State Measures for Improving Opioid Use Disorder Treatment

Implementation Toolkit

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Overview

In September 2021, Pew convened an expert panel to develop consensus on a set of Core Opioid Use Disorder (OUD) Treatment Measures that all states can and should use to assess treatment system effectiveness. To guide this effort, the panel used a measurement framework known as the OUD "cascade of care," which tracks services from diagnosis to recovery.

The table below describes the selected measures, organized by stages of the cascade.

Table 1: The Core OUD Treatment Measures for States

Cascade step	Measure	Definition	Source
OUD identification/ diagnosis	1a. OUD diagnosis (cascade measure)	Percentage of individuals who had documented OUD diagnosis (e.g., on an insurance claim).	N/A
	1b. Assessed for SUD using a standardized screening tool (supporting measure)	Percentage of individuals who were screened/assessed for SUD using a standardized screening tool.	Medicaid 1115 SUD waiver monitoring
Initiation of OUD treatment	2a. Use of pharmacotherapy for OUD (cascade measure)	Percentage of individuals with an OUD diagnosis who filled a prescription for or were administered or dispensed an MOUD, overall and by type of MOUD (methadone, buprenorphine, naltrexone).	NQF* #3400
	2b. OUD provider availability (supporting measure)	Number of providers who can prescribe buprenorphine, number of providers who do prescribe buprenorphine, number of opioid treatment programs that dispense methadone and/or buprenorphine.	Medicaid 1115 SUD waiver monitoring
Retention in OUD treatment	3a. Continuity of pharmacotherapy for OUD (cascade measure)	Percentage of individuals who filled a prescription or were dispensed an MOUD who received the MOUD for at least six months, overall and by type of MOUD (methadone, buprenorphine, naltrexone).	NQF #3175
	3b. Initiation of OUD treatment and engagement in OUD treatment (supporting measure)	Percentage of individuals who initiate SUD treatment within 14 days of an OUD diagnosis. Percentage of individuals who had two or more additional SUD services within 30 days of the initiation SUD treatment encounter.	HEDIS® † Initiation and Engagement of Substance Use Treatment (NQF #0004), stratified for OUD.‡
	3c. Follow-up after an emergency department visit for substance use (supporting measure)	Percentage of emergency department visits for individuals with a principal SUD or overdose diagnosis who had a follow-up visit for SUD within seven days of the visit and within 30 days of the visit.	HEDIS® Follow-Up After Emergency Department Visit for Substance Use (NQF #3488)
Recovery from OUD	4. One or more patient-reported outcome measures to be determined by each state (cascade measure)	Percentage of individuals who achieve an improved level of functioning or quality of life.	

* This table provides National Quality Forum numbers for those measures with current endorsements (an indication that they meet NQF standards for importance, reliability, validity, usability and relevance, and feasibility).

†HEDIS®

Four of the Core OUD Treatment Measures directly correspond to the cascade of care (1a, 2a, 3a, 4), enabling states to determine the rates at which people with OUD are progressing from diagnosis to treatment to recovery. The other measures (1b, 2b, 3b, 3c) quantify aspects of the treatment system that must be functioning well to improve care and outcomes:

- Increasing SUD screening (measure 1b) should increase the number of people with OUD who are diagnosed with OUD (measure 1a).
- Increasing the number of OUD providers who prescribe buprenorphine or naltrexone or who dispense methadone (measure 2b) should increase the number of individuals with OUD who receive medication for opioid use disorder (MOUD) (measure 2a).
- Improving initiation and engagement in treatment (measure 3b) should lead to more people entering and staying in OUD treatment (measure 3a).
- Improving care transitions from hospital emergency departments to ongoing OUD treatment (measure 3c) should also increase the number of people who enter and are retained in treatment (measure 3a).

This toolkit can be used by Medicaid, behavioral health, and other agency leadership and data analysts to adopt and use these measures. The first section of the toolkit offers a checklist of activities for successfully implementing and using the measures to improve OUD policies, programs, and practices. The second section describes each measure, including their data sources, the measure steward, and links to additional technical details on how to produce them. By using this checklist, state agency leadership will be equipped to analyze the core measures—enabling them to understand their treatment system's strengths and weaknesses, and make plans to improve.

