

Proposed Changes to Existing Measure for HEDIS^{®1} MY 2022: **Initiation and Engagement of Alcohol and** **Other Drug Abuse or Dependence Treatment (IET)**

NCQA seeks public comment on proposed revisions to the HEDIS measure *Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment*.

NCQA believes that the proposed revisions, outlined below and supported by NCQA expert panels, will improve the current measure and bring it into closer alignment with current clinical practice guidelines, expert consensus on the treatment of substance use disorders (SUD) and user input about how the measure can help health plans identify and evaluate early SUD treatment for select subpopulations.

NCQA proposes the following revisions to the IET measure for HEDIS Measurement Year 2022:

1. **Change the measure from “member-based” to “episode-based.”** This change will allow multiple treatment episodes to be measured independently, aligning with similar HEDIS measures of early treatment adherence.
2. **Lengthen the negative SUD look-back period from 60 days to 180 days for defining a “new episode of SUD treatment.”** A longer look-back period in the denominator will improve the measure’s validity by limiting the number of members receiving ongoing treatment who inadvertently fall into the denominator due to the length of time between SUD services.
3. **Remove the measure numerator requirement that psychosocial treatment accompany pharmacotherapy for treatment of opioid and alcohol use disorders.** Updated clinical practice guidelines and expert consensus no longer support this requirement.
4. **Add stratification for “behavioral health complexity” (co-occurring mental health or SUD diagnosis) to total SUD stratification rates and total rate (not all age stratifications).** Members with co-occurring mental health or SUD conditions are a common and complex patient population that has been found to initiate and engage in treatment more frequently than those without these co-occurring conditions. Stratification can help HEDIS users identify and evaluate early SUD treatment for select subpopulations.
5. **Split the current adult age stratification (18+ years of age) into 18–64 and 65+.** A more granular assessment of early SUD treatment for younger and older adults is consistent with other HEDIS SUD and mental health measures.

In addition to the revisions above, NCQA seeks feedback on the following proposed revisions:

1. **Include members 13–17 in the proposed 18–64 age stratification,** given that health plans demonstrate limited ability to report the 13–17 stratification.
2. **Count each new episode of SUD treatment in only one SUD diagnosis cohort** (principal diagnosis position on the index/identification claim or in the position closest to the principal position), in cases of dual SUD diagnosis. Currently, members with a dual SUD diagnosis on their identification event are included in all relevant SUD stratifications (opioid, alcohol, other drug use disorders). For example, for a diagnosis of both opioid use disorder (OUD) and alcohol use disorder (AUD), the health plan submits the denominator, numerator and performance data for the OUD stratification, the AUD stratification and an SUD “total.” However, both diagnoses may not be reflected on each subsequent treatment encounter and the validity of each stratified SUD performance rate may be compromised. Additionally, how the current measure collects data does not allow for systematic tracking of differences in treatment initiation and engagement for members with dual diagnoses.

With the proposed addition of the “behavioral health complexity” stratification to identify individuals with co-occurring mental health and SUD conditions, the measure would allow each SUD treatment episode to contribute to only one SUD stratification.

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3. **Remove emergency department (ED) visits or detoxification events for a diagnosis of SUD from the negative look-back period.** In this and other HEDIS measures, ED visits and detoxification events are not considered comprehensive treatment but indications of acute care and stabilization services. This potential modification could help identify additional new episodes of SUD treatment in the denominator for high-risk members who previously only had acute ED visits or detoxification events, rather than more comprehensive SUD treatment.

Supporting documents include draft measure specifications and evidence workup.

NCQA acknowledges the contributions of the Geriatric, Behavioral Health and Technical Measurement Advisory Panels.

Initiation and Engagement of ~~Alcohol and Other Drug Abuse or Dependence~~ Substance Use Disorder Treatment (IET)

SUMMARY OF CHANGES TO HEDIS MY 2022

- Removed “AOD” language and replaced with “SUD,” removed “abuse or dependence” language and replaced with “use disorder.”
- Updated Intake Period to July 2 of the year prior to the measurement year—November 14 of the measurement year.
- Updated to an episode-based measure, allowing members to contribute multiple episodes within the measurement year; changed language to “Treatment Period” and “Treatment Period Start Date.”
- Removed 18+ age stratification, added 18-64 and 65+ age stratifications.
- Added Behavioral Health Complexity stratification.
- Revised Negative SUD History in measure denominator from 60 days to 180 days.
- Revised Continuous Enrollment criteria from 108 to 228 days.
- Removed rule that only one of the two required criteria for the *Engagement* numerator could be satisfied by the dispensing or administration of pharmacotherapy.
- Revised rules for SUD diagnosis stratifications.
- Clarified members receiving hospice care are a required exclusion.

