 | 202203 | 29 | 1 | 4 |
| $ 186.11 | 201605 | 5 | 0 | 0 | $ 427.39 | 202204 | 30 | 1 | 5 |
| $ 171.67 | 201606 | 6 | 0 | 0 | $ 443.98 | 202205 | 31 | 1 | 6 |
| $ 175.64 | 201607 | 7 | 0 | 0 | $ 441.19 | 202206 | 32 | 1 | 7 |
| $ 194.12 | 201608 | 8 | 0 | 0 | $ 436.59 | 202207 | 33 | 1 | 8 |
| $ 190.89 | 201609 | 9 | 0 | 0 | $ 463.47 | 202208 | 34 | 1 | 9 |
| $ 180.10 | 201610 | 10 | 0 | 0 | $ 475.35 | 202209 | 35 | 1 | 10 |
| $ 172.82 | 201611 | 11 | 0 | 0 | $ 482.27 | 202210 | 36 | 1 | 11 |
| $ 180.12 | 201612 | 12 | 0 | 0 | $ 465.20 | 202211 | 37 | 1 | 12 |
| $ 166.16 | 201701 | 13 | 0 | 0 | $ 474.84 | 202212 | 38 | 1 | 13 |
| $ 159.77 | 201702 | 14 | 0 | 0 | $ 504.51 | 202301 | 39 | 1 | 14 |
| $ 200.05 | 201703 | 15 | 0 | 0 | $ 467.93 | 202302 | 40 | 1 | 15 |
| $ 244.40 | 201704 | 16 | 0 | 0 | $ 508.91 | 202303 | 41 | 1 | 16 |
| $ 264.82 | 201705 | 17 | 0 | 0 | $ 494.80 | 202304 | 42 | 1 | 17 |
| $ 254.97 | 201706 | 18 | 0 | 0 | $ 510.05 | 202305 | 43 | 1 | 18 |
| $ 280.02 | 201707 | 19 | 0 | 0 | $ 473.96 | 202306 | 44 | 1 | 19 |
| $ 267.47 | 201708 | 20 | 0 | 0 | $ 468.98 | 202307 | 45 | 1 | 20 |
| $ 221.32 | 201709 | 21 | 0 | 0 | $ 466.26 | 202308 | 46 | 1 | 21 |
| $ 221.75 | 201710 | 22 | 0 | 0 | $ 454.75 | 202309 | 47 | 1 | 22 |
| $ 201.77 | 201711 | 23 | 0 | 0 | $ 454.26 | 202310 | 48 | 1 | 23 |
| $ 218.40 | 201712 | 24 | 0 | 0 | $ 440.48 | 202311 | 49 | 1 | 24 |
| $ 199.77 | 201801 | 25 | 0 | 0 | $ 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 |



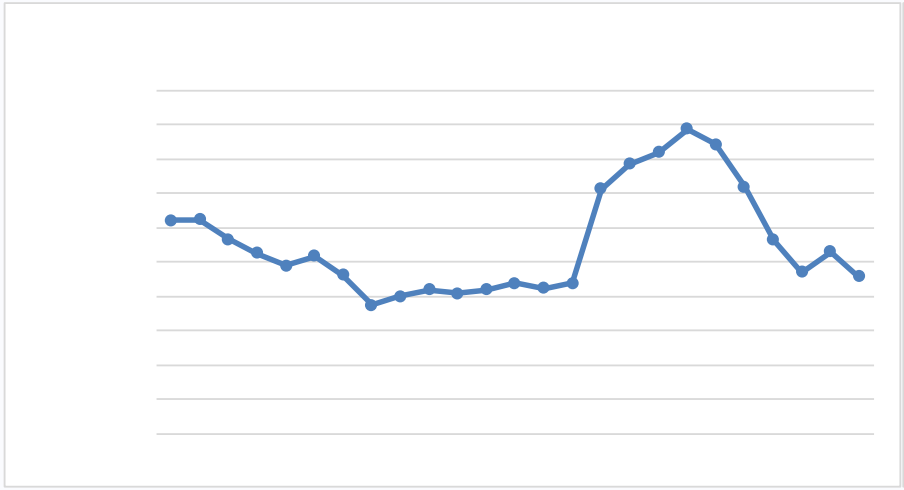


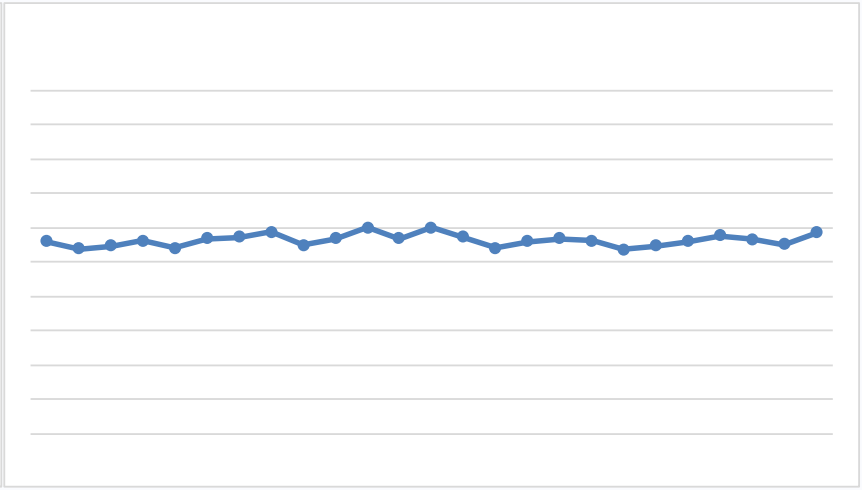
**CMS Metric #31 - Per Capita SUD Spending Within IMDs**
**Statistical Analysis: Interupted Time Series**

| Pre-Intervention | | | | | Post-Intervention | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OUTCOME | time | t | x | tx | OUTCOME | time | t | x | tx |
| $ 6,213.40 | 201601 | 1 | 0 | 0 | $ 5,594.70 | 202112 | 26 | 1 | 1 |
| $ 6,222.67 | 201602 | 2 | 0 | 0 | $ 5,377.08 | 202201 | 27 | 1 | 2 |
| $ 5,645.33 | 201603 | 3 | 0 | 0 | $ 5,449.70 | 202202 | 28 | 1 | 3 |
| $ 5,251.67 | 201604 | 4 | 0 | 0 | $ 5,609.56 | 202203 | 29 | 1 | 4 |
| $ 4,890.96 | 201605 | 5 | 0 | 0 | $ 5,395.30 | 202204 | 30 | 1 | 5 |
| $ 5,168.90 | 201606 | 6 | 0 | 0 | $ 5,682.88 | 202205 | 31 | 1 | 6 |
| $ 4,608.43 | 201607 | 7 | 0 | 0 | $ 5,716.22 | 202206 | 32 | 1 | 7 |
| $ 3,745.79 | 201608 | 8 | 0 | 0 | $ 5,872.81 | 202207 | 33 | 1 | 8 |
| $ 3,986.24 | 201609 | 9 | 0 | 0 | $ 5,480.34 | 202208 | 34 | 1 | 9 |
| $ 4,191.26 | 201610 | 10 | 0 | 0 | $ 5,665.70 | 202209 | 35 | 1 | 10 |
| $ 4,083.07 | 201611 | 11 | 0 | 0 | $ 5,989.16 | 202210 | 36 | 1 | 11 |
| $ 4,180.72 | 201612 | 12 | 0 | 0 | $ 5,682.61 | 202211 | 37 | 1 | 12 |
| $ 4,374.16 | 201701 | 13 | 0 | 0 | $ 5,984.79 | 202212 | 38 | 1 | 13 |
| $ 4,236.04 | 201702 | 14 | 0 | 0 | $ 5,722.16 | 202301 | 39 | 1 | 14 |
| $ 4,372.80 | 201703 | 15 | 0 | 0 | $ 5,398.48 | 202302 | 40 | 1 | 15 |
| $ 7,116.05 | 201704 | 16 | 0 | 0 | $ 5,579.42 | 202303 | 41 | 1 | 16 |
| $ 7,834.73 | 201705 | 17 | 0 | 0 | $ 5,679.93 | 202304 | 42 | 1 | 17 |
| $ 8,179.32 | 201706 | 18 | 0 | 0 | $ 5,613.14 | 202305 | 43 | 1 | 18 |
| $ 8,857.84 | 201707 | 19 | 0 | 0 | $ 5,358.57 | 202306 | 44 | 1 | 19 |
| $ 8,419.22 | 201708 | 20 | 0 | 0 | $ 5,467.08 | 202307 | 45 | 1 | 20 |
| $ 7,186.00 | 201709 | 21 | 0 | 0 | $ 5,597.12 | 202308 | 46 | 1 | 21 |
| $ 5,630.39 | 201710 | 22 | 0 | 0 | $ 5,766.45 | 202309 | 47 | 1 | 22 |
| $ 4,683.38 | 201711 | 23 | 0 | 0 | $ 5,650.68 | 202310 | 48 | 1 | 23 |
| $ 5,284.08 | 201712 | 24 | 0 | 0 | $ 5,509.84 | 202311 | 49 | 1 | 24 |
| $ 4,560.80 | 201801 | 25 | 0 | 0 | $ 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 |



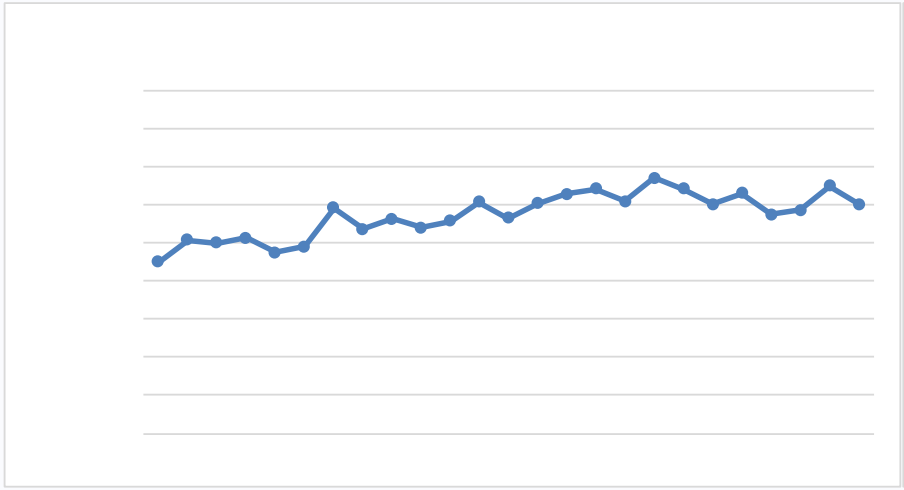


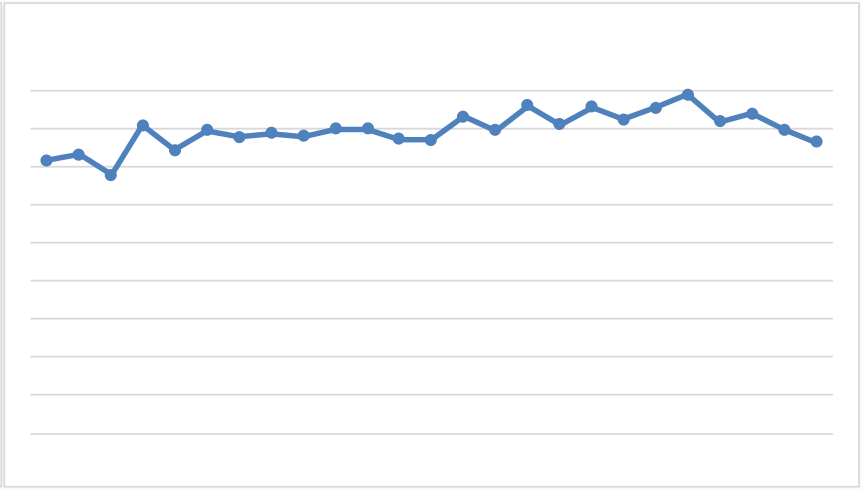
**HMA-Burns Metric #1 - Per Capita Total Spending for Individuals with SUD**
**Statistical Analysis: Interupted Time Series**