For more information on the OUD cascade of care, how Pew developed this set of measures, and why they matter, see, "States Should Measure Opioid Use Disorder Treatment to Improve Outcomes."

Implementing the Core OUD Treatment Measures

In this section, we outline the key steps to implementing the core OUD measures (see Figure 1 for a checklist of the steps).

Core Measure Implementation Checklist

- ☐ Identify a leader who will champion the adoption and use of the measures.
- ☐ Determine if the state is already collecting any of the core OUD measures.
- ☐ Develop a preliminary plan to use and disseminate the measures to improve access, quality, and outcomes.
- ☐ Obtain stakeholder feedback and agreement on the measures and how they should be used.
- ☐ Identify the data to implement the measures.
- ☐ Enter into data-sharing agreements.
- ☐ Identify staff and IT resources to analyze the data.
- ☐ Calculate the measures.
- ☐ Disseminate the measures and obtain feedback on how to improve them.
- ☐ Undertake quality, program, and policy improvement activities.
- ☐ Refine and repeat.

Step 1: Identify a leader who will champion the adoption and use of the metrics.

Implementing and acting on the metrics involves coordination across multiple stakeholder groups, both within and outside of state government. Data may be owned by multiple agencies, people with lived experience need to be engaged to understand the findings, departments will need to coordinate their responses based on what the metrics show, and providers may need to change their practices. To ensure that the metrics are implemented effectively, each state needs a champion who has credibility across these stakeholder groups and the authority to convene them. Although this person does not need to be a data analyst or researcher, they should have some understanding of the benefits and challenges of using data. Examples may include the leader of a cross-agency task force on the opioid crisis, the state opioid response director, the state substance use treatment director, or another senior official. This champion will need to take or delegate the following steps in this checklist.

Step 2: Determine if the state is already collecting any of the core OUD measures.

States likely already collect and report on a subset of the core OUD measures, for example, as a requirement of CMS' Medicaid Core Measures or the CMS Medicaid 1115 SUD demonstration. In this case, the main charges for the state will be to (1) develop and use the measures in the cascade of care framework, (2) fill in any missing measures, and (3) expand the measures beyond Medicaid to include individuals with Medicare and commercial insurance (as well as those who are uninsured, to the extent possible).

Step 3: Develop a preliminary plan to use and disseminate the measures to improve access, quality, and outcomes.

Creating a core set of metrics to track progress in addressing the OUD epidemic is necessary but not necessarily sufficient for reducing the impact of the epidemic. Therefore, it will be important for states to work with stakeholders to begin to plan for how the measures will be disseminated and used to improve OUD treatment policies and programs prior to creating the measures. The following are some of the questions that the metrics champion and agency leadership will want to think through:

- Where will the measures be displayed?
- Who will see the measures (Medicaid program staff, behavioral health department staff, managed care organizations, providers, people with OUD)?
- At what level (state, region, managed care organization, provider) will the measures be created and displayed?
- How will the state use the measures (only informational, tied to payment or contracts)?
- How will the state determine what actions should be taken to improve MOUD given the measures?
- What resources will be available to support policy and program quality improvement activities?
- How will these processes and resources be sustained over time?

Step 4: Obtain stakeholder feedback and agreement on the measures and how they should be used.

Obtaining input and understanding early in the process will help ensure that the measures are helpful and used. Agencies within the state government, treatment providers, health plans, and people with lived experience will provide feedback on the metrics and may be in a position to provide the data needed to calculate the measures.

States should get buy-in from the relevant data governance agencies within the state, including those that will need to provide staff and IT resources to create the measures, and the agencies that will use the measures for policy and treatment improvement activities. Depending on how the state government is structured, these agencies may include the Medicaid department, Department of Behavioral Health and/or Substance Use Services, and public health departments. Because states have competing priorities for data and analytic resources, endorsement from state leadership of the core OUD measures may be critical.

States should also vet the OUD measures with SUD treatment providers in the community. In general, these treatment providers welcome information that can help them improve their services. However, they may be concerned that states or health plans will employ the measures to financially or reputationally punish poor performance. They may also be worried that the data and measures will be inaccurate or misinterpreted. Discussing these concerns early in the process can help to allay these fears. Finally, providers may wish to view the measures as applied to their own organizations, in addition to the whole state. In order to meet this request, states may want to calculate the measures at the provider organization level and/or share the measure specifications with providers so that they can do their own calculations.

