

CBE ID

3400

Title

Use of Pharmacotherapy for Opioid Use Disorder

Project

Initial Recognition and Management

Endorsement Status

Endorsed with Conditions

E&M Committee Rationale/Justification

When the measure comes back for maintenance the developer should have:

- Explored the impact of patients in remission or who are on other forms of treatment on the performance results; and
- Assessed potential unintended consequences (e.g., discouraging use of other, non-pharmacological therapies) during implementation.

Is Under Review

No

Next Maintenance Cycle

Spring 2029

Previous Endorsement Cycle

Spring 2024

Steward

Substance Abuse and Mental Health Services Administration (SAMHSA)

1.0 New or Maintenance

Maintenance

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

The *Use of Pharmacotherapy for Opioid Use Disorder* measure evaluates the percentage of Medicaid or Medicare-Medicaid participants, aged 18 years and older, who have been diagnosed with an opioid use disorder (OUD) who filled a prescription for, were administered, or dispensed, a Food and Drug Administration (FDA)-approved medication to treat or manage OUD during the measurement year.

1.7 Composite Measure

No

1.7 Measure Type

Process

1.8 Level of Analysis

Population or Geographic Area

1.8a Population or Geographic Area Level of Analysis

State

1.9 Care Setting

Behavioral Health: Inpatient (e.g., Inpatient Psychiatric Facility), Behavioral Health: Outpatient, Emergency Department, Hospital: Acute Care Facility, Hospital: Critical Access, Hospital: Inpatient, Hospital: Outpatient, Inpatient Rehabilitation Facility, Outpatient Rehabilitation, Pharmacy

1.10 Measure Rationale

Pharmacotherapy for OUD is related to improved health outcomes, therefore, a quality measure to increase access to pharmacotherapy is expected to yield better care for beneficiaries with an OUD. Improved health outcomes associated with medications for OUD include reduced opioid use, overdose risk, and transmission of HIV and hepatitis C.

While other measures evaluate pharmacotherapy administration rates, CBE #3400 includes an analysis at the state-level and requires prescription fills within the measurement year. In addition, there are typically fewer quality measures for Medicaid and high rates of OUD for this population.

References:

Leshner, A., & Mancher, M. (2019). Medications for opioid use disorder save lives. *National Academies Press*. <https://doi.org/10.17226/25310>.

1.11 Measure Webpage

<https://www.medicaid.gov/resources-for-states/innovation-accelerator-program/fu...>

1.13 Data Dictionary

Not attached. I attest that all information will be provided where codes and/or value sets are needed (1.14a - 1.15c).

1.13a Attach Data Dictionary

[CBE 3400 Value Sets_2024.04.17.xlsx](#)

1.14 Numerator

Medicaid beneficiaries with evidence of at least one prescription filled, or who were administered

or dispensed an FDA-approved medication for OUD during the measurement year.

1.14a Numerator Details

CBE #3400 calculates the percentage of Medicaid beneficiaries ages 18 and older with an opioid use disorder (OUD) who filled a prescription for or were administered or dispensed an FDA-approved medication for OUD during the measure year. The numerator is the beneficiaries with evidence of at least one prescription filled or who were administered or dispensed an FDA-approved medication for OUD during the measurement year. The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone. The total is not a sum of the four medication cohorts. Count beneficiaries in the total denominator rate if they had at least one of the four FDA-approved medications for OUD during the measurement year. Report beneficiaries with multiple medications only once for the total rate for the denominator.

1.15 Denominator

Medicaid or Medicare-Medicaid beneficiaries aged 18 years and older with at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other diagnosis) at any time during the measurement year.

1.15a Denominator Details

The CBE #3400 measure data is reported annually across 12 months. The denominator is Medicaid beneficiaries ages 18 and older with at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other diagnosis) at any time during the measurement year.

1.15b Denominator Exclusions

None. However, states may require exclusions, as appropriate, for their substance use disorder (SUD) programs and recipients.

1.15c Denominator Exclusions Details

None.