| Pre-Intervention | | | | | Post-Intervention | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OUTCOME | time | t | x | tx | OUTCOME | time | t | x | tx |
| $ 900.09 | 201802 | 1 | 0 | 0 | $ 1,429.66 | 202112 | 26 | 1 | 1 |
| $ 1,012.75 | 201803 | 2 | 0 | 0 | $ 1,463.08 | 202201 | 27 | 1 | 2 |
| $ 996.71 | 201804 | 3 | 0 | 0 | $ 1,355.65 | 202202 | 28 | 1 | 3 |
| $ 1,024.59 | 201805 | 4 | 0 | 0 | $ 1,613.50 | 202203 | 29 | 1 | 4 |
| $ 949.95 | 201806 | 5 | 0 | 0 | $ 1,484.80 | 202204 | 30 | 1 | 5 |
| $ 979.82 | 201807 | 6 | 0 | 0 | $ 1,588.46 | 202205 | 31 | 1 | 6 |
| $ 1,182.26 | 201808 | 7 | 0 | 0 | $ 1,552.84 | 202206 | 32 | 1 | 7 |
| $ 1,069.12 | 201809 | 8 | 0 | 0 | $ 1,573.28 | 202207 | 33 | 1 | 8 |
| $ 1,123.11 | 201810 | 9 | 0 | 0 | $ 1,558.00 | 202208 | 34 | 1 | 9 |
| $ 1,079.22 | 201811 | 10 | 0 | 0 | $ 1,594.12 | 202209 | 35 | 1 | 10 |
| $ 1,113.14 | 201812 | 11 | 0 | 0 | $ 1,595.15 | 202210 | 36 | 1 | 11 |
| $ 1,211.67 | 201901 | 12 | 0 | 0 | $ 1,542.03 | 202211 | 37 | 1 | 12 |
| $ 1,127.72 | 201902 | 13 | 0 | 0 | $ 1,537.95 | 202212 | 38 | 1 | 13 |
| $ 1,204.06 | 201903 | 14 | 0 | 0 | $ 1,658.89 | 202301 | 39 | 1 | 14 |
| $ 1,254.75 | 201904 | 15 | 0 | 0 | $ 1,587.36 | 202302 | 40 | 1 | 15 |
| $ 1,281.40 | 201905 | 16 | 0 | 0 | $ 1,718.69 | 202303 | 41 | 1 | 16 |
| $ 1,214.36 | 201906 | 17 | 0 | 0 | $ 1,617.30 | 202304 | 42 | 1 | 17 |
| $ 1,339.38 | 201907 | 18 | 0 | 0 | $ 1,708.85 | 202305 | 43 | 1 | 18 |
| $ 1,282.48 | 201908 | 19 | 0 | 0 | $ 1,643.82 | 202306 | 44 | 1 | 19 |
| $ 1,200.16 | 201909 | 20 | 0 | 0 | $ 1,707.86 | 202307 | 45 | 1 | 20 |
| $ 1,258.41 | 201910 | 21 | 0 | 0 | $ 1,776.91 | 202308 | 46 | 1 | 21 |
| $ 1,149.07 | 201911 | 22 | 0 | 0 | $ 1,635.26 | 202309 | 47 | 1 | 22 |
| $ 1,170.51 | 201912 | 23 | 0 | 0 | $ 1,676.05 | 202310 | 48 | 1 | 23 |
| $ 1,297.32 | 202001 | 24 | 0 | 0 | $ 1,592.06 | 202311 | 49 | 1 | 24 |
| $ 1,200.42 | 202002 | 25 | 0 | 0 | $ 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 |



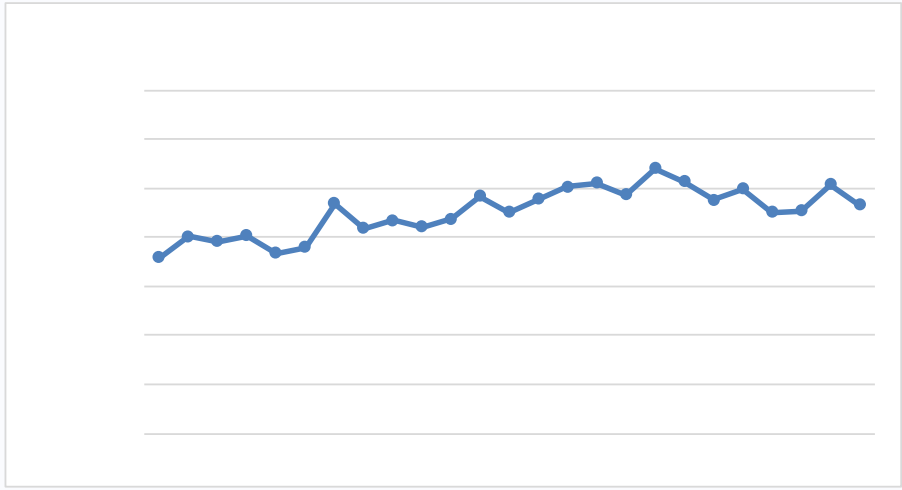


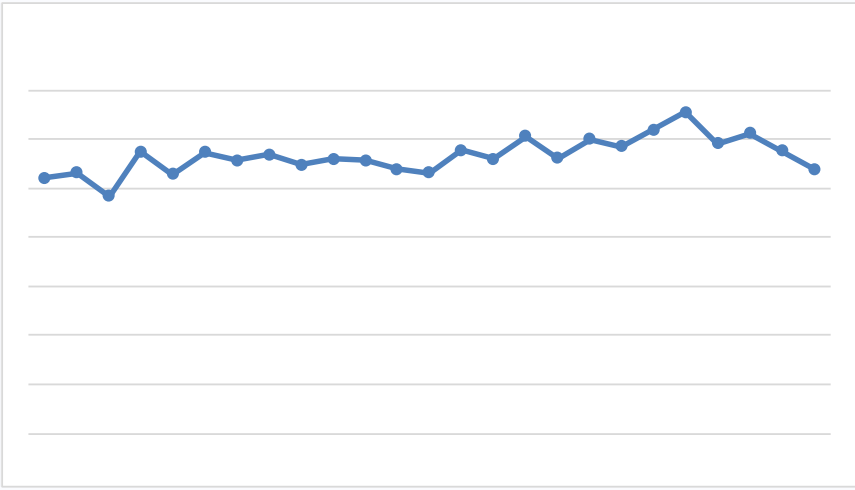
**HMA-Burns Metric #2 - Per Capita Total Spending Excluding SUD Spending for Individuals with SUD**
**Statistical Analysis: Interupted Time Series**

| Pre-Intervention | | | | | Post-Intervention | | | | |
|---|---|---|---|---|---|---|---|---|---|
| OUTCOME | time | t | x | tx | OUTCOME | time | t | x | tx |
| $ 717.11 | 201802 | 1 | 0 | 0 | $ 1,040.11 | 202112 | 26 | 1 | 1 |
| $ 803.00 | 201803 | 2 | 0 | 0 | $ 1,062.27 | 202201 | 27 | 1 | 2 |
| $ 781.23 | 201804 | 3 | 0 | 0 | $ 967.37 | 202202 | 28 | 1 | 3 |
| $ 806.02 | 201805 | 4 | 0 | 0 | $ 1,149.92 | 202203 | 29 | 1 | 4 |
| $ 735.12 | 201806 | 5 | 0 | 0 | $ 1,057.41 | 202204 | 30 | 1 | 5 |
| $ 757.01 | 201807 | 6 | 0 | 0 | $ 1,144.47 | 202205 | 31 | 1 | 6 |
| $ 935.92 | 201808 | 7 | 0 | 0 | $ 1,111.64 | 202206 | 32 | 1 | 7 |
| $ 835.59 | 201809 | 8 | 0 | 0 | $ 1,136.70 | 202207 | 33 | 1 | 8 |
| $ 867.34 | 201810 | 9 | 0 | 0 | $ 1,094.53 | 202208 | 34 | 1 | 9 |
| $ 840.49 | 201811 | 10 | 0 | 0 | $ 1,118.78 | 202209 | 35 | 1 | 10 |
| $ 875.95 | 201812 | 11 | 0 | 0 | $ 1,112.88 | 202210 | 36 | 1 | 11 |
| $ 967.55 | 201901 | 12 | 0 | 0 | $ 1,076.83 | 202211 | 37 | 1 | 12 |
| $ 901.56 | 201902 | 13 | 0 | 0 | $ 1,063.11 | 202212 | 38 | 1 | 13 |
| $ 956.18 | 201903 | 14 | 0 | 0 | $ 1,154.38 | 202301 | 39 | 1 | 14 |
| $ 1,006.92 | 201904 | 15 | 0 | 0 | $ 1,119.43 | 202302 | 40 | 1 | 15 |
| $ 1,019.77 | 201905 | 16 | 0 | 0 | $ 1,209.78 | 202303 | 41 | 1 | 16 |
| $ 971.98 | 201906 | 17 | 0 | 0 | $ 1,122.50 | 202304 | 42 | 1 | 17 |
| $ 1,079.19 | 201907 | 18 | 0 | 0 | $ 1,198.80 | 202305 | 43 | 1 | 18 |
| $ 1,026.52 | 201908 | 19 | 0 | 0 | $ 1,169.86 | 202306 | 44 | 1 | 19 |
| $ 950.71 | 201909 | 20 | 0 | 0 | $ 1,238.88 | 202307 | 45 | 1 | 20 |
| $ 996.71 | 201910 | 21 | 0 | 0 | $ 1,310.64 | 202308 | 46 | 1 | 21 |
| $ 902.46 | 201911 | 22 | 0 | 0 | $ 1,180.51 | 202309 | 47 | 1 | 22 |
| $ 906.43 | 201912 | 23 | 0 | 0 | $ 1,221.79 | 202310 | 48 | 1 | 23 |
| $ 1,013.85 | 202001 | 24 | 0 | 0 | $ 1,151.58 | 202311 | 49 | 1 | 24 |
| $ 931.57 | 202002 | 25 | 0 | 0 | $ 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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 10947<br>47.32 | 23666<br>44.70 | 34613 |
| Yes | 12185<br>52.68 | 29281<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 9300<br>76.32 | 20283<br>69.27 | 29583 |
| Yes | 2885<br>23.68 | 8998<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 5708<br>38.02 | 10891<br>33.11 | 16599 |
| Yes | 9307<br>61.98 | 22000<br>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<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 5038<br>54.13 | 9224<br>41.93 | 14262 |
| Yes | 4269<br>45.87 | 12776<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 14706<br>49.60 | 33117<br>46.25 | 47823 |
| Yes | 14946<br>50.40 | 38490<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 11479<br>76.80 | 25110<br>65.24 | 36589 |
| Yes | 3467<br>23.20 | 13380<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 27117<br>46.50 | 58183<br>43.76 | 85300 |
| Yes | 31205<br>53.50 | 74784<br>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<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 21356<br>68.44 | 45250<br>60.51 | 66606 |
| Yes | 9849<br>31.56 | 29534<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 8502<br>89.97 | 19625<br>86.74 | 28127 |
| Yes | 948<br>10.03 | 2999<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 8029<br>84.96 | 18100<br>80.00 | 26129 |
| Yes | 1421<br>15.04 | 4524<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 59609<br>94.92 | 75947<br>97.05 | 135556 |
| Yes | 3191<br>5.08 | 2308<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 69379<br>98.99 | 97867<br>98.72 | 167246 |
| Yes | 707<br>1.01 | 1264<br>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 | | |
| Frequency<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 61144<br>84.59 | 90935<br>89.45 | 152079 |
| Yes | 11136<br>15.41 | 10721<br>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<br>Col Pct | 2018/2019<br>Pre | 2022/2023<br>Post | Total |
| No | 25707<br>74.48 | 65478<br>77.33 | 91185 |
| Yes | 8808<br>25.52 | 19200<br>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<br>Col Pct | 2016/2017<br>Pre | 2022/2023<br>Post | Total |
| No | 66513<br>82.51 | 86046<br>78.62 | 152559 |
| Yes | 14100<br>17.49 | 23403<br>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 | | |
| Frequency<br>Col Pct | 2016/2017<br>Pre | 2022/2023<br>Post | Total |
| No | 7501<br>10.81 | 23454<br>10.11 | 30955 |
| Yes | 61869<br>89.19 | 208468<br>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 |