Description

The percentage of adolescent and adult members with a new episode of alcohol or other drug (AOD) abuse or dependence who received the following. The percentage of new substance use disorder (SUD) treatment episodes that result in treatment initiation and engagement. Two rates are reported:

- *Initiation of AOD-SUD Treatment.* The percentage of new SUD treatment episodes that result in treatment initiation ~~members who initiate treatment~~ through an inpatient ~~AOD-SUD~~ admission, outpatient visit, intensive outpatient encounter or partial hospitalization, telehealth or medication treatment within 14 days of the SUD diagnosis.
- *Engagement of AOD-SUD Treatment.* The percentage of new SUD treatment episodes that result in treatment engagement ~~members who initiated treatment and who were engaged in ongoing AOD treatment~~ within 34 days of the SUD treatment initiation ~~visit~~.

Definitions

Intake Period

January 1–November 14–July 2 of the year prior to the measurement year – November 14 of the measurement year. The Intake Period is used to capture new SUD treatment episodes ~~of AOD abuse and dependence~~.

Date of service for services billed weekly or monthly

For an opioid treatment service that bills monthly or weekly (ODU Weekly Non Drug Service Value Set; OUD Monthly Office Based Treatment Value Set; OUD Weekly Drug Treatment Service Value Set), if the service includes a range of dates, then use the earliest date as the date of service. Use this date for all relevant events (the ~~IETD~~ Treatment Period Start Date, negative ~~diagnosis~~ SUD history and numerator events).

**IESD Treatment
Period Start Date**

~~Index Episode Start Date. The earliest date of service for an eligible encounter during the Intake Period with a diagnosis of AOD abuse or dependence. An eligible encounter during the Intake Period with a diagnosis of SUD with a negative SUD history.~~

For an outpatient, intensive outpatient, partial hospitalization, observation, telehealth, or ED visit (not resulting in an inpatient stay), the IESD Treatment Period Start Date is the date of service.

For an inpatient stay or for detoxification that occurred during an inpatient stay, the IESD Treatment Period Start Date is the date of discharge.

For detoxification (other than detoxification that occurred during an inpatient stay), the IESD Treatment Period Start Date is the date of service.

For ~~ED or~~ observation visits, outpatient, intensive outpatient, partial hospitalization, detoxification or telehealth visits that result in an inpatient stay, the IESD Treatment Period Start Date is the date of the inpatient discharge (an AOD/SUD diagnosis is not required for the inpatient stay; use the diagnosis from the ~~ED or observation visit~~ outpatient, intensive outpatient, partial hospitalization, observation, telehealth, detoxification or ED visit to determine the diagnosis cohort).

For direct transfers, the IESD Treatment Period Start Date is the discharge date from the last admission (an AOD-SUD diagnosis is not required for the transfer; use the diagnosis from the initial admission to determine the diagnosis cohort).

**AUD or OUD
medication
dispensing
event**

Alcohol use disorder (AUD) or opioid use disorder (OUD) pharmacotherapy identified using pharmacy data (Alcohol Use Disorder Treatment Medications List, Opioid Use Disorder Treatment Medications List

medication lists).

**AUD or OUD
medication
administration
event**

AUD or OUD pharmacotherapy identified using medical claims data (Naltrexone Injection Value Set, Buprenorphine Oral Value Set, Buprenorphine Oral Weekly Value Set, Buprenorphine Injection Value Set, Buprenorphine Implant Value Set, Buprenorphine Naloxone Value Set, Methadone Oral Value Set, Methadone Oral Weekly Value Set, OUD Weekly Drug Treatment Service Value Set)value sets).