1.16 Type of Score

Rate/proportion

1.17 Measure Score Interpretation

Better performance = Higher score

1.18 Calculation of Measure Score

Please see measure score calculation diagram attachment.

1.18a Attach measure score calculation diagram

[CBE 3400 Measure Score Diagram.pdf](#)

1.19 Measure Stratification Details

Measure performance is calculated both overall and stratified by four medications/ modes of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

1.20 Types of Data Sources

Claims Data

1.25 Data Source Details

CBE #3400 uses administrative claims or encounter data and pharmacy claims. For measure testing the data source is the Transformed Medicaid Statistical Information System (T-MSIS), which contains beneficiary, service utilization, administrative claims, and expenditure data for the Medicaid population, including those covered through both fee-for-service and managed care payers.

1.26 Minimum Sample Size

Not applicable—CBE #3400 measure does not involve sampling.

2.1 Attach Logic Model

[CBE 3400 Logic Model.pdf](#)

2.2 Evidence of Measure Importance

Of the 106,699 drug overdose deaths in the United States in 2021, opioids were involved in 80,411 deaths (75.4 percent) (Centers for Disease Control and Prevention, 2023). Between 2010 and 2019, opioid use disorder affected more than 7.6 million individuals annually, compared to only about 1 million individuals who received medications for OUD (MOUD) (Krawczyk, Rivera, Jent, Keyes, Jones, & Cerda, 2022). Methadone, buprenorphine, and naltrexone are FDA-approved MOUD, which have shown improved health outcomes and decreased overdose risk by 50 percent, when compared to no treatment or treatments without medication (Santo, Clark, Hickman, Grebely, Campbell, Sordo, ... & Degenhardt, 2022; Leshner & Mancher, 2019). However, there are low utilization rates of MOUD, partly due to limited treatment capacity and access (Krawczyk et al., 2022). In addition, the COVID-19 public health emergency also created challenges for individuals with OUD, including decreased treatment access and quality, increased mood symptoms, and increased substance use (Banks, Paschke, Li, Fentem, Rich, Szlyk, & Cavasoz-Rehg, 2022). Policy and research initiatives focus on the gap between OUD rates and individuals who receive MOUD (Krawczyk et al., 2022).

References:

Banks, D. E., Paschke, M. E., Li, X., Fentem, A., Rich, A., Szlyk, H. S., & Cavazos-Rehg, P. (2022). Opioid use disorder and COVID-19: Treatment and recovery factors among vulnerable populations at the intersection of two U.S. epidemics. *Journal of Psychoactive Drugs*, 54(4), 300-308. <https://doi.org/10.1080/02791072.2022.2079443>

Centers for Disease Control and Prevention. (2023). Drug overdose deaths remained high in 2021. *Drug Overdose Deaths*. Retrieved from <https://www.cdc.gov/drugoverdose/deaths>

Krawczyk, N., Rivera, B., Jent, V., Keyes, K., Jones, C., & Cerda, M. (2022). Has the treatment gap for opioid use disorder narrowed in the U.S.?: A yearly assessment from 2010 to 2019. *International Journal of Drug Policy*, 110. <https://doi.org/10.1016/j.drugpo.2022.103786>

Leshner, A., & Mancher, M. (2019). Medications for opioid use disorder save lives. *National Academies Press*. <https://doi.org/10.17226/25310>

Santo, T., Clark, B., Hickman, M., Grebely, J., Campbell, G., Sordo, L. ... & Degenhardt, L. (2022). Association of opioid agonist treatment with all-cause mortality and specific causes of death among people with opioid dependence: a systematic review and meta-analysis. *JAMA Psychiatry*, 78(9):979-993. doi:10.1001/jamapsychiatry.2021.0976

2.4 Performance Gap

The distribution of performance scores for CBE #3400 are presented in **Exhibit 1** (within the performance gap attachment). Scores demonstrate room for improvement with a median score for all treatments of 52.6 percent. Buprenorphine was the most prevalent treatment with a median rate of 34.5 percent, followed by methadone (16.1 percent), oral naltrexone (2.8 percent) and injectable naltrexone (1.3 percent). Deciles for each treatment modality are presented therein.