Health plans can also benefit from using the measures as a health plan policy and process improvement tool. Thus, it will also be important to obtain feedback from Medicaid, Medicare, and commercial health plans on the core OUD measures. As with providers, health plans may want to understand how the measures are intended to be used. For example, will the state use the measures to establish contracts with Medicaid managed plans or to determine bonus payments? Should the managed care plans use the measures in their contracts with providers? In some states, health plans may be in the best position to calculate the claims-based measures, which is another reason to obtain early buy-in.

Individuals with lived experience and their families should also be consulted for input into how best to use the measures. Individuals with OUD and their families may wish to view the data at the provider level to help identify high-quality OUD treatment programs. They also can be helpful in identifying reasons for gaps in access and use of OUD treatment and solutions (see the text box following this section for resources on engaging community members).

Step 5: Identify the data to implement the measures.

Most states can readily access Medicaid claims data, as well as data captured by their behavioral health department. It may be harder for states to obtain Medicare and commercial claims data, although this data may be available through states' all-payer claims databases. Additionally, the OUD provider supply measure may be calculated using prescription drug monitoring data and data from SAMHSA's treatment locators.

Step 6: Enter into data-sharing agreements.

Data-sharing agreements may be needed to obtain claims data from the state's all-payer claims databases; from Medicaid, public health, and substance use departments; and from managed care organizations.

Because these agreements can take time to execute, states may want to consider first using these measures with the most readily accessible data, and continuing the implementation process with that, while simultaneously working to bring on additional data sources.

Step 7: Identify staff and IT resources to analyze the data.

State resources for conducting data analytics are typically in high demand. Some states may have existing internal data shops or contracts with external vendors that they can leverage to calculate the measures. Identifying technical expertise in the quality measures can ensure that they are correctly calculated. States may be able to use federal Medicaid matching dollars, SAMHSA block grant, or State Opioid Response funding, and other federal grant program funding to fund the effort.

Step 8: Calculate the measures.

This step requires identifying the existing technical specifications (if available), determining whether they need to be modified based on the data available, or creating new technical specifications, if required. States should also develop steps for stratifying the data by subpopulation, such as race, ethnicity, rurality.

Stratifying Measures to Access Equity

Each core OUD treatment measure should be stratified to identify disparities by race, ethnicity, gender, and geography, as well as any other subpopulation of importance. Medicaid and Medicare enrollment files usually have data elements indicating the beneficiary's race/ethnicity, gender, and ZIP code. However, data from some Medicaid programs and Medicare plans may have missing race/ethnicity data for many enrollees. Furthermore, typically, commercial insurance plans do not report race/ethnicity in their claims data. In place of race/ethnicity variables at the individual level, states can create metrics of racial segregation or Black/Hispanic community density at the regional level. This data is available from the census and can be linked to claims data using a geographic identifier such as the three-digit ZIP code (which can be used to define regions in states). Studies using regional level measures of race/ethnicity find that regions where more Black people live have lower access to MOUD and are more likely to have methadone providers, rather than buprenorphine.[1]

Step 9: Disseminate the measures and obtain feedback on how to improve them.

The measures offer an opportunity to begin discussions with experts, health plans, providers, and people with OUD about ways to improve the metrics. Because they are "on the ground," providers and clients are in the best position to identify barriers to accessing MOUD. Dissemination strategies vary, but several states have developed innovative OUD dashboards. Ideally, all states will create the same core measures and disseminate them widely, which will create opportunities for cross-state learning.

Step 10: Undertake quality, program, policy improvement activities based on the measures' information.

States can use the core OUD measures as an opportunity to review and revise their regulations and policies. For example, states may reduce barriers to OUD initiation by revamping regulations and policies to encourage initiation of MOUD in emergency departments, general hospitals, jails, residential SUD programs, and through mobile community outreach. States may also consider reviewing and revising their Medicaid coverage of MOUD to ensure that all products are covered (e.g., injectable, long-acting forms of MOUD) and to remove prior authorization requirements that often prevent individuals from obtaining MOUD. States can use the measures of MOUD provider capacity to identify regions lacking access to medication treatment and develop policies to expand access, such as hiring prescribing professionals in federally qualified health centers or community mental health centers.