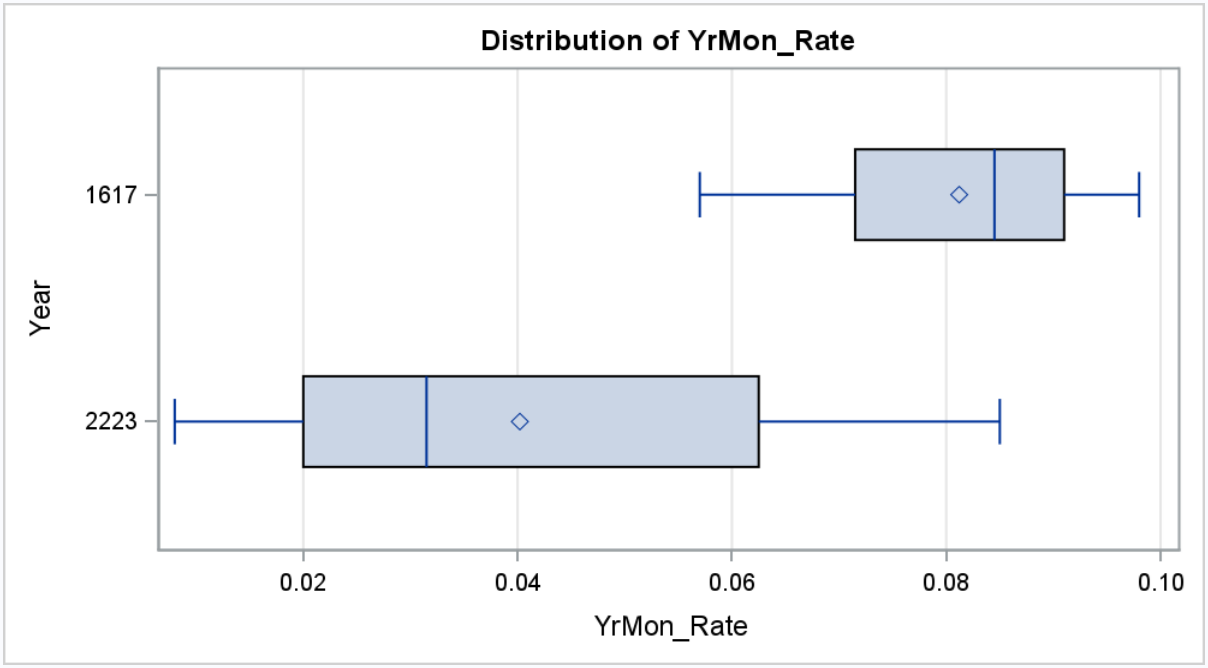
## Metric #27: The TTEST Procedure of Rate of Overdose Deaths

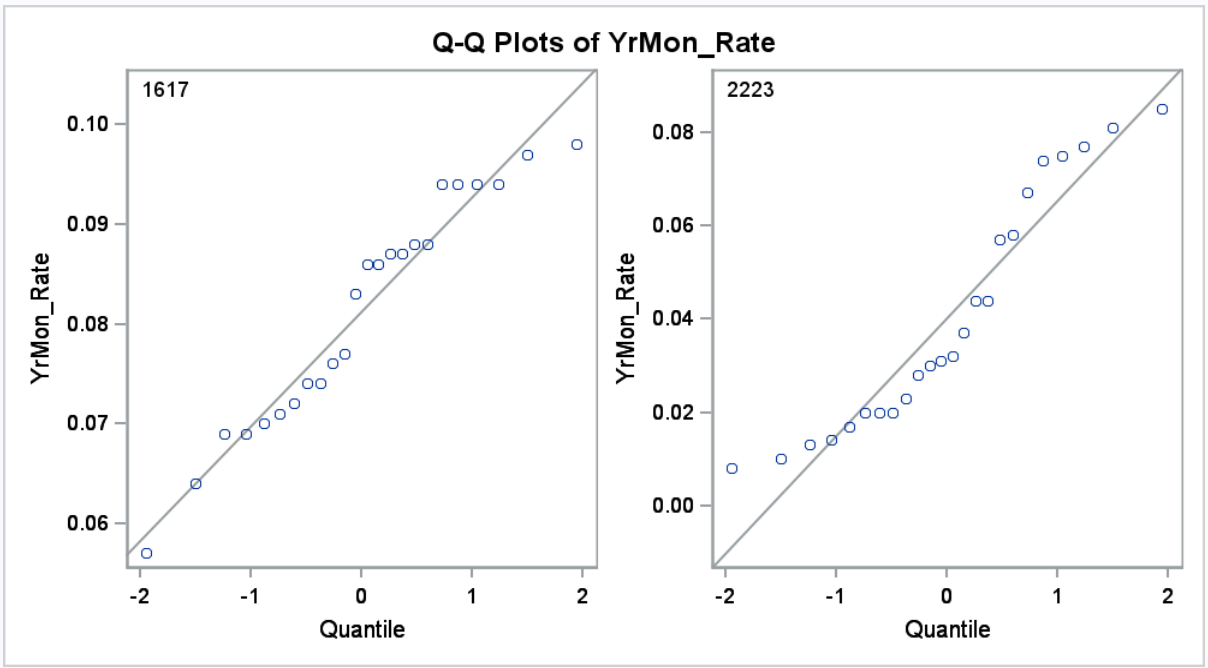
### Variable: YrMon_Rate

| 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 | |
| Satterthwait | 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 | 2,872 |
| 2016 | Feb | 10,606 | 562 | 9,826 | 194 | 8,756 | 1,850 | 166 | 15 | 3,599 | 2,910 |
| 2016 | Mar | 11,491 | 601 | 10,612 | 229 | 9,527 | 1,964 | 189 | 9 | 3,944 | 3,206 |
| 2016 | Apr | 11,659 | 594 | 10,778 | 215 | 9,758 | 1,901 | 193 | 8 | 4,092 | 3,121 |
| 2016 | May | 11,884 | 611 | 10,926 | 274 | 9,848 | 2,036 | 215 | 11 | 4,183 | 3,206 |
| 2016 | Jun | 11,857 | 543 | 11,026 | 223 | 9,948 | 1,909 | 201 | 12 | 4,227 | 3,160 |
| 2016 | Jul | 11,265 | 514 | 10,497 | 189 | 9,399 | 1,866 | 190 | 6 | 3,965 | 3,044 |
| 2016 | Aug | 12,707 | 610 | 11,772 | 250 | 10,665 | 2,042 | 194 | 11 | 4,501 | 3,359 |
| 2016 | Sep | 12,084 | 597 | 11,201 | 234 | 10,130 | 1,954 | 180 | 13 | 4,349 | 3,336 |
| 2016 | Oct | 11,933 | 575 | 11,101 | 217 | 10,116 | 1,817 | 166 | 27 | 4,565 | 3,143 |
| 2016 | Nov | 12,227 | 586 | 11,383 | 229 | 10,373 | 1,854 | 176 | 21 | 4,630 | 3,226 |
| 2016 | Dec | 11,770 | 546 | 10,957 | 227 | 10,014 | 1,756 | 170 | 25 | 4,723 | 3,193 |
| 2017 | Jan | 12,496 | 554 | 11,661 | 236 | 10,617 | 1,879 | 174 | 24 | 4,941 | 3,339 |
| 2017 | Feb | 12,245 | 572 | 11,429 | 207 | 10,475 | 1,770 | 230 | 24 | 4,814 | 3,143 |
| 2017 | Mar | 13,433 | 579 | 12,571 | 549 | 11,522 | 1,911 | 246 | 36 | 5,391 | 3,331 |
| 2017 | Apr | 12,918 | 547 | 12,121 | 208 | 11,170 | 1,748 | 225 | 27 | 5,302 | 3,221 |
| 2017 | May | 13,941 | 599 | 13,034 | 250 | 12,008 | 1,933 | 233 | 30 | 5,648 | 3,306 |
| 2017 | Jun | 13,980 | 570 | 13,077 | 280 | 12,036 | 1,944 | 246 | 42 | 5,747 | 3,372 |
| 2017 | Jul | 13,342 | 512 | 12,527 | 263 | 11,543 | 1,799 | 222 | 31 | 5,735 | 3,184 |
| 2017 | Aug | 15,160 | 574 | 14,237 | 300 | 13,057 | 2,103 | 286 | 24 | 6,509 | 3,727 |
| 2017 | Sep | 14,077 | 548 | 13,212 | 272 | 12,108 | 1,969 | 260 | 18 | 6,169 | 3,495 |
| 2017 | Oct | 14,833 | 569 | 13,902 | 320 | 12,798 | 2,035 | 248 | 21 | 6,715 | 3,702 |
| 2017 | Nov | 14,630 | 562 | 13,719 | 306 | 12,671 | 1,959 | 255 | 23 | 6,685 | 3,673 |
| 2017 | Dec | 14,121 | 537 | 13,246 | 301 | 12,179 | 1,942 | 242 | 20 | 6,466 | 3,556 |

**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 | 3,828 |
| 2018 | Feb | 15,096 | 540 | 14,181 | 324 | 13,127 | 1,969 | 357 | 21 | 7,009 | 3,667 |
| 2018 | Mar | 16,347 | 597 | 15,327 | 359 | 14,199 | 2,148 | 406 | 20 | 7,615 | 3,997 |
| 2018 | Apr | 16,332 | 595 | 15,339 | 333 | 14,286 | 2,046 | 404 | 35 | 7,728 | 3,873 |
| 2018 | May | 16,400 | 580 | 15,407 | 354 | 14,346 | 2,054 | 382 | 23 | 7,811 | 3,957 |
| 2018 | Jun | 15,310 | 534 | 14,374 | 363 | 13,293 | 2,017 | 344 | 20 | 7,320 | 3,700 |
| 2018 | Jul | 15,531 | 522 | 14,591 | 384 | 13,521 | 2,010 | 357 | 20 | 7,450 | 3,728 |
| 2018 | Aug | 16,501 | 559 | 15,493 | 394 | 14,278 | 2,223 | 403 | 34 | 7,834 | 3,973 |
| 2018 | Sep | 15,350 | 571 | 14,399 | 336 | 13,317 | 2,033 | 374 | 26 | 7,455 | 3,597 |
| 2018 | Oct | 16,856 | 581 | 15,829 | 401 | 14,618 | 2,238 | 424 | 29 | 8,222 | 3,937 |
| 2018 | Nov | 16,187 | 573 | 15,194 | 370 | 13,997 | 2,190 | 409 | 22 | 8,063 | 3,752 |
| 2018 | Dec | 15,771 | 548 | 14,843 | 365 | 13,626 | 2,145 | 386 | 18 | 7,914 | 3,668 |
| 2019 | Jan | 16,898 | 555 | 15,911 | 430 | 14,579 | 2,319 | 381 | 22 | 8,383 | 3,864 |
| 2019 | Feb | 17,101 | 578 | 16,123 | 399 | 14,821 | 2,280 | 408 | 17 | 8,523 | 3,864 |
| 2019 | Mar | 17,466 | 595 | 16,416 | 455 | 15,103 | 2,363 | 399 | 16 | 8,631 | 3,965 |
| 2019 | Apr | 18,858 | 606 | 17,790 | 461 | 16,507 | 2,351 | 435 | 17 | 9,772 | 4,030 |
| 2019 | May | 19,665 | 617 | 18,612 | 435 | 17,319 | 2,346 | 429 | 13 | 10,401 | 4,157 |
| 2019 | Jun | 18,784 | 547 | 17,790 | 445 | 16,486 | 2,298 | 450 | 4 | 10,138 | 4,006 |
| 2019 | Jul | 19,341 | 541 | 18,367 | 431 | 17,041 | 2,300 | 479 | 7 | 10,435 | 3,959 |
| 2019 | Aug | 19,803 | 525 | 18,810 | 463 | 17,448 | 2,355 | 494 | 4 | 10,673 | 3,904 |
| 2019 | Sep | 19,439 | 535 | 18,410 | 494 | 17,117 | 2,322 | 480 | 7 | 10,586 | 3,715 |
| 2019 | Oct | 20,876 | 572 | 19,769 | 533 | 18,411 | 2,465 | 498 | 11 | 11,443 | 3,986 |
| 2019 | Nov | 19,748 | 534 | 18,738 | 473 | 17,406 | 2,342 | 461 | 7 | 11,149 | 3,635 |
| 2019 | Dec | 19,975 | 525 | 18,974 | 473 | 17,660 | 2,315 | 485 | 6 | 11,380 | 3,633 |