**Negative
Diagnosis-SUD
History**

~~A period of 60 days (2 months) before the IESD when the member had no claims/encounters with a diagnosis of AOD abuse or dependence.~~

To qualify for Negative SUD History, the following criteria must be met:

- A period of 180 days prior to the Treatment Period Start Date when the member had no claims/encounters with a diagnosis of SUD (Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set).
- A period of 180 days prior to the Treatment Period Start Date when the member had no AUD or OUD medication dispensing events or AUD or OUD medication administration events.
- A period of 180 days prior to the Treatment Period Start Date when the member was not already receiving AUD or OUD pharmacotherapy. For example, if an ~~OUD dispensing event~~ has a date of service of the Treatment Period Start Date is on January 1, then the 180 days prior includes July 5–December 31. If the member had received a

buprenorphine implant (180 days supply) any time during the 180 days prior to January 1, the member is already receiving OUD pharmacotherapy on January 1 and does not have a negative SUD history.

To determine if a member was receiving AUD or OUD pharmacotherapy during the lookback period, identify the start and end dates for each medication. The start date is the date of service of the dispensing event or administration event and the end date is the start date plus the days supply minus one. For pharmacotherapy dispensing events identified using a medication list (AUD or OUD medication dispensing events), use days supply in the pharmacy data. If days supply is not available in the pharmacy data, then use the days supply listed for the corresponding value set. If the pharmacy data for a buprenorphine oral medication does not contain days supply, count as a 7-days supply. No adjustments for overlapping days supply are required for the negative lookback period.

For an inpatient stay, use the admission date to determine the Negative ~~Diagnosis~~ SUD History.

~~For ED or observation visits—an outpatient, intensive outpatient, partial hospitalization, observation, telehealth, detoxification or ED visit that result in an inpatient stay,~~ use the earliest date of service (either the ~~ED/observation date outpatient, intensive outpatient, partial hospitalization, observation, telehealth detoxification, or ED date~~ of service or the inpatient admission date) to determine the Negative ~~Diagnosis~~ SUD History.

For direct transfers, use the first admission to determine the Negative ~~Diagnosis~~ SUD History.

Treatment Period

A period of 48 calendar days beginning on the Treatment Period Start Date through the 47 days after the Treatment Period Start Date.

Note: Members can have multiple Treatment Period Start Dates and Treatment Periods during the measurement year.

Direct transfer

A direct transfer is when the discharge date from the first inpatient setting precedes the admission date to a second inpatient setting by one calendar day or less. For example:

- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 1, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to an inpatient setting on June 2, is a direct transfer.
- An inpatient discharge on June 1, followed by an admission to another inpatient setting on June 3, is not a direct transfer; these are two distinct inpatient stays.

Use the following method to identify admissions to and discharges from inpatient settings.

1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
2. Identify the admission and discharge dates for the stay.

Eligible Population

~~Note: Members in hospice are excluded from the eligible population. Refer to General Guideline 17: Members in Hospice.~~

Product lines Commercial, Medicaid, Medicare (report each product line separately).

Age 13 years and older as of ~~the Treatment Period Start Date~~ December 31 of the measurement year. Report ~~two~~ three age stratifications and a total rate:

- 13–17 years.
- ~~18+ 18-64~~ years.
- 65+ years.
- Total.

The total is the sum of the age stratifications.

~~AOD-SUD~~ diagnosis cohorts

Report the following diagnosis cohorts for each age stratification and the total rate:

- Alcohol ~~abuse or dependence~~ use disorder.
- Opioid ~~abuse or dependence~~ use disorder.
- Other drug ~~abuse or dependence~~ use disorder.
- Total.

The total is the sum of the SUD diagnosis stratifications.

Behavioral health complexity

For this measure, each SUD diagnosis cohort total rate (total age stratification only) will be stratified by a proxy variable for behavioral health complexity, defined as a co-occurring SUD or mental health (MH) condition during the measurement year or the year prior to the measurement year. The two stratifications are:

- No co-occurring MH or SUD.
- Co-occurring MH or SUD.

Continuous enrollment ~~60-180~~ days (~~2-6~~ months) prior to the ~~IESD-Treatment Period Start Date~~ through 47 days after the ~~IESD-Treatment Period Start Date~~ (~~108-228~~ total days).

Allowable gap None.

Anchor date None.

Benefits Medical, pharmacy and chemical dependency (inpatient and outpatient).

Note: *Members with detoxification-only chemical dependency benefits do not meet these criteria.*

Event/diagnosis New episode of ~~AOD abuse or dependence~~ SUD during the Intake Period.