As another example, there are many interventions that states can pursue to improve the continuity of MOUD. Determining which ones to undertake requires an understanding of why patients discontinue MOUD. For example, are patients being lost when they transition from one health care setting to another? Do they stop because of logistical barriers such as lack of time or transportation? Can the creation of culturally sensitive and linguistically appropriate treatment settings that meet the needs of patients holistically reduce treatment dropout? By engaging people with OUD and providers, states can make changes to address the specific circumstances of their residents.

Step 11: Refine and repeat.

Having an impact on the opioid epidemic will require a long-term focus and commitment. Despite progress on expanding access to MOUD, the COVID-19 pandemic and spread of more deadly synthetic opioids have accelerated opioid overdose deaths. The core measures will need to be tracked over years to be effective. States will need to plan for updating the quality measures as the measure stewards make changes, ongoing policy refinement as the data and circumstances of the opioid crisis change, and continuous quality improvement initiatives.

Resources for Engaging Community Members with OUD

As state officials develop plans to engage community members with OUD to help them interpret and act on the core metrics, there are many questions to consider. Who will be included? How do we build and keep trust? What will we expect of them? What will we promise in return? The answers to these questions will be determined by each state's particular circumstances. Fortunately, there are resources available to help answer them:

General approaches to engaging community

Principles of Community Engagement

The federal Centers for Disease Control and Prevention has developed a comprehensive guide to community engagement. It provides models and frameworks, examples of successful cases, and tools for evaluating an organization's capacity for meaningful engagement.

Why Am I Always Being Researched?

This guide from Chicago Beyond highlights the power dynamics inherent in efforts to engage with the community and provides guidance on how to navigate these relationships ethically.

Engaging community members about data and quality improvement

A Toolkit for Centering Racial Equity Throughout Data Integration

Actionable Intelligence for Social Policy at the University of Pennsylvania partnered with state and local officials, community nonprofit organizations, and university researchers to develop this toolkit to help people using administrative data, like that used to construct many of the core metrics, keep racial equity at the forefront while planning and executing their data strategy. Doing so requires engaging community members.

Data Party Toolkit

This document provides tips and resources to host a "data party"—an opportunity to get insights into your data from stakeholders.

Engaging Consumers in the Quality Measurement Enterprise

This report reviews barriers to engaging consumers in quality measurement and improvement and offers recommendations to address them.

Resources specific to engaging people with OUD

We Are the Researched, the Researchers, and the Discounted: The Experiences of Drug User Activists as Researchers

Read this article to hear directly from people who use drugs about their experiences navigating and being negatively impacted by the power imbalances of research efforts—and their recommendations for how to improve.

The Ethics of Community-Based Research With People Who Use Drugs: Results of a Scoping Review

This article identifies ethical issues in partnering with people who use drugs—such as compensation, confidentiality when discussing criminalized behavior, and recruiting diverse voices—and promising approaches from the literature in navigating them.

Core OUD Treatment Measures Specifications

This section describes each measure in greater detail, providing:

- A description of the measure.
- The National Quality Forum (NQF) number, if applicable. NQF is a nonprofit group that evaluates measures that are used by federal and state governments and private-sector health care organizations to measure the quality of care.[2]
- The numerator and denominator.
- The data sources used to calculate the measure.
- The measure steward (the organization that created the measure and is responsible for updating it).
- Where to find a more detailed specification that includes the billing and diagnostic codes needed to implement the measure.
- Additional information that data analysts should keep in mind when implementing the measures.

Measures are regularly updated by measure stewards. Where applicable, refer to these stewards for the most recent information.

To implement the measures using the cascade of care framework, the denominator should be limited to the population of individuals who met the criteria for the prior cascade measure's numerator. For example, only individuals with an OUD diagnosis (measure 1a) should be included in the denominator of the measure use of pharmacotherapy for OUD (measure 2a). Similarly, only individuals who met the criteria for having pharmacotherapy for OUD would be included in the measure of continuity of pharmacotherapy for OUD (measure 3a).