Exhibit 2, within the performance gap attachment, examines performance scores by several beneficiary characteristics, including age band, biological sex, race or ethnicity, and dual-eligibility status. Chi-square and probability were calculated to determine whether differences in performance scores based on these characteristics were statistically significant. The performance rates reflect only the rate for all treatments as the best indicator of overall care.

Significant differences in performance were found for all characteristics. Notably, the over 65 age group and dually eligible beneficiaries had much lower performance than their respective cohorts within the age and dual-eligibility status categories. Dually eligible beneficiaries had a treatment rate of 8.3 percent versus a rate of 59.0 percent for non-dually eligible beneficiaries while those over age 64 had a treatment rate of only 3.8 percent versus rates ranging from 36.6 percent to 65.9 percent for younger age groups.

2.4a Attach Performance Gap Results

[CBE 3400 Performance Gap Tables.pdf](#)

2.6 Meaningfulness to Target Population

Nearly four out of five Americans with OUD do not receive treatment (Madras, Ahmad, Wen, &

Sharfstein, 2020). In addition to physical health effects, individuals with OUD also experience mental health challenges, including suicide (Madras, Ahmad, Wen, & Sharfstein, 2020). Although many individuals with OUD may desire and would benefit from treatment, barriers remain. These barriers include providers' stigma, providers' lack of training, systems that do not focus on patient needs, laws that restrict treatment access, and financial restraints (Madras, Ahmad, Wen, & Sharfstein, 2020).

References:

Madras, B. K., Ahmad, N. J., Wen, J., & Sharfstein, J. S. (2020). Improving access to evidence-based medical treatment for opioid use disorder: strategies to address key barriers within the treatment system. *NAM Perspectives*, 2020, 10.31478/202004b. <https://doi.org/10.31478/202004b>

3.1 Contributions Towards Closing Care Gaps

As shown above, in **Exhibit 2** (within the performance gap attachment) and **Exhibit 6** (within the supplemental attachment), some potential social risk factors were examined to identify performance gaps. These factors include age band, biological sex, race or ethnicity, and dual eligibility status. Statistically significant differences in performance have been identified, which demonstrate an opportunity for improving health equity based on these risk factors.

4.1 Feasibility Assessment

CBE #3400 was assessed via qualitative survey of a multi-stakeholder panel. Results of the feasibility assessment, as captured in two survey questions, indicate that CBE #3400 is likely minimally challenging to report, and places minimal burden on users.

In general, there are no concerns with capturing data for this measure using the data elements defined in the specification. All respondents indicated either *No* or *Not Sure/Do Not Know* when asked if there are any challenges with capturing data for the CBE #3400 measure using the described elements. The other survey question related to feasibility showed that 80 percent of respondents either strongly agreed or agreed that reporting this measure does not place undue burden on entities to collect the data (i.e., 40 percent strongly agreed, and 40 percent agreed). One respondent indicated, *Do Not Know or Not Applicable*. These findings suggest that the measure is likely minimally burdensome to report, and feasibility is not a concern.

Results from the qualitative survey related to measure feasibility for CBE #3400 appear in **Exhibit 3** and **Exhibit 4** (within the supplemental attachment).

4.3 Feasibility Informed Final Measure

No changes were made to the final measure specifications in response to the feasibility assessment. There was high agreement that the measure is likely minimally burdensome to report.

4.4 Proprietary Information

Not a proprietary measure and no proprietary components

5.1.1 Data Used for Testing

As described above, CBE #3400 uses administrative claims or encounter data and pharmacy claims. For measure testing, the data source is the T-MSIS, which contains beneficiary, service utilization, administrative claims, and expenditure data for the Medicaid population, including those covered through both fee-for-service and managed care payers. The measurement period for scientific acceptability testing was calendar year 2021.

5.1.2 Differences in Data

The same data were used for all aspects of testing.