Follow the steps below to identify the ~~eligible population, which is the~~ denominator for both rates.

Step 1 Identify eligible events, the Index Episode. Identify all members-Identify all claims/encounters with a diagnosis of SUD for members in the specified age range ~~who~~ during the Intake Period where the member had one of the following:

- An outpatient visit, telehealth, intensive outpatient visit or partial hospitalization with a diagnosis of ~~AOD-abuse or dependence~~SUD. Any of the following code combinations meet criteria:
 - IET Stand Alone Visits Value Set **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
 - IET Visits Group 1 Value Set **with** IET POS Group 1 Value Set and with one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
 - IET Visits Group 2 Value Set **with** IET POS Group 2 Value Set and **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
 - ~~ODU Weekly Non Drug Service Value Set **with** Opioid Abuse and Dependence Value Set.~~
 - ~~ODU Monthly Office Based Treatment Value Set **with** Opioid Abuse and Dependence Value Set.~~
 - ~~ODU Weekly Drug Treatment Service Value Set **with** Opioid Abuse and Dependence Value Set.~~
- A detoxification visit (Detoxification Value Set) **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- An ED visit (ED Value Set) **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- An observation visit (Observation Value Set) **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- An acute or nonacute inpatient discharge **with** one of the following on the discharge claim: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set. To identify acute and nonacute inpatient discharges:
 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
 2. Identify the discharge date for the stay.
- A telephone visit (Telephone Visits Value Set) **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- An e-visit or virtual check-in (Online Assessments Value Set) **with** one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- An opioid treatment service (ODU Weekly Non Drug Service Value Set; ODU Monthly Office Based Treatment Value Set; ODU Weekly Drug Treatment Service Value Set) with a diagnosis of opioid abuse or dependence (Opioid Abuse and Dependence Value Set).

~~For members with more than one episode of AOD abuse or dependence, use the first episode.~~

~~For members whose first episode was an ED or observation visit that resulted in an inpatient stay, use the diagnosis from the ED or observation visit to determine the diagnosis cohort and use the inpatient discharge date as the IESD.~~

Step 2 ~~For each eligible event identified in step 1, identify the SUD diagnosis cohort to which it belongs for measure calculation. Select the Index Episode and stratify based on age and AOD diagnosis cohort.~~

- ~~If the eligible event includes member has a diagnosis of AUD (Alcohol Abuse and Dependence Value Set), place the corresponding Treatment Period member in the alcohol cohort.~~
- ~~If the eligible event includes member has a diagnosis of OUD (Opioid Abuse and Dependence Value Set), place the corresponding Treatment Period member in the opioid cohort.~~
- ~~If the eligible event includes member has a diagnosis for a drug use disorder drug abuse or dependence that is neither for opioid or alcohol (Other Drug Abuse and Dependence Value Set), place the corresponding Treatment Period member in the other drug cohort.~~

~~If the eligible event includes member has multiple substance use diagnoses for the visit, report the corresponding eligible event member in all AOD the SUD diagnosis stratifications for which there is a primary diagnosis. If neither substance use diagnosis is in a primary position on the claim, place the Treatment Period in the stratification that reflects the diagnosis in the position closest to the principal diagnosis on the claim meet criteria.~~

~~The total is not a sum of the diagnosis cohorts. Count members in the total denominator rate if they had at least one alcohol, opioid or other drug abuse or dependence diagnosis during the measurement period. Report member with multiple diagnoses during the Index Episode only once for the total rate for the denominator.~~

Step 3 ~~Test for Negative Diagnosis SUD History. For each eligible event identified in step 1, test for a Negative SUD History. Exclude events that do not have a Negative SUD History. All remaining events with a Negative SUD History are considered Treatment Period Start Dates. members who had a claim/ encounter with a diagnosis of AOD abuse or dependence (AOD Abuse and Dependence Value Set), AOD medication treatment (AOD Medication Treatment Value Set) or an alcohol or opioid dependency treatment medication dispensing event (Alcohol Use Disorder Treatment Medications List; Opioid Use Disorder Treatment Medications List) during the 60 days (2 months) before the IESD.~~

~~For an inpatient IESD Treatment Period Start Date, use the admission date to determine the 60 180-day Negative Diagnosis SUD History period.~~