Alternatively, states may adopt some or all of the measures without restricting the denominators to the individuals who met the criteria for the prior measure in the cascade. This approach could allow states to determine the percentage of individuals who may have recovered from OUD without using MOUD for at least six months, for example.

1a. OUD Diagnosis

Measure description	Percentage of individuals over a year who had a documented OUD diagnosis (e.g., on an insurance claim).
NQF ID and name	N/A
Denominator	Number of individuals in the population of interest over the period (e.g., number of Medicaid beneficiaries in the year).
Numerator	The number of individuals with an OUD diagnosis on their claim in any position.
Data sources	Insurance claims data, including Medicaid, Medicare, and private insurance.
Measure steward	None.
Full technical specification	See Appendix A for a list of ICD-10 OUD diagnoses.
Notes	Nationally representative household surveys that measure the prevalence of OUD, such as the National Survey on Drug Use and Health (NSDUH) or a state's own prevalence estimates, if available, can be used to provide context for the OUD diagnosis measure. For example, the NSDUH may indicate that 10% of the state's population ages 18 or older has an OUD, while Medicaid claims data may show that only 5% of the enrolled adult population was diagnosed with an OUD. This comparison reveals that no more than half of Medicaid enrollees with an OUD are being diagnosed by the health care system—and even more may be going undiagnosed, because some states have found higher rates of OUD in the Medicaid population than the rest of the state.[3]

1b. Assessed for SUD Treatment Needs Using a Standardized Screening Tool

Measure description	Percentage of individuals screened for SUD treatment needs using a standardized screening tool during the measurement period.
NQF ID and name	N/A
Denominator	Number of individuals in the population of interest over the time period (e.g., number of Medicaid beneficiaries enrolled over a year).
Numerator	The number of unique individuals screened for SUD treatment need using a standardized screening tool for SUD, including but not limited to: • Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST) • Alcohol Use Disorders Identification Test (AUDIT) or AUDIT-C • Drug Abuse Screening Test (DAST or DAST-10) • CAGE Alcohol Use Assessment • CRAFFT Screening Tool • Tobacco, Alcohol, Prescription Medication, and Other Substance Use Tool
Data sources	Electronic health records or registry data. Insurance claims, including Medicaid, Medicare, and private insurance claims, can be used to measure screening for alcohol and/or substance abuse (e.g., using Screening and Brief Intervention (SBI) CPT, G, or H codes). However, providers may not always bill insurance when they screen for alcohol or drug abuse, therefore, the measure may not be accurately captured in insurance claims data and may be more accurately captured in electronic health records.
Measure steward	Centers for Medicaid and Medicare Services (CMS), 1115 Substance Use Disorder (SUD) Demonstration Monitoring Metrics.
Full technical specification	Contact 1115MonitoringAndEvaluation@cms.hhs.gov
Notes	This measure was an optional measure, as opposed to a required measure, under the 1115 SUD demonstration.

2a. Use of Pharmacotherapy for OUD

Measure description	Percentage of beneficiaries with an OUD who filled a prescription for or were administered or dispensed a Food and Drug Administration (FDA)-approved medication for OUD during the measure year. The measure will report any medications used in treating OUD and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.
NQF ID and name	NQF 3400: Use of Pharmacotherapy for Opioid Use Disorder.
Denominator	Beneficiaries with at least one encounter with a diagnosis of OUD.
Numerator	Beneficiaries with evidence of at least one prescription filled or who were administered or dispensed a medication for OUD.
Data sources	Electronic health records or registry data. Insurance claims, including Medicaid, Medicare, and private insurance claims, can be used to measure screening for alcohol and/or substance abuse (e.g., using Screening and Brief Intervention (SBI) CPT, G, or H codes). However, providers may not always bill insurance when they screen for alcohol or drug abuse, therefore, the measure may not be accurately captured in insurance claims data and may be more accurately captured in electronic health records.
Measure steward	CMS
Full technical specification	Technical specification for this measure, as used by CMS, can be found at https://www.medicaid.gov/license/form/1551/27606.
Notes	This is a 2021 Medicaid core set measure already reported by many states. It will be essential to update the measure to capture new FDA-approved medications to treat opioid use disorders. This measure includes oral naltrexone. However, this medication is not recommended for treating OUD.[4] If state officials identify widespread use of the medication, they should do further analysis to understand who is prescribing and receiving this treatment.