**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 | 3,885 |
| 2020 | Feb | 22,518 | 540 | 21,426 | 550 | 20,088 | 2,430 | 537 | 13 | 12,931 | 3,751 |
| 2020 | Mar | 23,406 | 576 | 22,349 | 479 | 21,077 | 2,329 | 557 | 11 | 13,876 | 3,856 |
| 2020 | Apr | 23,376 | 513 | 22,450 | 409 | 21,266 | 2,110 | 536 | 14 | 13,949 | 3,228 |
| 2020 | May | 24,555 | 494 | 23,668 | 384 | 22,466 | 2,089 | 616 | 24 | 14,698 | 3,072 |
| 2020 | Jun | 26,540 | 494 | 25,585 | 457 | 24,286 | 2,254 | 718 | 24 | 15,716 | 3,385 |
| 2020 | Jul | 27,269 | 493 | 26,267 | 504 | 24,966 | 2,303 | 781 | 31 | 16,406 | 3,818 |
| 2020 | Aug | 27,732 | 492 | 26,760 | 476 | 25,441 | 2,291 | 827 | 30 | 16,528 | 4,095 |
| 2020 | Sep | 28,536 | 520 | 27,463 | 541 | 26,184 | 2,352 | 894 | 43 | 17,181 | 4,691 |
| 2020 | Oct | 29,479 | 543 | 28,294 | 607 | 26,762 | 2,717 | 931 | 36 | 17,595 | 5,258 |
| 2020 | Nov | 29,301 | 517 | 28,045 | 667 | 26,426 | 2,875 | 990 | 28 | 17,716 | 5,070 |
| 2020 | Dec | 30,277 | 502 | 29,034 | 668 | 27,357 | 2,920 | 1,050 | 31 | 18,289 | 5,291 |
| 2021 | Jan | 31,820 | 532 | 30,477 | 811 | 28,672 | 3,148 | 1,148 | 69 | 19,073 | 5,393 |
| 2021 | Feb | 31,844 | 535 | 30,554 | 755 | 28,740 | 3,104 | 1,226 | 58 | 19,086 | 5,363 |
| 2021 | Mar | 34,053 | 608 | 32,602 | 843 | 30,600 | 3,453 | 1,350 | 93 | 20,035 | 5,872 |
| 2021 | Apr | 32,784 | 568 | 31,426 | 790 | 29,614 | 3,170 | 1,374 | 89 | 19,502 | 5,480 |
| 2021 | May | 32,320 | 527 | 31,038 | 755 | 29,312 | 3,008 | 1,399 | 82 | 19,680 | 4,978 |
| 2021 | Jun | 33,387 | 500 | 32,079 | 808 | 30,305 | 3,082 | 1,486 | 97 | 20,439 | 4,877 |
| 2021 | Jul | 32,271 | 450 | 31,046 | 775 | 29,331 | 2,940 | 1,520 | 101 | 20,162 | 4,476 |
| 2021 | Aug | 32,901 | 466 | 31,637 | 798 | 29,961 | 2,940 | 1,565 | 112 | 20,394 | 4,500 |
| 2021 | Sep | 32,593 | 440 | 31,299 | 854 | 29,526 | 3,067 | 1,587 | 107 | 20,351 | 4,417 |
| 2021 | Oct | 32,278 | 467 | 30,958 | 853 | 29,294 | 2,984 | 1,598 | 102 | 20,337 | 4,461 |
| 2021 | Nov | 32,773 | 469 | 31,431 | 873 | 29,703 | 3,070 | 1,614 | 100 | 20,665 | 4,390 |
| 2021 | Dec | 32,112 | 432 | 30,898 | 782 | 29,215 | 2,897 | 1,618 | 107 | 20,544 | 4,218 |

**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 | 4,289 |
| 2022 | Feb | 33,174 | 492 | 31,855 | 827 | 30,293 | 2,881 | 1,748 | 116 | 21,131 | 4,320 |
| 2022 | Mar | 35,830 | 560 | 34,364 | 906 | 32,736 | 3,094 | 1,874 | 131 | 22,319 | 4,705 |
| 2022 | Apr | 34,706 | 540 | 33,273 | 893 | 31,709 | 2,997 | 1,920 | 108 | 21,858 | 4,603 |
| 2022 | May | 34,389 | 506 | 32,985 | 898 | 31,417 | 2,972 | 1,901 | 110 | 21,628 | 4,494 |
| 2022 | Jun | 34,791 | 516 | 33,377 | 898 | 31,786 | 3,005 | 1,950 | 103 | 22,006 | 4,500 |
| 2022 | Jul | 33,078 | 462 | 31,811 | 805 | 30,296 | 2,782 | 1,577 | 113 | 21,277 | 4,199 |
| 2022 | Aug | 35,848 | 527 | 34,338 | 983 | 32,715 | 3,133 | 1,611 | 118 | 22,576 | 4,644 |
| 2022 | Sep | 34,255 | 511 | 32,851 | 893 | 31,408 | 2,847 | 1,520 | 120 | 21,879 | 4,423 |
| 2022 | Oct | 34,399 | 516 | 33,026 | 857 | 31,555 | 2,844 | 1,452 | 135 | 22,087 | 4,439 |
| 2022 | Nov | 34,823 | 591 | 33,310 | 922 | 31,802 | 3,021 | 1,420 | 144 | 22,320 | 4,407 |
| 2022 | Dec | 34,155 | 540 | 32,769 | 846 | 31,276 | 2,879 | 1,422 | 146 | 22,369 | 4,291 |
| 2023 | Jan | 36,989 | 620 | 35,342 | 1,027 | 33,863 | 3,126 | 1,464 | 149 | 23,615 | 4,618 |
| 2023 | Feb | 36,789 | 633 | 35,158 | 998 | 33,650 | 3,139 | 1,409 | 155 | 23,453 | 4,594 |
| 2023 | Mar | 38,047 | 669 | 36,289 | 1,089 | 34,813 | 3,234 | 1,475 | 134 | 23,945 | 4,938 |
| 2023 | Apr | 36,550 | 659 | 34,957 | 934 | 33,604 | 2,946 | 1,410 | 126 | 23,202 | 4,684 |
| 2023 | May | 37,864 | 652 | 36,142 | 1,070 | 34,684 | 3,180 | 1,465 | 172 | 23,774 | 4,828 |
| 2023 | Jun | 36,536 | 590 | 34,935 | 1,011 | 33,479 | 3,057 | 1,363 | 194 | 23,267 | 4,551 |
| 2023 | Jul | 38,171 | 530 | 36,667 | 974 | 35,282 | 2,889 | 1,393 | 189 | 25,665 | 4,287 |
| 2023 | Aug | 40,111 | 617 | 38,471 | 1,023 | 37,070 | 3,041 | 1,538 | 193 | 26,472 | 4,563 |
| 2023 | Sep | 38,070 | 574 | 36,567 | 929 | 35,284 | 2,786 | 1,422 | 199 | 25,659 | 4,088 |
| 2023 | Oct | 38,466 | 646 | 36,884 | 936 | 35,649 | 2,817 | 1,457 | 240 | 25,543 | 4,310 |
| 2023 | Nov | 37,672 | 621 | 36,133 | 918 | 34,997 | 2,675 | 1,367 | 236 | 25,198 | 4,222 |
| 2023 | Dec | 36,509 | 568 | 35,031 | 910 | 33,909 | 2,600 | 1,323 | 277 | 24,936 | 3,982 |

**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 | 120 |
| 2016 | Feb | 258 | 10 | 244 | 0 | 236 | 22 | 4 | 0 | 134 | 132 |
| 2016 | Mar | 225 | 5 | 217 | 0 | 205 | 20 | 1 | 0 | 131 | 132 |
| 2016 | Apr | 245 | 5 | 238 | 0 | 225 | 20 | 2 | 1 | 118 | 142 |
| 2016 | May | 254 | 2 | 242 | 2 | 231 | 23 | 3 | 0 | 124 | 132 |
| 2016 | Jun | 262 | 9 | 248 | 2 | 234 | 28 | 3 | 0 | 133 | 139 |
| 2016 | Jul | 244 | 12 | 224 | 1 | 226 | 18 | 3 | 0 | 109 | 136 |
| 2016 | Aug | 283 | 7 | 266 | 1 | 255 | 28 | 3 | 0 | 140 | 168 |
| 2016 | Sep | 289 | 6 | 266 | 0 | 267 | 22 | 1 | 0 | 153 | 142 |
| 2016 | Oct | 328 | 4 | 310 | 0 | 301 | 27 | 1 | 0 | 183 | 188 |
| 2016 | Nov | 284 | 4 | 272 | 1 | 263 | 21 | 2 | 2 | 165 | 174 |
| 2016 | Dec | 288 | 2 | 276 | 0 | 268 | 20 | 3 | 2 | 162 | 173 |
| 2017 | Jan | 252 | 0 | 233 | 0 | 234 | 18 | 6 | 0 | 141 | 168 |
| 2017 | Feb | 265 | 1 | 255 | 0 | 249 | 16 | 11 | 1 | 152 | 156 |
| 2017 | Mar | 329 | 5 | 322 | 0 | 303 | 26 | 10 | 1 | 192 | 188 |
| 2017 | Apr | 329 | 4 | 324 | 0 | 298 | 31 | 5 | 0 | 182 | 175 |
| 2017 | May | 349 | 3 | 343 | 0 | 316 | 33 | 12 | 0 | 197 | 182 |
| 2017 | Jun | 364 | 2 | 357 | 2 | 341 | 23 | 10 | 1 | 188 | 180 |
| 2017 | Jul | 346 | 1 | 343 | 1 | 327 | 19 | 9 | 0 | 173 | 156 |
| 2017 | Aug | 399 | 1 | 393 | 2 | 378 | 21 | 9 | 2 | 205 | 172 |
| 2017 | Sep | 366 | 2 | 362 | 2 | 344 | 22 | 6 | 1 | 192 | 188 |
| 2017 | Oct | 374 | 1 | 369 | 2 | 352 | 22 | 7 | 0 | 199 | 186 |
| 2017 | Nov | 334 | 5 | 327 | 1 | 317 | 17 | 7 | 1 | 177 | 153 |
| 2017 | Dec | 322 | 3 | 315 | 1 | 300 | 22 | 7 | 0 | 149 | 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 | 173 |
| 2018 | Feb | 376 | 4 | 367 | 1 | 361 | 15 | 7 | 0 | 192 | 173 |
| 2018 | Mar | 360 | 6 | 352 | 1 | 344 | 16 | 9 | 0 | 192 | 185 |
| 2018 | Apr | 369 | 7 | 353 | 1 | 356 | 13 | 10 | 0 | 192 | 173 |
| 2018 | May | 356 | 8 | 345 | 0 | 341 | 15 | 8 | 0 | 172 | 167 |
| 2018 | Jun | 361 | 5 | 354 | 0 | 347 | 14 | 4 | 0 | 173 | 170 |
| 2018 | Jul | 352 | 4 | 348 | 0 | 339 | 13 | 5 | 1 | 158 | 159 |
| 2018 | Aug | 354 | 2 | 351 | 0 | 339 | 15 | 6 | 0 | 150 | 161 |
| 2018 | Sep | 302 | 2 | 299 | 0 | 286 | 16 | 3 | 0 | 134 | 136 |
| 2018 | Oct | 357 | 7 | 346 | 1 | 341 | 16 | 5 | 1 | 163 | 141 |
| 2018 | Nov | 368 | 4 | 360 | 1 | 346 | 22 | 7 | 0 | 161 | 150 |
| 2018 | Dec | 372 | 3 | 367 | 1 | 352 | 20 | 5 | 1 | 172 | 127 |
| 2019 | Jan | 330 | 1 | 327 | 1 | 315 | 15 | 6 | 1 | 151 | 123 |
| 2019 | Feb | 321 | 3 | 317 | 0 | 311 | 10 | 12 | 1 | 149 | 124 |
| 2019 | Mar | 353 | 4 | 348 | 1 | 340 | 13 | 10 | 1 | 170 | 139 |
| 2019 | Apr | 336 | 2 | 333 | 1 | 320 | 16 | 10 | 0 | 161 | 156 |
| 2019 | May | 384 | 2 | 382 | 0 | 368 | 16 | 15 | 0 | 192 | 170 |
| 2019 | Jun | 369 | 17 | 352 | 0 | 353 | 16 | 9 | 0 | 188 | 170 |
| 2019 | Jul | 364 | 1 | 363 | 0 | 356 | 8 | 9 | 0 | 213 | 54 |
| 2019 | Aug | 388 | 3 | 385 | 0 | 372 | 16 | 11 | 0 | 215 | 59 |
| 2019 | Sep | 387 | 7 | 379 | 1 | 378 | 9 | 13 | 1 | 180 | 52 |
| 2019 | Oct | 457 | 7 | 450 | 0 | 449 | 8 | 14 | 0 | 219 | 57 |
| 2019 | Nov | 428 | 7 | 420 | 1 | 418 | 10 | 10 | 0 | 206 | 49 |
| 2019 | Dec | 474 | 14 | 459 | 1 | 465 | 9 | 12 | 0 | 215 | 51 |