~~For ED or observation visits outpatient, intensive outpatient, partial hospitalization, observation, telehealth, detoxification or ED visit that result in an inpatient stay, use the earliest date of service (the ED/observation outpatient, intensive outpatient, partial hospitalization, observation, telehealth, detoxification or ED date of service or the inpatient admission date) to determine the Negative Diagnosis SUD History.~~

Step 4 ~~Identify all Treatment Periods and calculate continuous enrollment. Members must be continuously enrolled for 6180 days (26 months) before the IESD Treatment Period Start Date through 47 days after the IESD Treatment Period Start Date (40228 total days), with no gaps.~~

Step 5 ~~Select the Index Episode and stratify based on age and AOD diagnosis cohort.~~

- ~~• If the member has includes a diagnosis of alcohol abuse or dependence (Alcohol Abuse and Dependence Value Set), place the member in the alcohol cohort.~~
- ~~• If the member has a diagnosis of opioid abuse or dependence (Opioid Abuse and Dependence Value Set), place the member in the opioid cohort.~~
- ~~• If the member has a diagnosis for a drug abuse or dependence that is neither for opioid or alcohol (Other Drug Abuse and Dependence Value Set), place the member in the other drug cohort.~~

~~If the member has multiple substance use diagnosis for the visit, report the member in the AOD diagnosis stratifications for which they it meets criteria.~~

~~The total is not a sum of the diagnosis cohorts. Count member Each Treatment Period is counted in the total denominator rate once, even if a single Treatment Period includes a Treatment Period Start Date with multiple diagnoses. if they had at least one alcohol, opioid or other drug abuse or dependence use disorder diagnosis during the measurement period. Report member Treatment Periods with multiple diagnoses during the Index Episode only once for the total rate for the denominator.~~

For each Treatment Period identified in step 4, identify if the member has a history of SUD or another MH condition during the measurement year or the year prior to the measurement year, and stratify based on behavioral health complexity.

- For Treatment Periods for a diagnosis of AUD (Alcohol Abuse and Dependence Value Set), identify if the member has a diagnosis of an additional SUD or MH condition (Opioid Abuse and Dependence Value Set; Other Drug Abuse and Dependence Value Set; Mental Illness Value Set) during the measurement year or the year prior to the measurement year. If they do, place the Treatment Period in the Co-occurring MH/SUD Behavioral Health Complexity cohort.
- For Treatment Periods for a diagnosis of OUD (Opioid Abuse and Dependence Value Set), identify if the member has a diagnosis of an additional SUD or MH condition (Alcohol Abuse and Dependence Value Set; Other Drug Abuse and Dependence Value Set; Mental Illness Value Set) during the measurement year or the year prior to the measurement year. If they do, place the Treatment Period in the Co-occurring MH/SUD Behavioral Health Complexity cohort.
- For Treatment Periods for a diagnosis of another drug use disorder other than opioid or alcohol (Other Drug Abuse and Dependence Value Set), identify if the member has a diagnosis of an additional SUD or MH condition (Alcohol Abuse and Dependence Value Set; Opioid Drug Abuse and Dependence Value Set; Mental Illness Value Set) during the measurement year or the year prior to the measurement year. If they do, place the Treatment Period in the Co-occurring MH/SUD Behavioral Health Complexity cohort.

For all Treatment Periods that do not meet the criteria for placement in the Co-occurring MH/SUD cohort, place the Treatment Period in the No Co-occurring MH/SUD Behavioral Health Complexity cohort.

Required exclusion Members receiving hospice care. (Refer to *General Guideline 17: Members in Hospice.*)

Administrative Specification

Denominator The eligible population.

Numerator

Initiation of AOD SUD Treatment Initiation of AOD SUD treatment within 14 days of the IESD Treatment Period Start Date.

If the ~~Index Episode Treatment Period Start Date~~ was an inpatient discharge (or an ~~ED/observation~~outpatient, intensive outpatient, partial hospitalization, observation, telehealth, detoxification or ED visit that resulted in an inpatient stay), the inpatient stay is considered initiation of treatment and the ~~member~~ Treatment Period is compliant.