2b. Opioid Use Disorder Provider Availability

Measure description	Number of providers who can prescribe buprenorphine, number of providers who do prescribe buprenorphine, and number of opioid treatment programs that dispense methadone and/or buprenorphine.
NQF ID and name	N/A
Denominator	N/A (count)
Numerator	N/A (count)

Data sources	**Data sources on total number of providers who are buprenorphine-waivered and opioid treatment programs in the state:** Information on buprenorphine-waivered providers and OTPs can be obtained from the Substance Abuse and Mental Health Services Administration (SAMHSA) treatment locators:
	• Buprenorphine-waivered providers: https://www.samhsa.gov/medication-assisted-treatment/find-treatment/treatment-practitioner-locator
	• OTPs: https://dpt2.samhsa.gov/treatment/directory.aspx
	• OTPs providing buprenorphine: https://findtreatment.samhsa.gov/. To use this tool:
	  • Select state.
	  • Under substance use type of opioid treatment, select federally certified opioid treatment program and provides buprenorphine.
	  • Select download.
	Data source for number of providers prescribing/administering medications to treat opioid use disorders: This information can be obtained from prescription drug insurance claims that include a provider identifier, such as a National Provider Index. States can identify all prescription claims for MOUD and determine how many of the prescribing professionals who participate in their program or health plan are writing prescriptions for MOUD. Prescription Drug Monitoring Program data may also be used to determine the number of buprenorphine prescribers.

Measure steward	None
Full technical specification	N/A
Notes	Because most prescribers who have a DEA waiver to prescribe buprenorphine prescribe little or no buprenorphine, it is important to count how many providers actually are prescribing the medication and to how many patients. This measure is being used by some states in their opioid dashboards and as a required monitoring metric in the SUD 1115 demonstration.

3a. Continuity of Pharmacotherapy for OUD

Measure Description	Percentage of individuals who filled a prescription or were dispensed a MOUD for at least six months, overall and by type of MOUD (methadone, buprenorphine, naltrexone, injectable naltrexone).
NQF ID and name	3175. Continuity of Pharmacotherapy for Opioid Use Disorders.
Denominator	Adults ages 18 years and older who had a diagnosis of OUD and pharmacotherapy for OUD during the 18-month denominator identification period.
Numerator	Adults in the denominator who had at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days.
Data sources	Insurance claims data, including Medicaid, Medicare, and private insurance.
Measure steward	University of Southern California
Full technical specification	Contact mattke@usc.edu Additional measure details: https://qpp.cms.gov/docs/QPP_quality_measure_specifications/CQM-Measures/2019_Measure_468_MIPSCQM.pdf
Notes	At least 18 months of claims data should be used to accurately capture continuity. This is a monitoring metric in the SUD 1115 demonstration. Like use of pharmacotherapy, this measure includes oral naltrexone. If the data reveals widespread use of this medication for OUD, further analysis is needed.

3b. Initiation of OUD Treatment and Engagement in OUD Treatment

Measure description	Percentage of individuals who initiate SUD treatment within 14 days of an OUD diagnosis. Rate of individuals who had two or more additional SUD services within 30 days of the initiation of a SUD treatment encounter.
NQF ID and name	0004. Initiation and Engagement of Substance Use Treatment, stratified for OUD.
Denominator	**Original**: Individuals ages 13 years and older diagnosed with a new episode of alcohol and drug dependency. **OUD specific**: Individuals ages 13 years and older diagnosed with a new episode of OUD.
Numerator	**Initiation of substance use treatment**: Initiation of substance use treatment through an inpatient admission, outpatient visit, intensive outpatient encounter, partial hospitalization, telehealth, or MOUD within 14 days of diagnosis. **Engagement of substance use treatment**: Initiation of substance use treatment and two or more additional alcohol or other drug services or MOUD within 34 days after the date of the initiation encounter.
Data sources	Insurance claims data, including Medicaid, Medicare, and private insurance.
Measure steward	National Committee for Quality Assurance.
Full technical specification	Contact NCQA at https://my.ncqa.org/. Additional measure details: Measure details (cms.gov)
Notes	The NCQA HEDIS® measure specification has been adjusted pursuant to NCQA's Rules for Allowable Adjustments of HEDIS. The adjusted measure specification may be used only for internal quality improvement purposes. The numerator is not limited to OUD-specific treatment because claims often lack that level of detail. The initial specifications for this measure did not consider MOUD alone in the definition of substance use treatment, but now it does. Because this measure includes psychosocial services, states should examine it closely when using it to understand OUD treatment, as the evidence for these services alone improving outcomes is weak.[5] States may want to consider conducting an MOUD-only subanalysis of this measure. This is a 2021 Medicaid core set measure and a monitoring metric in the SUD 1115 demonstration.