**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 | 54 |
| 2020 | Feb | 536 | 15 | 517 | 3 | 522 | 14 | 11 | 1 | 216 | 56 |
| 2020 | Mar | 563 | 9 | 552 | 2 | 554 | 9 | 12 | 0 | 228 | 56 |
| 2020 | Apr | 347 | 5 | 340 | 2 | 341 | 6 | 8 | 1 | 130 | 49 |
| 2020 | May | 449 | 6 | 441 | 2 | 444 | 5 | 9 | 1 | 184 | 58 |
| 2020 | Jun | 512 | 9 | 502 | 1 | 504 | 8 | 13 | 1 | 207 | 64 |
| 2020 | Jul | 589 | 14 | 573 | 2 | 578 | 11 | 19 | 1 | 244 | 74 |
| 2020 | Aug | 656 | 20 | 633 | 3 | 640 | 16 | 21 | 2 | 274 | 96 |
| 2020 | Sep | 711 | 20 | 688 | 3 | 689 | 22 | 25 | 1 | 313 | 98 |
| 2020 | Oct | 735 | 16 | 713 | 4 | 713 | 22 | 25 | 1 | 327 | 102 |
| 2020 | Nov | 736 | 20 | 711 | 4 | 706 | 30 | 28 | 2 | 320 | 115 |
| 2020 | Dec | 782 | 17 | 757 | 6 | 750 | 32 | 21 | 3 | 341 | 118 |
| 2021 | Jan | 743 | 15 | 724 | 4 | 711 | 32 | 19 | 4 | 331 | 108 |
| 2021 | Feb | 764 | 17 | 745 | 2 | 742 | 22 | 31 | 8 | 322 | 99 |
| 2021 | Mar | 902 | 15 | 885 | 2 | 868 | 34 | 43 | 13 | 349 | 129 |
| 2021 | Apr | 971 | 17 | 952 | 2 | 936 | 35 | 52 | 12 | 391 | 124 |
| 2021 | May | 1,056 | 15 | 1,038 | 3 | 1,019 | 37 | 60 | 13 | 426 | 129 |
| 2021 | Jun | 1,110 | 20 | 1,088 | 2 | 1,072 | 38 | 66 | 9 | 433 | 126 |
| 2021 | Jul | 1,116 | 24 | 1,090 | 2 | 1,082 | 34 | 61 | 12 | 442 | 150 |
| 2021 | Aug | 1,155 | 19 | 1,133 | 3 | 1,119 | 36 | 56 | 13 | 441 | 135 |
| 2021 | Sep | 1,080 | 18 | 1,060 | 2 | 1,054 | 26 | 54 | 10 | 413 | 127 |
| 2021 | Oct | 1,075 | 15 | 1,059 | 1 | 1,046 | 29 | 61 | 13 | 390 | 146 |
| 2021 | Nov | 1,116 | 18 | 1,096 | 2 | 1,082 | 34 | 60 | 5 | 429 | 143 |
| 2021 | Dec | 1,107 | 20 | 1,083 | 4 | 1,083 | 24 | 44 | 2 | 447 | 146 |

**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 | 138 |
| 2022 | Feb | 1,034 | 15 | 1,012 | 7 | 1,008 | 26 | 53 | 8 | 436 | 124 |
| 2022 | Mar | 1,154 | 20 | 1,126 | 8 | 1,128 | 26 | 76 | 10 | 488 | 161 |
| 2022 | Apr | 1,134 | 25 | 1,107 | 2 | 1,105 | 29 | 66 | 12 | 484 | 154 |
| 2022 | May | 1,261 | 28 | 1,228 | 5 | 1,228 | 33 | 66 | 12 | 531 | 139 |
| 2022 | Jun | 1,230 | 20 | 1,205 | 5 | 1,198 | 32 | 71 | 13 | 520 | 148 |
| 2022 | Jul | 1,198 | 18 | 1,175 | 5 | 1,168 | 30 | 55 | 13 | 502 | 122 |
| 2022 | Aug | 1,336 | 15 | 1,315 | 6 | 1,311 | 25 | 53 | 13 | 575 | 148 |
| 2022 | Sep | 1,292 | 10 | 1,275 | 7 | 1,267 | 25 | 52 | 10 | 534 | 169 |
| 2022 | Oct | 1,352 | 18 | 1,326 | 8 | 1,322 | 30 | 49 | 14 | 554 | 163 |
| 2022 | Nov | 1,372 | 20 | 1,344 | 8 | 1,342 | 30 | 54 | 12 | 550 | 156 |
| 2022 | Dec | 1,353 | 28 | 1,320 | 5 | 1,329 | 24 | 49 | 10 | 539 | 139 |
| 2023 | Jan | 1,343 | 22 | 1,315 | 6 | 1,316 | 27 | 52 | 9 | 564 | 127 |
| 2023 | Feb | 1,409 | 36 | 1,363 | 10 | 1,379 | 30 | 46 | 6 | 585 | 150 |
| 2023 | Mar | 1,439 | 38 | 1,390 | 11 | 1,403 | 36 | 53 | 9 | 602 | 184 |
| 2023 | Apr | 1,457 | 48 | 1,401 | 8 | 1,425 | 32 | 63 | 15 | 582 | 168 |
| 2023 | May | 1,531 | 38 | 1,485 | 8 | 1,490 | 41 | 56 | 18 | 621 | 178 |
| 2023 | Jun | 1,380 | 41 | 1,336 | 3 | 1,349 | 31 | 40 | 22 | 565 | 140 |
| 2023 | Jul | 1,306 | 31 | 1,268 | 7 | 1,272 | 34 | 38 | 21 | 548 | 129 |
| 2023 | Aug | 1,373 | 36 | 1,329 | 8 | 1,338 | 35 | 42 | 23 | 560 | 140 |
| 2023 | Sep | 1,293 | 29 | 1,257 | 7 | 1,268 | 25 | 44 | 16 | 518 | 145 |
| 2023 | Oct | 1,389 | 32 | 1,349 | 8 | 1,360 | 29 | 39 | 14 | 559 | 131 |
| 2023 | Nov | 1,297 | 30 | 1,262 | 5 | 1,273 | 24 | 38 | 15 | 557 | 121 |
| 2023 | Dec | 1,207 | 31 | 1,172 | 4 | 1,180 | 27 | 40 | 15 | 510 | 121 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2016 | Jan | 945 | 10 | 859 | 36 | 842 | 103 | 5 | 2 | 321 | 47 |
| 2016 | Feb | 798 | 8 | 706 | 44 | 708 | 90 | 6 | 0 | 261 | 45 |
| 2016 | Mar | 793 | 13 | 715 | 39 | 706 | 87 | 5 | 0 | 282 | 46 |
| 2016 | Apr | 727 | 10 | 672 | 32 | 636 | 91 | 5 | 0 | 235 | 35 |
| 2016 | May | 726 | 10 | 665 | 45 | 614 | 112 | 4 | 1 | 227 | 50 |
| 2016 | Jun | 726 | 10 | 674 | 35 | 629 | 97 | 4 | 1 | 199 | 49 |
| 2016 | Jul | 896 | 14 | 829 | 39 | 796 | 100 | 5 | 0 | 290 | 48 |
| 2016 | Aug | 1,110 | 9 | 1,064 | 34 | 1,022 | 88 | 6 | 2 | 495 | 75 |
| 2016 | Sep | 1,163 | 7 | 1,112 | 31 | 1,077 | 86 | 6 | 1 | 509 | 50 |
| 2016 | Oct | 1,143 | 11 | 1,068 | 28 | 1,048 | 95 | 2 | 2 | 504 | 55 |
| 2016 | Nov | 1,108 | 6 | 1,036 | 29 | 1,027 | 81 | 4 | 3 | 487 | 56 |
| 2016 | Dec | 1,157 | 5 | 1,088 | 31 | 1,070 | 87 | 2 | 5 | 512 | 66 |
| 2017 | Jan | 959 | 7 | 893 | 27 | 878 | 81 | 3 | 3 | 464 | 56 |
| 2017 | Feb | 977 | 6 | 926 | 27 | 903 | 74 | 6 | 1 | 459 | 40 |
| 2017 | Mar | 1,168 | 5 | 1,119 | 31 | 1,087 | 81 | 6 | 2 | 563 | 67 |
| 2017 | Apr | 1,031 | 5 | 984 | 32 | 939 | 92 | 36 | 1 | 502 | 44 |
| 2017 | May | 1,050 | 7 | 987 | 34 | 963 | 87 | 24 | 4 | 529 | 56 |
| 2017 | Jun | 1,033 | 6 | 983 | 35 | 957 | 76 | 33 | 3 | 502 | 60 |
| 2017 | Jul | 1,122 | 2 | 1,061 | 37 | 1,034 | 88 | 23 | 1 | 555 | 52 |
| 2017 | Aug | 1,087 | 4 | 1,030 | 32 | 994 | 93 | 21 | 2 | 549 | 63 |
| 2017 | Sep | 1,022 | 5 | 967 | 29 | 948 | 74 | 22 | 2 | 522 | 72 |
| 2017 | Oct | 950 | 3 | 907 | 27 | 875 | 75 | 15 | 3 | 470 | 51 |
| 2017 | Nov | 877 | 7 | 835 | 30 | 803 | 74 | 18 | 0 | 470 | 49 |
| 2017 | Dec | 894 | 4 | 851 | 27 | 821 | 73 | 29 | 2 | 460 | 59 |