5.1.3 Characteristics of Measured Entities

As shown in **Exhibit 5**, within the supplemental attachment, for the 50 states and the District of Columbia, which were included in our analysis, there were 2,591,296 Medicaid beneficiaries in the eligible population who had at least one OUD diagnosis in the measurement year of 2021. Denominator counts for measured entities (eligible state-level Medicaid beneficiaries) ranged from 472 to 64,311 with a median of 13,467 beneficiaries, per entity.

5.1.4 Characteristics of Units of the Eligible Population

As shown in **Exhibit 6**, within the supplemental attachment, 50.4 percent of beneficiaries were in the 25 to 44 age category followed by 33.1 percent in the 45 to 64 grouping. Approximately 51 percent of the beneficiaries eligible for the denominator were female. Non-Hispanic white beneficiaries accounted for about 62 percent of the denominator, followed by other/multiracial (14.2 percent), Black, non-Hispanic (13.5 percent) and Hispanic beneficiaries of all races (approximately 10.3 percent). Approximately 21.8 percent of denominator were dually eligible beneficiaries.

5.2.1 Level(s) of Reliability Testing Conducted

Accountable entity level (i.e., measure score) (e.g., signal-to-noise analysis)

5.2.2 Method(s) of Reliability Testing

Reliability was calculated in accordance with the methods described in *The Reliability of Provider Profiling: A Tutorial* (2009). This approach calculates the ability of the measure to distinguish between the performances of different reporting entities (in this case, state or district). Specifically, the testing calculated the signal-to-noise ratio for each entity, with higher scores indicating greater reliability. The reliability score is estimated using a beta-binomial model and is a function of the facility's sample size and score on the measure, as well as the variance across measured entities.

References:

Adams, J. (2009). *The reliability of provider profiling: A tutorial*. <https://doi.org/10.7249/tr653>

5.2.3 Reliability Testing Results

The distribution of the state estimates of signal-to-noise reliability are shown in **Exhibit 7** (within the reliability attachment). The estimates for the “all treatments” score ranged from 0.99218 to 0.99996, with a median of 0.99979. Median reliability scores for the four individual treatment rates ranged from 0.99668 (oral naltrexone) to 0.99976 (methadone).

5.2.3a Attach Additional Reliability Testing Results

[CBE 3400 Reliability.pdf](#)

5.2.4 Interpretation of Reliability Results

The signal-to-noise analyses showed that the reliability of CBE #3400 is excellent. Although high signal-to-noise reliability is not indicative of high-quality health care, it does indicate that the measure may be used to distinguish between states with respect to health care quality.

High reliability for CBE #3400 is likely supported by large enough sample sizes at the state level. The average number of beneficiaries in the denominator for the overall rate was about 30,000 (ranging from 472 to 64,311).

5.3.1 Level(s) of Validity Testing Conducted

[Accountable entity level \(i.e., measure score\) \(e.g., criterion validity\)](#)

5.3.3 Method(s) of Validity Testing

Convergent Validity. To assess convergent validity, the measure developer examined the correlations between CBE #3400 and the HEDIS[®] *Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment* (IET) measure (measurement year 2021, 18 and older age stratification). The HEDIS IET measure assesses the percentage of individuals with new episode of alcohol or other drug abuse or dependence who initiated treatment within 14 days and received ongoing treatment within 34 days after initiation.

The measure developer also examined correlations between CBE #3400 and CBE #3453, *Continuity of Care After Inpatient or Residential Treatment for Substance Use Disorder*, which measures the percentage of discharges from inpatient or residential treatment for substance use disorder (SUD) for Medicaid beneficiaries, ages 18-64, which were followed by a treatment service for SUD. Two rates are reported, continuity within 7 and 14 days after discharge.

Face Validity. Results of the face-validity assessment, as captured in the TEP survey (questions 4 through 7), indicated agreement from TEP respondents in support of the measure’s validity.

5.3.4 Validity Testing Results

See validity attachment.