3c. Follow-Up After an Emergency Department Visit for Substance Abuse

Measure description	Rate of emergency department visits for individuals with a principal SUD diagnosis or a diagnosis of drug overdose who had a follow-up visit for SUD within seven days of the visit and within 30 days of the visit.
NQF ID and name	NQF 3488. Follow-Up After Emergency Department Visit for Substance Use.
Denominator	An emergency department visit with a principal diagnosis of SUD or drug overdose between Jan. 1 and Dec. 1 of the measurement year in which the beneficiary was 18 years or older on the date of the visit.
Numerator	**7-Day Follow-Up**: A follow-up visit with any practitioner, with a principal diagnosis of substance use disorder within seven days after the emergency department visit (eight total days). **30-Day Follow-Up**: A follow-up visit with any practitioner, with a principal diagnosis of substance use disorder within 30 days after the emergency department visit (31 total days).
Data sources	Insurance claims data, including Medicaid, Medicare, and private insurance.
Measure steward	National Committee for Quality Assurance (NCQA).
Full technical specification	Contact NCQA at https://my.ncqa.org/. Additional measure details: https://cmit.cms.gov/CMIT_public/ViewMeasure?MeasureId=4024
Notes	This measure is a Medicaid core set measure and a SUD 1115 demonstration monitoring metric. This measure is limited to individuals who visited an emergency department but were not admitted to the hospital. Note that this measure is specified for SUD in general, not OUD specifically.

4. Recovery from OUD

Measure description	Percentage of individuals who achieve an improved level of functioning or quality of life.
NQF ID and name	N/A
Denominator	Varies by measure
Numerator	Varies by measure
Data sources	Possible data sources include (1) Recovery estimates from the National Survey on Drug Use and Health (NSDUH), (2) the SAMHSA National Outcome Measures and, (3) patient functioning and/or quality of life instruments as collected through patient surveys or during provider encounters. **National Survey on Drug Use and Health recovery estimates**: Since 2020, this survey has asked respondents who indicated that they have a problem with drug use whether they perceived themselves to be in recovery.[6] Specifically, respondents were asked "whether they thought they ever have had a problem with their own drug or alcohol use." If they answered yes, they were then asked "whether they considered themselves to be in recovery or to have recovered from their own problem with drug or alcohol use."[7] Although this data provides estimates of people in recovery, it does not provide the targeted information that policymakers need to improve the treatment system, such as where they received care. It also does not provide information on the various dimensions of recovery, defined by SAMHSA as health, home, purpose, and community.[8] **SAMHSA National Outcome Measures**: States are required to collect and report to SAMHSA a common set of outcome metrics on individuals receiving treatment in substance use treatment programs that receive public funding. National Outcome Measures include the percentage of patients reducing/abstaining from substances, achieving stable housing, not being arrested, being employed, engaging in self-help groups, and being successfully discharged. Some states, such as Connecticut, track the SAMHSA National Outcome Measures across providers and over time.[9] However, the quality and the comprehensiveness of the National Outcome Measures vary among states and thus may not be a viable option for tracking recovery outcomes for all states. Further, measuring successful discharge may be misinterpreted to imply that MOUD should be time-limited, while research shows that long-term treatment can lead to better outcomes in employment, health, and criminal justice involvement.[10] **Patient functioning and/or quality of life instruments as collected through patient surveys or during provider encounters:** Reliable and valid patient-reported outcome instruments can be used to collect information on patient functioning and quality of life. The list below provides a sample of tools that can be used to capture functioning and quality of life for patients with SUD. The instruments can be administered to patients during a provider encounter or can be sent directly to patients via a survey. 1. Brief Assessment of Recovery Capital (BARC-10) 2. Addiction Severity Index (ASI) 3. Brief Addiction Monitor (BAM) 4. RecoveryTrack 5. Functional Outcomes Survey 12-item Short Form (SF-12) 6. Functional Outcomes Survey 20-item Short Form (SF-20) 7. Functional Outcomes Survey 36 (SF-36) 8. WHOQOL 9. WHOQOL-BREF 10. Global Appraisal of Individual Need (GAIN-I) 11. Personal Wellbeing Index—Adult (PWI-A) 12. Behavior and Symptom Identification Scale-24 (BASIS-24) 13. Alcohol Quality of Life Scale (AQoLS)
Measure steward	N/A
Full technical specification	N/A
Notes	In the future, validated quality measures may be available. With funding from CMS, the American Psychiatric Association is developing measures for the "improvement or maintenance of symptoms, functioning, and recovery."[11]