**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 | 65 |
| 2018 | Feb | 824 | 8 | 789 | 24 | 747 | 77 | 30 | 2 | 421 | 47 |
| 2018 | Mar | 1,046 | 4 | 994 | 37 | 958 | 88 | 42 | 6 | 474 | 68 |
| 2018 | Apr | 1,126 | 9 | 1,068 | 32 | 1,044 | 82 | 38 | 4 | 546 | 56 |
| 2018 | May | 1,103 | 8 | 1,040 | 34 | 1,022 | 81 | 25 | 4 | 490 | 70 |
| 2018 | Jun | 1,075 | 4 | 1,029 | 28 | 1,003 | 72 | 29 | 2 | 516 | 60 |
| 2018 | Jul | 1,075 | 8 | 1,018 | 37 | 1,002 | 73 | 26 | 2 | 495 | 92 |
| 2018 | Aug | 1,128 | 5 | 1,075 | 38 | 1,043 | 85 | 32 | 3 | 508 | 81 |
| 2018 | Sep | 1,067 | 3 | 1,015 | 43 | 975 | 92 | 31 | 2 | 460 | 71 |
| 2018 | Oct | 1,199 | 3 | 1,142 | 37 | 1,116 | 83 | 17 | 4 | 550 | 88 |
| 2018 | Nov | 1,154 | 9 | 1,082 | 42 | 1,060 | 94 | 14 | 3 | 534 | 80 |
| 2018 | Dec | 1,094 | 7 | 1,044 | 39 | 1,019 | 75 | 10 | 1 | 499 | 77 |
| 2019 | Jan | 1,214 | 7 | 1,167 | 37 | 1,130 | 84 | 6 | 2 | 560 | 89 |
| 2019 | Feb | 1,119 | 6 | 1,065 | 47 | 1,024 | 95 | 5 | 2 | 494 | 66 |
| 2019 | Mar | 1,242 | 4 | 1,181 | 56 | 1,130 | 112 | 8 | 2 | 524 | 87 |
| 2019 | Apr | 1,203 | 6 | 1,139 | 56 | 1,094 | 109 | 16 | 2 | 505 | 94 |
| 2019 | May | 1,229 | 10 | 1,165 | 53 | 1,122 | 107 | 7 | 2 | 519 | 90 |
| 2019 | Jun | 1,193 | 7 | 1,128 | 58 | 1,088 | 105 | 17 | 0 | 492 | 100 |
| 2019 | Jul | 1,284 | 8 | 1,222 | 53 | 1,189 | 95 | 22 | 0 | 567 | 103 |
| 2019 | Aug | 1,290 | 3 | 1,230 | 55 | 1,198 | 92 | 23 | 1 | 553 | 90 |
| 2019 | Sep | 1,316 | 7 | 1,248 | 60 | 1,220 | 96 | 15 | 0 | 553 | 91 |
| 2019 | Oct | 1,344 | 6 | 1,283 | 55 | 1,241 | 103 | 31 | 1 | 566 | 83 |
| 2019 | Nov | 1,324 | 4 | 1,269 | 50 | 1,229 | 95 | 24 | 1 | 562 | 93 |
| 2019 | Dec | 1,440 | 2 | 1,390 | 47 | 1,341 | 99 | 27 | 0 | 626 | 114 |

**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 | 123 |
| 2020 | Feb | 1,482 | 1 | 1,431 | 50 | 1,378 | 104 | 23 | 1 | 673 | 122 |
| 2020 | Mar | 1,532 | 4 | 1,476 | 51 | 1,421 | 111 | 37 | 2 | 719 | 133 |
| 2020 | Apr | 1,373 | 8 | 1,315 | 50 | 1,280 | 93 | 32 | 2 | 638 | 107 |
| 2020 | May | 1,766 | 6 | 1,713 | 47 | 1,672 | 94 | 40 | 1 | 849 | 118 |
| 2020 | Jun | 1,992 | 3 | 1,927 | 61 | 1,873 | 119 | 44 | 2 | 1,004 | 117 |
| 2020 | Jul | 2,091 | 7 | 2,026 | 56 | 1,977 | 114 | 39 | 4 | 1,025 | 138 |
| 2020 | Aug | 2,057 | 5 | 1,995 | 57 | 1,919 | 138 | 47 | 2 | 985 | 180 |
| 2020 | Sep | 2,065 | 5 | 2,003 | 57 | 1,953 | 112 | 41 | 4 | 1,011 | 178 |
| 2020 | Oct | 2,278 | 7 | 2,215 | 53 | 2,149 | 129 | 57 | 5 | 1,138 | 176 |
| 2020 | Nov | 2,194 | 7 | 2,123 | 61 | 2,057 | 137 | 46 | 2 | 1,094 | 185 |
| 2020 | Dec | 2,126 | 4 | 2,060 | 55 | 1,992 | 134 | 54 | 6 | 1,033 | 176 |
| 2021 | Jan | 2,414 | 4 | 2,354 | 56 | 2,257 | 157 | 64 | 8 | 1,138 | 186 |
| 2021 | Feb | 2,372 | 4 | 2,312 | 56 | 2,224 | 148 | 61 | 9 | 1,115 | 176 |
| 2021 | Mar | 2,678 | 6 | 2,617 | 55 | 2,514 | 164 | 76 | 16 | 1,259 | 245 |
| 2021 | Apr | 2,767 | 7 | 2,696 | 64 | 2,588 | 179 | 83 | 20 | 1,262 | 212 |
| 2021 | May | 2,874 | 4 | 2,800 | 70 | 2,709 | 165 | 104 | 11 | 1,328 | 217 |
| 2021 | Jun | 2,921 | 7 | 2,841 | 73 | 2,749 | 172 | 123 | 14 | 1,392 | 207 |
| 2021 | Jul | 2,905 | 2 | 2,842 | 61 | 2,737 | 168 | 91 | 15 | 1,427 | 165 |
| 2021 | Aug | 2,876 | 5 | 2,800 | 71 | 2,683 | 193 | 94 | 27 | 1,389 | 195 |
| 2021 | Sep | 2,783 | 10 | 2,716 | 57 | 2,606 | 177 | 116 | 19 | 1,303 | 208 |
| 2021 | Oct | 2,850 | 8 | 2,772 | 70 | 2,675 | 175 | 126 | 20 | 1,331 | 171 |
| 2021 | Nov | 2,726 | 4 | 2,662 | 60 | 2,574 | 152 | 124 | 18 | 1,269 | 179 |
| 2021 | Dec | 2,726 | 9 | 2,661 | 56 | 2,579 | 147 | 103 | 15 | 1,272 | 185 |

**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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2022 | Jan | 2,796 | 9 | 2,728 | 59 | 2,648 | 148 | 102 | 19 | 1,364 | 178 |
| 2022 | Feb | 2,825 | 9 | 2,752 | 64 | 2,674 | 151 | 110 | 22 | 1,345 | 185 |
| 2022 | Mar | 3,293 | 14 | 3,209 | 70 | 3,094 | 199 | 131 | 26 | 1,546 | 255 |
| 2022 | Apr | 3,136 | 12 | 3,058 | 66 | 2,942 | 194 | 121 | 22 | 1,418 | 207 |
| 2022 | May | 3,236 | 6 | 3,172 | 58 | 3,045 | 191 | 136 | 26 | 1,448 | 250 |
| 2022 | Jun | 3,166 | 8 | 3,086 | 72 | 2,980 | 186 | 139 | 19 | 1,429 | 210 |
| 2022 | Jul | 3,243 | 7 | 3,172 | 64 | 3,055 | 188 | 126 | 21 | 1,451 | 212 |
| 2022 | Aug | 3,570 | 13 | 3,492 | 65 | 3,365 | 205 | 124 | 28 | 1,726 | 266 |
| 2022 | Sep | 3,591 | 10 | 3,505 | 76 | 3,394 | 197 | 125 | 20 | 1,669 | 241 |
| 2022 | Oct | 3,411 | 12 | 3,328 | 71 | 3,210 | 201 | 110 | 24 | 1,544 | 228 |
| 2022 | Nov | 3,417 | 13 | 3,333 | 71 | 3,224 | 193 | 102 | 24 | 1,534 | 221 |
| 2022 | Dec | 3,453 | 15 | 3,365 | 73 | 3,276 | 177 | 112 | 40 | 1,564 | 213 |
| 2023 | Jan | 3,863 | 9 | 3,780 | 74 | 3,670 | 193 | 118 | 42 | 1,737 | 221 |
| 2023 | Feb | 3,745 | 25 | 3,633 | 87 | 3,518 | 227 | 116 | 41 | 1,657 | 232 |
| 2023 | Mar | 3,902 | 21 | 3,800 | 81 | 3,658 | 244 | 114 | 38 | 1,748 | 252 |
| 2023 | Apr | 3,811 | 17 | 3,724 | 70 | 3,603 | 208 | 100 | 34 | 1,687 | 236 |
| 2023 | May | 3,952 | 19 | 3,845 | 88 | 3,722 | 230 | 101 | 44 | 1,786 | 232 |
| 2023 | Jun | 3,748 | 17 | 3,637 | 94 | 3,518 | 230 | 84 | 61 | 1,701 | 243 |
| 2023 | Jul | 3,677 | 17 | 3,571 | 89 | 3,446 | 231 | 111 | 61 | 1,637 | 192 |
| 2023 | Aug | 3,547 | 20 | 3,423 | 104 | 3,323 | 224 | 112 | 41 | 1,542 | 231 |
| 2023 | Sep | 3,359 | 17 | 3,260 | 82 | 3,155 | 204 | 96 | 50 | 1,457 | 176 |
| 2023 | Oct | 3,416 | 18 | 3,309 | 89 | 3,203 | 213 | 85 | 52 | 1,493 | 218 |
| 2023 | Nov | 3,346 | 10 | 3,242 | 94 | 3,129 | 217 | 91 | 56 | 1,502 | 185 |
| 2023 | Dec | 3,251 | 6 | 3,173 | 72 | 3,071 | 180 | 92 | 67 | 1,451 | 206 |

**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 | 22 |
| 2016 | Feb | 392 | 4 | 344 | 3 | 377 | 15 | 0 | 0 | 229 | 17 |
| 2016 | Mar | 366 | 0 | 342 | 2 | 347 | 19 | 4 | 1 | 228 | 17 |
| 2016 | Apr | 348 | 0 | 335 | 1 | 318 | 30 | 2 | 0 | 202 | 14 |
| 2016 | May | 313 | 0 | 302 | 5 | 273 | 40 | 0 | 1 | 170 | 25 |
| 2016 | Jun | 307 | 0 | 300 | 0 | 280 | 27 | 2 | 0 | 155 | 19 |
| 2016 | Jul | 444 | 0 | 435 | 0 | 416 | 28 | 0 | 0 | 265 | 14 |
| 2016 | Aug | 661 | 0 | 652 | 3 | 638 | 23 | 3 | 2 | 454 | 43 |
| 2016 | Sep | 657 | 1 | 643 | 1 | 636 | 21 | 2 | 2 | 462 | 30 |
| 2016 | Oct | 709 | 1 | 676 | 1 | 673 | 36 | 0 | 2 | 488 | 30 |
| 2016 | Nov | 685 | 0 | 651 | 2 | 656 | 29 | 4 | 3 | 464 | 38 |
| 2016 | Dec | 670 | 1 | 641 | 2 | 644 | 26 | 0 | 5 | 472 | 34 |
| 2017 | Jan | 641 | 1 | 610 | 2 | 622 | 19 | 1 | 2 | 443 | 36 |
| 2017 | Feb | 617 | 1 | 600 | 1 | 603 | 14 | 2 | 2 | 428 | 23 |
| 2017 | Mar | 752 | 0 | 735 | 2 | 729 | 23 | 0 | 2 | 512 | 37 |
| 2017 | Apr | 723 | 0 | 708 | 5 | 693 | 30 | 1 | 0 | 472 | 29 |
| 2017 | May | 757 | 0 | 734 | 4 | 730 | 27 | 1 | 4 | 499 | 35 |
| 2017 | Jun | 747 | 1 | 738 | 5 | 728 | 19 | 1 | 2 | 481 | 31 |
| 2017 | Jul | 824 | 0 | 804 | 5 | 794 | 30 | 0 | 1 | 532 | 32 |
| 2017 | Aug | 791 | 1 | 766 | 3 | 756 | 35 | 1 | 2 | 511 | 37 |
| 2017 | Sep | 748 | 1 | 726 | 2 | 731 | 17 | 0 | 1 | 488 | 37 |
| 2017 | Oct | 722 | 0 | 710 | 1 | 706 | 16 | 3 | 2 | 447 | 35 |
| 2017 | Nov | 635 | 0 | 628 | 6 | 618 | 17 | 4 | 0 | 429 | 33 |
| 2017 | Dec | 686 | 0 | 680 | 0 | 669 | 17 | 6 | 2 | 442 | 43 |