If the ~~Index Episode Treatment Period Start Date~~ was an opioid treatment service that bills monthly or weekly (OUD Monthly Office Based Treatment Value Set; OUD Weekly Non Drug Service Value Set; OUD Weekly Drug

Treatment Service Value Set), the opioid treatment service is considered initiation of treatment and the ~~member~~ Treatment Period is compliant.

If the ~~Index Episode Treatment Period Start Date~~ was not an inpatient discharge, the ~~member must initiate~~ treatment must be initiated on the ~~IESD Treatment Period Start Date~~ or in the 13 days after the ~~IESD Treatment Period Start Date~~ (14 total days). Any of the following code combinations meet criteria for initiation:

- An acute or nonacute inpatient admission **with** a diagnosis (on the discharge claim) matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set. To identify acute and nonacute inpatient admissions:
 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
 2. Identify the admission date for the stay.
- IET Stand Alone Visits Value Set **with** a diagnosis matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- Observation Value Set **with** a diagnosis matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- IET Visits Group 1 Value Set **with** IET POS Group 1 Value Set **and** a diagnosis matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- IET Visits Group 2 Value Set **with** IET POS Group 2 Value Set **and** a diagnosis matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- A telephone visit (Telephone Visits Value Set) **with** a diagnosis matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- An e-visit or virtual check-in (Online Assessments Value Set) **with** a diagnosis matching the ~~IESD Treatment Period Start Date~~ diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- If the ~~Index Episode Treatment Period Start Date~~ was for a diagnosis of ODU (Opioid Abuse and Dependence Value Set) or an opioid treatment service (ODU Weekly Non Drug Service Value Set).
- If the ~~Index Episode Treatment Period Start Date~~ was for a diagnosis of ODU (Opioid Abuse and Dependence Value Set) or an opioid treatment service (ODU Monthly Office Based Treatment Value Set).

- If the Index Episode Treatment Period Start Date was for a diagnosis of AUD (Alcohol Abuse and Dependence Value Set), a medication treatment dispensing event (Alcohol Use Disorder Treatment Medications List) or medication treatment during a visit (AOD Medication Treatment Value Set Naltrexone Injection Value Set).
- If the Index Episode Treatment Period Start Date was for a diagnosis of ODU (Opioid Abuse and Dependence Value Set), a medication treatment dispensing event (Opioid Use Disorder Treatment Medications Listtable) or medication treatment during a visit (AOD Medication Treatment Value Set, Naltrexone Injection Value Set, Buprenorphine Oral Value Set, Buprenorphine Oral Weekly Value Set, Buprenorphine Injection Value Set, Buprenorphine Implant Value Set, Buprenorphine Naloxone Value Set, Methadone Oral Value Set, Methadone Oral Weekly Value Set, ODU Weekly Drug Treatment Service Value Set SetBuprenorphine Implant Value Set, Buprenorphine Injection Value Set, Buprenorphine Naloxone Value Set, Buprenorphine Oral Value Set, Methadone Oral Value Set, Naltrexone Injection Value Set, ODU Weekly Drug Treatment Service Value Set).

For all initiation events except medication treatment (AOD Medication Treatment Value Naltrexone Injection Value Set, Buprenorphine Oral Value Set, Buprenorphine Oral Weekly Value Set, Buprenorphine Injection Value Set, Buprenorphine Implant Value Set, Buprenorphine Naloxone Value Set, Methadone Oral Value Set, Methadone Oral Weekly Value Set, ODU Weekly Drug Treatment Service Value Set SetBuprenorphine Implant Value Set, Buprenorphine Injection Value Set, Buprenorphine Naloxone Value Set, Buprenorphine Oral Value Set, Methadone Oral Value Set, Naltrexone Injection Value Set, ODU Weekly Drug Treatment Service Value Set), Alcohol Use Disorder Treatment Medications List, Opioid Use Disorder Treatment Medications Listtable), initiation on the same day as the IESDTreatment Period Start Date must be with different providers in order to count.

If a member is compliant for the Initiation numerator for any diagnosis cohort (alcohol, opioid, other drug) or for multiple cohorts, count the member only once in the Total Initiation numerator. The "Total" column is not the sum of the diagnosis columns.

Exclude the memberTreatment Period from the denominator for both indicators (*Initiation of AODSUD Treatment and Engagement of AODSUD Treatment*) if the initiation of treatment event is an inpatient stay with a discharge date after November 27 of the measurement year.