‡ The NCQA HEDIS measure specification has been adjusted pursuant to NCQA's Rules for Allowable Adjustments of HEDIS. The adjusted measure specification may be used only for internal quality improvement purposes.

Appendix A: ICD-10 Opioid User Disorder Diagnostic Codes

Opioid Use Disorder	
F11.10	Opioid abuse, uncomplicated.
F11.120	Opioid abuse with intoxication, uncomplicated.
F11.121	Opioid abuse with intoxication, delirium.
F11.122	Opioid abuse with intoxication, with perceptual disturbance.
F11.129	Opioid abuse with intoxication, unspecified.
F11.14	Opioid abuse with opioid-induced mood disorder.
F11.150	Opioid abuse with opioid-induced psychotic disorder, with delusions.
F11.151	Opioid abuse with opioid-induced psychotic disorder, with hallucinations.
F11.159	Opioid abuse with opioid-induced psychotic disorder, unspecified.
F11.181	Opioid abuse with opioid-induced sexual dysfunction.
F11.182	Opioid abuse with opioid-induced sleep disorder.
F11.188	Opioid abuse with other opioid-induced disorder.
F11.19	Opioid abuse with unspecified opioid-induced disorder.
F11.20	Opioid dependence, uncomplicated.
F11.21	Opioid dependence, in remission.
F11.220	Opioid dependence with intoxication, uncomplicated.
F11.221	Opioid dependence with intoxication, delirium.
F11.222	Opioid dependence with intoxication, with perceptual disturbance.
F11.229	Opioid dependence with intoxication, unspecified.
F11.23	Opioid dependence with withdrawal.
F11.24	Opioid dependence with opioid-induced mood disorder.
F11.250	Opioid dependence with opioid-induced psychotic disorder, with delusions.
F11.251	Opioid dependence with opioid-induced psychotic disorder, with hallucinations.
F11.259	Opioid dependence with opioid-induced psychotic disorder, unspecified.
F11.281	Opioid dependence with opioid-induced sexual dysfunction.
F11.282	Opioid dependence with opioid-induced sleep disorder.
F11.288	Opioid dependence with other opioid-induced disorder.
F11.29	Opioid dependence with unspecified opioid-induced disorder.

Opioid Use	
F11.90	Opioid use, unspecified, uncomplicated.
F11.920	Opioid use, unspecified with intoxication, uncomplicated.
F11.921	Opioid use, unspecified with intoxication delirium.
F11.922	Opioid use, unspecified with intoxication, with perceptual disturbance.
F11.929	Opioid use, unspecified with intoxication, unspecified.
F11.93	Opioid use, unspecified, with withdrawal.
F11.94	Opioid use, unspecified, with opioid-induced mood disorder.
F11.950	Opioid use, unspecified with opioid-induced psychotic disorder, with delusions.
F11.951	Opioid use, unspecified with opioid-induced psychotic disorder, with hallucinations.
F11.959	Opioid use, unspecified with opioid-induced psychotic disorder, unspecified.
F11.981	Opioid use, unspecified with opioid-induced sexual dysfunction.
F11.982	Opioid use, unspecified with opioid-induced sleep disorder.
F11.988	Opioid use, unspecified with other opioid-induced disorder.
F11.99	Opioid use, unspecified, with unspecified opioid-induced disorder.

Endnotes

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