**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 | 34 |
| 2018 | Feb | 596 | 3 | 589 | 2 | 577 | 19 | 5 | 1 | 399 | 15 |
| 2018 | Mar | 766 | 1 | 748 | 6 | 738 | 28 | 10 | 5 | 462 | 45 |
| 2018 | Apr | 893 | 0 | 875 | 2 | 870 | 23 | 8 | 4 | 555 | 45 |
| 2018 | May | 856 | 2 | 834 | 3 | 838 | 18 | 5 | 4 | 477 | 49 |
| 2018 | Jun | 806 | 0 | 796 | 3 | 791 | 15 | 8 | 2 | 469 | 45 |
| 2018 | Jul | 832 | 1 | 814 | 5 | 815 | 17 | 10 | 2 | 468 | 74 |
| 2018 | Aug | 874 | 1 | 856 | 5 | 846 | 28 | 9 | 3 | 486 | 67 |
| 2018 | Sep | 791 | 0 | 781 | 5 | 767 | 24 | 6 | 2 | 433 | 53 |
| 2018 | Oct | 947 | 0 | 930 | 5 | 926 | 21 | 10 | 3 | 531 | 71 |
| 2018 | Nov | 923 | 1 | 896 | 4 | 897 | 26 | 12 | 2 | 532 | 63 |
| 2018 | Dec | 776 | 2 | 768 | 3 | 759 | 17 | 8 | 1 | 435 | 57 |
| 2019 | Jan | 807 | 0 | 804 | 1 | 788 | 19 | 4 | 1 | 477 | 62 |
| 2019 | Feb | 748 | 0 | 744 | 1 | 732 | 16 | 3 | 1 | 421 | 49 |
| 2019 | Mar | 787 | 3 | 782 | 3 | 759 | 28 | 6 | 2 | 441 | 54 |
| 2019 | Apr | 789 | 1 | 785 | 2 | 761 | 28 | 15 | 2 | 438 | 64 |
| 2019 | May | 811 | 2 | 805 | 3 | 772 | 39 | 4 | 2 | 449 | 66 |
| 2019 | Jun | 762 | 0 | 758 | 3 | 738 | 24 | 13 | 0 | 412 | 68 |
| 2019 | Jul | 843 | 1 | 833 | 6 | 822 | 21 | 12 | 0 | 473 | 72 |
| 2019 | Aug | 849 | 1 | 839 | 4 | 825 | 24 | 15 | 1 | 475 | 64 |
| 2019 | Sep | 847 | 0 | 839 | 7 | 821 | 26 | 10 | 0 | 461 | 67 |
| 2019 | Oct | 882 | 1 | 873 | 5 | 861 | 21 | 23 | 0 | 475 | 59 |
| 2019 | Nov | 844 | 0 | 840 | 3 | 820 | 24 | 15 | 1 | 456 | 55 |
| 2019 | Dec | 950 | 0 | 945 | 4 | 920 | 30 | 19 | 0 | 511 | 66 |

**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 | 79 |
| 2020 | Feb | 963 | 0 | 960 | 2 | 938 | 25 | 19 | 0 | 541 | 76 |
| 2020 | Mar | 1,017 | 2 | 1,010 | 4 | 986 | 31 | 34 | 0 | 594 | 81 |
| 2020 | Apr | 955 | 0 | 949 | 3 | 930 | 25 | 28 | 0 | 538 | 61 |
| 2020 | May | 1,267 | 0 | 1,263 | 2 | 1,246 | 21 | 34 | 1 | 755 | 77 |
| 2020 | Jun | 1,432 | 1 | 1,421 | 8 | 1,394 | 38 | 39 | 1 | 875 | 79 |
| 2020 | Jul | 1,524 | 1 | 1,513 | 6 | 1,490 | 34 | 35 | 2 | 905 | 92 |
| 2020 | Aug | 1,530 | 0 | 1,520 | 8 | 1,481 | 49 | 45 | 2 | 886 | 123 |
| 2020 | Sep | 1,531 | 1 | 1,520 | 7 | 1,492 | 39 | 40 | 3 | 894 | 130 |
| 2020 | Oct | 1,700 | 1 | 1,693 | 4 | 1,655 | 45 | 53 | 5 | 1,022 | 130 |
| 2020 | Nov | 1,644 | 2 | 1,632 | 8 | 1,600 | 44 | 38 | 2 | 966 | 147 |
| 2020 | Dec | 1,586 | 0 | 1,572 | 8 | 1,534 | 52 | 44 | 5 | 903 | 135 |
| 2021 | Jan | 1,804 | 0 | 1,795 | 9 | 1,744 | 60 | 51 | 8 | 993 | 137 |
| 2021 | Feb | 1,772 | 0 | 1,767 | 5 | 1,725 | 47 | 50 | 7 | 977 | 129 |
| 2021 | Mar | 1,942 | 0 | 1,935 | 7 | 1,889 | 53 | 68 | 13 | 1,093 | 181 |
| 2021 | Apr | 2,063 | 1 | 2,050 | 12 | 1,992 | 71 | 70 | 17 | 1,133 | 161 |
| 2021 | May | 2,157 | 1 | 2,146 | 10 | 2,091 | 66 | 91 | 10 | 1,180 | 173 |
| 2021 | Jun | 2,209 | 2 | 2,190 | 17 | 2,142 | 67 | 114 | 10 | 1,252 | 159 |
| 2021 | Jul | 2,261 | 0 | 2,246 | 15 | 2,183 | 78 | 82 | 12 | 1,286 | 128 |
| 2021 | Aug | 2,260 | 1 | 2,238 | 21 | 2,175 | 85 | 88 | 21 | 1,256 | 150 |
| 2021 | Sep | 2,204 | 0 | 2,199 | 5 | 2,125 | 79 | 101 | 15 | 1,191 | 165 |
| 2021 | Oct | 2,264 | 1 | 2,252 | 11 | 2,187 | 77 | 112 | 15 | 1,217 | 125 |
| 2021 | Nov | 2,219 | 1 | 2,205 | 13 | 2,150 | 69 | 113 | 16 | 1,175 | 147 |
| 2021 | Dec | 2,187 | 2 | 2,172 | 13 | 2,124 | 63 | 93 | 15 | 1,170 | 141 |

**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 | 142 |
| 2022 | Feb | 2,326 | 0 | 2,309 | 17 | 2,258 | 68 | 98 | 16 | 1,256 | 144 |
| 2022 | Mar | 2,618 | 1 | 2,604 | 13 | 2,519 | 99 | 111 | 19 | 1,397 | 202 |
| 2022 | Apr | 2,489 | 0 | 2,472 | 17 | 2,381 | 108 | 113 | 20 | 1,260 | 147 |
| 2022 | May | 2,575 | 0 | 2,561 | 14 | 2,482 | 93 | 130 | 23 | 1,293 | 198 |
| 2022 | Jun | 2,526 | 1 | 2,508 | 17 | 2,433 | 93 | 124 | 15 | 1,275 | 182 |
| 2022 | Jul | 2,615 | 2 | 2,597 | 16 | 2,513 | 102 | 114 | 19 | 1,305 | 159 |
| 2022 | Aug | 2,957 | 2 | 2,938 | 17 | 2,839 | 118 | 117 | 23 | 1,575 | 214 |
| 2022 | Sep | 2,996 | 2 | 2,974 | 20 | 2,888 | 108 | 116 | 16 | 1,522 | 187 |
| 2022 | Oct | 2,886 | 5 | 2,859 | 22 | 2,755 | 131 | 104 | 17 | 1,421 | 178 |
| 2022 | Nov | 2,874 | 4 | 2,852 | 18 | 2,764 | 110 | 89 | 22 | 1,414 | 186 |
| 2022 | Dec | 2,904 | 4 | 2,878 | 22 | 2,819 | 85 | 96 | 37 | 1,438 | 176 |
| 2023 | Jan | 3,204 | 1 | 3,182 | 21 | 3,095 | 109 | 103 | 36 | 1,579 | 185 |
| 2023 | Feb | 3,133 | 8 | 3,106 | 19 | 2,997 | 136 | 102 | 32 | 1,524 | 191 |
| 2023 | Mar | 3,247 | 10 | 3,212 | 25 | 3,103 | 144 | 103 | 35 | 1,609 | 209 |
| 2023 | Apr | 3,173 | 9 | 3,147 | 17 | 3,053 | 120 | 87 | 25 | 1,560 | 197 |
| 2023 | May | 3,316 | 10 | 3,271 | 35 | 3,176 | 140 | 85 | 38 | 1,627 | 200 |
| 2023 | Jun | 3,146 | 8 | 3,109 | 29 | 3,012 | 134 | 76 | 57 | 1,551 | 198 |
| 2023 | Jul | 3,094 | 11 | 3,058 | 25 | 2,959 | 135 | 97 | 53 | 1,493 | 159 |
| 2023 | Aug | 2,952 | 12 | 2,898 | 42 | 2,824 | 128 | 104 | 35 | 1,414 | 189 |
| 2023 | Sep | 2,771 | 8 | 2,734 | 29 | 2,654 | 117 | 91 | 44 | 1,320 | 144 |
| 2023 | Oct | 2,856 | 10 | 2,815 | 31 | 2,734 | 122 | 73 | 45 | 1,368 | 178 |
| 2023 | Nov | 2,818 | 5 | 2,788 | 25 | 2,700 | 118 | 79 | 51 | 1,384 | 139 |
| 2023 | Dec | 2,737 | 5 | 2,717 | 15 | 2,637 | 100 | 85 | 58 | 1,326 | 160 |

**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 | 298 |
| 2016 | Feb | 3,417 | 107 | 3,308 | 2 | 3,411 | 6 | 79 | 0 | 1,788 | 328 |
| 2016 | Mar | 3,684 | 96 | 3,586 | 2 | 3,675 | 9 | 84 | 0 | 2,075 | 383 |
| 2016 | Apr | 3,780 | 77 | 3,701 | 2 | 3,771 | 9 | 93 | 1 | 2,171 | 357 |
| 2016 | May | 3,954 | 89 | 3,863 | 2 | 3,941 | 13 | 104 | 1 | 2,282 | 353 |
| 2016 | Jun | 4,109 | 92 | 4,015 | 2 | 4,097 | 12 | 105 | 1 | 2,386 | 377 |
| 2016 | Jul | 4,119 | 81 | 4,035 | 3 | 4,109 | 10 | 95 | 3 | 2,324 | 375 |
| 2016 | Aug | 4,463 | 85 | 4,375 | 3 | 4,450 | 13 | 114 | 5 | 2,573 | 422 |
| 2016 | Sep | 4,614 | 88 | 4,522 | 4 | 4,602 | 12 | 113 | 8 | 2,634 | 439 |
| 2016 | Oct | 4,755 | 89 | 4,663 | 2 | 4,747 | 8 | 101 | 9 | 2,857 | 481 |
| 2016 | Nov | 4,913 | 91 | 4,820 | 2 | 4,907 | 6 | 95 | 9 | 2,969 | 493 |
| 2016 | Dec | 5,147 | 91 | 5,050 | 4 | 5,140 | 7 | 92 | 8 | 3,062 | 497 |
| 2017 | Jan | 5,439 | 97 | 5,336 | 3 | 5,432 | 7 | 93 | 10 | 3,235 | 538 |
| 2017 | Feb | 5,525 | 95 | 5,426 | 2 | 5,516 | 9 | 116 | 12 | 3,192 | 500 |
| 2017 | Mar | 6,100 | 88 | 6,008 | 3 | 6,089 | 11 | 131 | 14 | 3,620 | 585 |
| 2017 | Apr | 6,249 | 102 | 6,143 | 3 | 6,242 | 7 | 127 | 10 | 3,696 | 589 |
| 2017 | May | 6,580 | 108 | 6,469 | 2 | 6,575 | 5 | 133 | 15 | 3,983 | 619 |
| 2017 | Jun | 6,660 | 98 | 6,553 | 8 | 6,648 | 12 | 131 | 16 | 4,055 | 649 |
| 2017 | Jul | 6,774 | 97 | 6,673 | 4 | 6,763 | 11 | 132 | 10 | 4,034 | 605 |
| 2017 | Aug | 7,280 | 103 | 7,173 | 4 | 7,271 | 9 | 153 | 7 | 4,546 | 778 |
| 2017 | Sep | 8,427 | 102 | 8,299 | 19 | 8,340 | 87 | 197 | 9 | 5,581 | 782 |
| 2017 | Oct | 9,479 | 111 | 9,335 | 23 | 9,358 | 121 | 200 | 16 | 6,635 | 868 |
| 2017 | Nov | 9,757 | 120 | 9,600 | 29 | 9,627 | 130 | 200 | 18 | 6,843 | 901 |
| 2017 | Dec | 10,323 | 125 | 10,153 | 37 | 10,155 | 168 | 207 | 12 | 7,149 | 857 |