5.3.4a Attach Additional Validity Testing Results

[CBE 3400 Validity.pdf](#)

5.3.5 Interpretation of Validity Results

As presented in **Exhibit 7**, CBE #3400 is very strongly correlated with performance score data for the HEDIS[®] IET measure. The measure yields Pearson correlation coefficients of 0.78 with the IET 14-day treatment initiation score and 0.76 with the IET 34-day treatment initiation score, demonstrating strong correlation for both scores. Correlations with CBE #3453 were also strong. CBE #3400 yields Pearson correlation coefficients of 0.70 with the CBE #3453 7-day continuity of care score and 0.72 with the CBE #3453 14-day continuity of care score. In addition to strong Pearson correlation coefficients, all correlations were statistically significant with $p < 0.0001$, further indicating a strong validity rating for CBE #3400.

Results in **Exhibit 8** suggest that the measure, as specified, truly evaluates what it intends to assess. The majority of respondents either strongly agreed or agreed that NQF 3400 assesses access to pharmacotherapy for the adult Medicaid population. One respondent indicated *Do Not Know or Not Applicable*, noting a lack of experience in this area.

Exhibit 9 shows that the measure is useful in understanding and comparing the quality of care between different entities measured. The majority of respondents either strongly agreed or agreed that comparing scores on this measure differentiates good from poor performance, were undecided or indicated *Do Not Know or Not Applicable*, noting a lack of experience in this area. One undecided respondent stated that access to pharmacotherapy may not be sufficiently assessed by a fill of one prescription but did not provide additional detail.

In **Exhibit 10**, the findings suggest that the data elements defined in this measure for identifying beneficiaries for the denominator are reasonable and useful in identifying the population of interest. The majority of respondents agreed that identifying individuals who had at least one encounter with an ICD-10 diagnosis code for opioid abuse, dependence, or remission (primary or other) at any time during the measurement year is an appropriate way of identifying Medicaid beneficiaries with an OUD. Other respondents indicated *Do Not Know or Not Applicable*.

The results in **Exhibit 11** show that the majority of TEP respondents agree that the data elements used to define the measure's numerator criteria are reasonable and useful in capturing access to pharmacotherapy for OUD. The majority of respondents agreed that access to pharmacotherapy for OUD can be identified by at least one prescription filled, or administration or dispensed an FDA-approved medication for OUD through use of pharmacy claims (National Drug Codes [NDC]) or HCPCS coding of medical service. One of the respondents who agreed added that methadone would be an exception, as further research is needed to understand how methadone dispensing from methadone clinics is tracked. One respondent was undecided on this topic, given the long-term nature of treatment and recovery for individuals with OUD which often requires continued pharmacotherapy, and another respondent indicated *Do Not Know or Not Applicable* for this

question. The team notes that the one respondent who was undecided on this question provided feedback on the face validity of the numerator specification, rather than numerator data element validity.

5.3.2 Type of Accountable Entity Level Validity Testing Conducted (derived)

Empirical validity testing at the accountable entity-level (e.g., criterion validity, construct validity, known groups analysis), Systematic assessment of face validity of the measure's performance score as an indicator of quality or resource use

5.4.1 Methods Used to Address Risk Factors

No risk adjustment or stratification

6.1.1 Current Status

In use

6.1.3 Current Use(s)

Quality Improvement with Benchmarking (external benchmarking to multiple organizations),
Quality Improvement (Internal to the specific organization)

6.1.3 Program Details

Name of the program and sponsor

The CMS Medicaid Adult Core Set

URL of the program

<https://www.medicaid.gov/medicaid/quality-of-care/performance-measurement/adult...>

Purpose of the program

See below (applicable level of analysis and care setting).

Geographic area and percentage of accountable entities and patients included

See below (applicable level of analysis and care setting).