**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 | 984 |
| 2018 | Feb | 10,781 | 119 | 10,620 | 36 | 10,613 | 168 | 323 | 16 | 7,503 | 900 |
| 2018 | Mar | 11,524 | 136 | 11,342 | 40 | 11,345 | 179 | 353 | 14 | 8,023 | 989 |
| 2018 | Apr | 11,858 | 131 | 11,684 | 38 | 11,667 | 191 | 366 | 15 | 8,306 | 1,006 |
| 2018 | May | 12,489 | 129 | 12,315 | 44 | 12,260 | 229 | 391 | 10 | 8,834 | 1,070 |
| 2018 | Jun | 12,660 | 132 | 12,483 | 44 | 12,412 | 248 | 396 | 11 | 9,002 | 1,018 |
| 2018 | Jul | 13,012 | 125 | 12,829 | 53 | 12,757 | 255 | 419 | 10 | 9,185 | 1,092 |
| 2018 | Aug | 13,630 | 146 | 13,419 | 55 | 13,357 | 273 | 445 | 15 | 9,726 | 1,128 |
| 2018 | Sep | 13,575 | 127 | 13,380 | 62 | 13,303 | 272 | 454 | 11 | 9,779 | 1,044 |
| 2018 | Oct | 14,321 | 128 | 14,127 | 62 | 14,043 | 278 | 466 | 9 | 10,362 | 1,162 |
| 2018 | Nov | 14,571 | 110 | 14,392 | 59 | 14,293 | 278 | 451 | 12 | 10,656 | 1,079 |
| 2018 | Dec | 14,669 | 106 | 14,501 | 59 | 14,383 | 286 | 431 | 7 | 10,795 | 1,045 |
| 2019 | Jan | 15,161 | 111 | 14,983 | 64 | 14,875 | 286 | 440 | 16 | 11,297 | 1,148 |
| 2019 | Feb | 15,400 | 107 | 15,221 | 68 | 15,115 | 285 | 437 | 7 | 11,353 | 1,104 |
| 2019 | Mar | 15,996 | 122 | 15,798 | 73 | 15,698 | 298 | 416 | 8 | 11,506 | 1,177 |
| 2019 | Apr | 16,502 | 111 | 16,317 | 68 | 16,197 | 305 | 425 | 7 | 12,612 | 1,275 |
| 2019 | May | 16,839 | 114 | 16,650 | 75 | 16,514 | 325 | 423 | 4 | 12,831 | 1,275 |
| 2019 | Jun | 16,716 | 106 | 16,529 | 81 | 16,393 | 323 | 446 | 4 | 12,672 | 1,274 |
| 2019 | Jul | 17,104 | 106 | 16,908 | 86 | 16,769 | 335 | 475 | 4 | 13,084 | 1,264 |
| 2019 | Aug | 17,211 | 91 | 17,029 | 90 | 16,872 | 339 | 467 | 4 | 13,284 | 1,247 |
| 2019 | Sep | 17,162 | 90 | 16,972 | 95 | 16,824 | 338 | 465 | 3 | 13,295 | 1,222 |
| 2019 | Oct | 17,911 | 85 | 17,731 | 91 | 17,568 | 343 | 483 | 9 | 13,962 | 1,276 |
| 2019 | Nov | 17,919 | 88 | 17,734 | 93 | 17,566 | 353 | 478 | 5 | 13,904 | 1,133 |
| 2019 | Dec | 18,249 | 90 | 18,064 | 93 | 17,876 | 373 | 483 | 3 | 14,210 | 1,216 |

**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 | 1,270 |
| 2020 | Feb | 19,176 | 105 | 18,991 | 77 | 18,847 | 329 | 520 | 10 | 15,410 | 1,147 |
| 2020 | Mar | 19,806 | 102 | 19,635 | 68 | 19,565 | 241 | 546 | 9 | 15,821 | 1,211 |
| 2020 | Apr | 20,504 | 101 | 20,337 | 64 | 20,271 | 233 | 533 | 9 | 16,281 | 1,005 |
| 2020 | May | 21,493 | 87 | 21,338 | 62 | 21,263 | 230 | 553 | 14 | 17,165 | 979 |
| 2020 | Jun | 22,302 | 89 | 22,138 | 64 | 22,107 | 195 | 594 | 17 | 17,960 | 1,089 |
| 2020 | Jul | 23,033 | 94 | 22,867 | 67 | 22,846 | 187 | 651 | 15 | 18,777 | 1,284 |
| 2020 | Aug | 23,690 | 97 | 23,512 | 77 | 23,522 | 168 | 715 | 20 | 19,262 | 1,449 |
| 2020 | Sep | 24,323 | 100 | 24,132 | 79 | 24,127 | 196 | 774 | 21 | 19,868 | 1,695 |
| 2020 | Oct | 24,798 | 102 | 24,621 | 72 | 24,629 | 169 | 842 | 17 | 20,160 | 1,808 |
| 2020 | Nov | 25,282 | 103 | 25,064 | 88 | 25,076 | 206 | 905 | 21 | 20,290 | 1,706 |
| 2020 | Dec | 26,001 | 113 | 25,734 | 94 | 25,759 | 242 | 971 | 20 | 20,846 | 1,792 |
| 2021 | Jan | 26,401 | 98 | 26,189 | 114 | 26,091 | 310 | 1,037 | 45 | 21,185 | 1,822 |
| 2021 | Feb | 26,486 | 100 | 26,296 | 90 | 26,242 | 244 | 1,097 | 39 | 21,180 | 1,721 |
| 2021 | Mar | 27,457 | 112 | 27,248 | 97 | 27,191 | 266 | 1,188 | 51 | 22,041 | 1,974 |
| 2021 | Apr | 27,460 | 103 | 27,262 | 95 | 27,227 | 233 | 1,229 | 55 | 21,929 | 1,858 |
| 2021 | May | 27,826 | 110 | 27,621 | 95 | 27,590 | 236 | 1,303 | 54 | 22,210 | 1,837 |
| 2021 | Jun | 28,346 | 106 | 28,142 | 98 | 28,098 | 248 | 1,357 | 74 | 22,743 | 1,804 |
| 2021 | Jul | 28,308 | 105 | 28,111 | 92 | 28,064 | 244 | 1,403 | 74 | 22,563 | 1,701 |
| 2021 | Aug | 28,473 | 115 | 28,246 | 112 | 28,217 | 256 | 1,447 | 67 | 22,745 | 1,642 |
| 2021 | Sep | 28,541 | 119 | 28,313 | 109 | 28,305 | 236 | 1,530 | 87 | 22,748 | 1,603 |
| 2021 | Oct | 28,761 | 117 | 28,537 | 107 | 28,521 | 240 | 1,534 | 74 | 22,891 | 1,626 |
| 2021 | Nov | 29,096 | 118 | 28,857 | 121 | 28,853 | 243 | 1,593 | 72 | 23,094 | 1,587 |
| 2021 | Dec | 29,507 | 132 | 29,260 | 115 | 29,262 | 245 | 1,610 | 72 | 23,359 | 1,518 |

**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 | 1,523 |
| 2022 | Feb | 30,141 | 129 | 29,889 | 123 | 29,904 | 237 | 1,695 | 86 | 23,878 | 1,522 |
| 2022 | Mar | 31,149 | 136 | 30,894 | 119 | 30,917 | 232 | 1,796 | 103 | 24,636 | 1,708 |
| 2022 | Apr | 31,100 | 126 | 30,857 | 117 | 30,875 | 225 | 1,858 | 91 | 24,553 | 1,714 |
| 2022 | May | 31,378 | 138 | 31,123 | 117 | 31,171 | 207 | 1,904 | 93 | 24,660 | 1,679 |
| 2022 | Jun | 31,691 | 136 | 31,433 | 122 | 31,490 | 201 | 1,902 | 91 | 24,659 | 1,654 |
| 2022 | Jul | 31,651 | 127 | 31,392 | 132 | 31,418 | 233 | 1,573 | 73 | 24,442 | 1,577 |
| 2022 | Aug | 32,427 | 133 | 32,164 | 130 | 32,190 | 237 | 1,553 | 86 | 25,262 | 1,734 |
| 2022 | Sep | 32,328 | 142 | 32,049 | 137 | 32,108 | 220 | 1,510 | 85 | 25,036 | 1,725 |
| 2022 | Oct | 32,483 | 135 | 32,229 | 119 | 32,265 | 218 | 1,444 | 82 | 25,052 | 1,603 |
| 2022 | Nov | 32,955 | 143 | 32,654 | 158 | 32,706 | 249 | 1,431 | 122 | 25,517 | 1,635 |
| 2022 | Dec | 33,043 | 138 | 32,747 | 158 | 32,789 | 254 | 1,443 | 116 | 25,452 | 1,555 |
| 2023 | Jan | 34,124 | 159 | 33,764 | 201 | 33,724 | 400 | 1,433 | 123 | 26,409 | 1,654 |
| 2023 | Feb | 33,759 | 156 | 33,464 | 139 | 33,502 | 257 | 1,387 | 125 | 26,122 | 1,573 |
| 2023 | Mar | 34,720 | 170 | 34,408 | 142 | 34,465 | 255 | 1,412 | 112 | 26,661 | 1,762 |
| 2023 | Apr | 34,289 | 164 | 33,996 | 129 | 34,078 | 211 | 1,417 | 99 | 26,309 | 1,626 |
| 2023 | May | 34,821 | 163 | 34,517 | 141 | 34,615 | 206 | 1,434 | 132 | 26,581 | 1,706 |
| 2023 | Jun | 34,092 | 174 | 33,782 | 136 | 33,863 | 229 | 1,339 | 160 | 25,712 | 1,608 |
| 2023 | Jul | 27,758 | 168 | 27,481 | 109 | 27,594 | 164 | 1,139 | 167 | 19,410 | 1,343 |
| 2023 | Aug | 26,866 | 169 | 26,596 | 101 | 26,719 | 147 | 1,138 | 160 | 18,579 | 1,372 |
| 2023 | Sep | 26,083 | 167 | 25,819 | 97 | 25,929 | 154 | 1,071 | 161 | 17,878 | 1,216 |
| 2023 | Oct | 26,210 | 165 | 25,951 | 94 | 26,063 | 147 | 1,058 | 181 | 17,930 | 1,302 |
| 2023 | Nov | 25,872 | 161 | 25,606 | 105 | 25,727 | 145 | 1,031 | 186 | 17,691 | 1,254 |
| 2023 | Dec | 25,356 | 140 | 25,117 | 99 | 25,214 | 142 | 1,015 | 200 | 17,095 | 1,188 |

**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 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 |
|---|---|---|---|---|---|---|---|
| 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), [POA, 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), [POA; NOF #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

| | CMS Measurement Period | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | CY 2016 | CY 2017 | CY 2018 | CY 2019 | CY 2020 | CY 2021 | CY 2022 | CY 2023 |
| Numerator | 12,314 | 15,337 | 15,420 | 15,785 | 18,401 | 35,248 | 37,558 | 37,226 |
| Denominator | 24,956 | 27,973 | 28,688 | 29,634 | 33,838 | 63,236 | 67,039 | 65,928 |
| Rate | 49.3% | 54.8% | 53.8% | 53.3% | 54.4% | 55.7% | 56.0% | 56.5% |

**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

| | CMS Measurement Period | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | CY 2016 | CY 2017 | CY 2018 | CY 2019 | CY 2020 | CY 2021 | CY 2022 | CY 2023 |
| Numerator | 2,686 | 3,981 | 4,612 | 5,237 | 6,443 | 13,169 | 14,302 | 15,232 |
| Denominator | 12,314 | 15,337 | 15,420 | 15,785 | 18,401 | 35,248 | 37,558 | 37,226 |
| Rate | 21.8% | 26.0% | 29.9% | 33.2% | 35.0% | 37.4% | 38.1% | 40.9% |

**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% |