Applicable level of analysis and care setting

Purpose: The Adult Core Set is required by statute (Section 1139B of the Social Security Act); it directs the Secretary of Health and Human Services to identify and publish a set of core healthcare quality measures for those aged 18 years and older who are enrolled in Medicaid. Beginning in 2024, use of the behavioral health measures within the Adult Core Set (including CBE #3400) is mandatory for states. The Core Set is refreshed annually so that states may address changes to required measures prior to mandatory reporting. State data that derived from the Adult Core Set measures are documented within published chart packs and datasets that highlight publicly reportable measures.

Geographic area and percentage of accountable entities and patients included: CBE #3400 is mandatory for use by states who provide Medicaid to adults aged 18 years and older.

Level of analysis and care setting: CBE #3400 is measured at the state level. CBE #3400 does not focus on a setting, but rather documentation of disbursement of medications for OUD.

Name of the program and sponsor

Medicaid Innovation Accelerator Program (IAP), Center for Medicaid and CHIP Services (CMCS)

URL of the program

<https://www.medicaid.gov/resources-for-states/innovation-accelerator-program/fu...>

Purpose of the program

See below (applicable level of analysis and care setting).

Geographic area and percentage of accountable entities and patients included

See below (applicable level of analysis and care setting).

Applicable level of analysis and care setting

Purpose: The goal of IAP was to improve the health and health care of Medicaid beneficiaries and to reduce costs by supporting states' ongoing payment and delivery system reforms. Medicaid IAP supported state Medicaid agencies to build capacity in key program and functional areas by offering targeted technical support, tool development, and cross-state learning opportunities. The goal of the Medicaid IAP Reducing SUD area was to support states to introduce policy, program, and payment reforms to better identify individuals with SUD, expand coverage for effective treatment, enhance care and practices delivered to beneficiaries, and develop payment mechanisms for SUD services that will provide better outcomes.

Geographic area and percentage of accountable entities and patients included: The IAP covered all 50 states.

Level of analysis and care setting: The measure is included in the IAP for optional reporting at the state level.

6.2.1 Actions of Measured Entities to Improve Performance

Usability of the measure was assessed via qualitative survey of a multi-stakeholder group. The results indicate that 80 percent of the respondents strongly agree or agree that the measure assesses the quality of care (i.e., access to OUD pharmacotherapy) provided to Medicaid beneficiaries who are at high-risk due to their OUD diagnosis. Overall, these results suggest that the majority of TEP respondents agreed that CBE #3400 is useful for assessing care quality among the Medicaid OUD population. Furthermore, 60 percent of respondents either strongly agree or agree that the results from the measure can be used by entities to guide decision-making and improve healthcare quality and health outcomes. These findings suggest that the majority of TEP respondents support the use of CBE #3400 for decision making and health care quality improvement efforts. There was inconclusive feedback on whether the results of CBE #3400 supplies meaningful information to the individuals or entities who use the measure's data. 50 percent of respondents either strongly agreed or agreed, 25 percent were undecided, and another 25 percent indicated *Do Not Know or Not Applicable*. These findings suggest that the measure may be meaningful to the measure's users, but more information may be needed to make this determination.

6.2.2 Feedback on Measure Performance

Feedback on the continued use of CBE #3400 is collected via public comment when the Adult Core Set is evaluated annually, via the annual review and selection process. To date, no

substantive comments on CBE #3400 have been received.

6.2.3 Consideration of Measure Feedback

To date, no substantive comments on CBE #3400 have been received.

6.2.4 Progress on Improvement

Mandatory use and reporting of CBE #3400 as part of the Medicaid Adult Core Set began in 2024. Data on trends in performance are not available at this time but will be included in annual updates.

6.2.5 Unexpected Findings

To date, no unexpected findings have been identified.

7.1 Supplemental Attachment

[CBE 3400 Supplement.pdf](#)

Developer POC email

wdowd@rti.org

Measure Developer POC

United States

The measure developer is different from the measure steward

Yes

Steward Address

United States

Steward Organization

Substance Abuse and Mental Health Services Administration (SAMHSA)

Steward Organization URL

<https://www.samhsa.gov/>

Steward POC email

Shweta.Palakkode@samhsa.hhs.gov