Engagement of AODSUD Treatment

- Step 1** Identify all members Treatment Periods compliant for the Initiation of AODSUD Treatment numerator.

For members who Treatment Periods that initiated treatment via an inpatient admission, the 34-day period for engagement begins the day after discharge.

- Step 2** If the Treatment Period Start Date Diagnosis cohort was a diagnosis of OUD (Opioid Abuse and Dependence Value Set), the Treatment Period is numerator compliant for Engagement of SUD Treatment if any of the following criteria are

met beginning on the day after the initiation encounter through 34 days after the initiation event.

- Identify members who Treatment Periods that had an OA claim for an opioid treatment service that bills monthly (OUD Monthly Office Based Treatment Value Set). -or who ha
- An d a OUD medication administration eventvisit that included medication administration of 31 days or greater (OUD Weekly Drug Treatment Service-Naltrexone Injection Value Set; Buprenorphine Oral Weekly Value Set; Buprenorphine Injection Value Set; Buprenorphine Implant Value Set).
- An OUD medication dispensing event;- with a days supply of 31 or more days. Methadone Oral Weekly Value Set)Value Set) beginning on the day after the initiation encounter through 34 days after the initiation event.
- For these membersTreatment Periods, if the IESD Treatment Period Start Date Diagnosis cohort was a diagnosis of opioid abuse or dependenceuse disorder (Opioid Abuse and Dependence Value Set), the memberTreatment Period is numerator compliant for Engagement of AODSUD Treatment.

If the Treatment Period Start Date Diagnosis cohort was a diagnosis of AUD (Alcohol Abuse and Dependence Value Set), the Treatment Period is numerator compliant for Engagement of SUD Treatment if any of the following criteria are met beginning on the day after the initiation encounter through 34 days after the initiation event.

- An AUD medication administration event of 31 days or greater (Naltrexone Injection Value Set).
- An AUD medication dispensing event with a days supply of 31 or more days.

Step 3 Identify the remaining Treatment Periods where initiation of SUD treatment was not a medication treatment or monthly service of 31 days in duration or longer (step 2).

These Treatment Periods are numerator compliant if there are two of the following events, in any combination:

- Engagement visits.
- Engagement medication treatment events.

Two engagement visits can be on the same date of service, but they must be with different providers in order to count as two events. An engagement visit on the same date of service as an engagement medication treatment event meets criteria (there is no requirement that they be with different providers).

Refer to the descriptions below to identify engagement visits and engagement medication treatment events.

Identify members whose initiation of AOD treatment was a medication treatment event (Alcohol Use Disorder Treatment Medications List; Opioid Use Disorder Treatment Medications List; AOD Medication Treatment Value Set).

These members are numerator compliant if they have two or more engagement events, where only one can be an engagement medication treatment event,

~~beginning on the day after the initiation encounter through 34 days after the initiation event (total of 34 days).~~

Step 4 ~~Identify the remaining members whose initiation of AOD treatment was not a medication treatment event (members not identified in step 3).~~

~~These members are numerator compliant if they meet either of the following:~~

- ~~• At least one engagement medication treatment event.~~
- ~~• At least two engagement visits.~~

~~Two engagement visits can be on the same date of service but they must be with different providers in order to count as two events. An engagement visit on the same date of service as an engagement medication treatment event meets criteria (there is no requirement that they be with different providers).~~

~~Refer to the descriptions below to identify engagement visits and engagement medication treatment events.~~

Engagement visits Any of the following beginning on the day after the initiation encounter through 34 days after the initiation event (total of 34 days) meet criteria for an engagement visit:

- An acute or nonacute inpatient admission with a diagnosis (on the discharge claim) matching the IESD Treatment Period Start Date diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set. To identify acute or nonacute inpatient admissions:
 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
 2. Identify the admission date for the stay.
- IET Stand Alone Visits Value Set **with** a diagnosis matching the IESD Treatment Period Start Date diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- Observation Value Set **with** a diagnosis matching the IESD Treatment Period Start Date diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- IET Visits Group 1 Value Set **with** IET POS Group 1 Value Set **with** a diagnosis matching the IESD Treatment Period Start Date diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- IET Visits Group 2 Value Set **with** IET POS Group 2 Value Set **with** a diagnosis matching the IESD Treatment Period Start Date diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- A telephone visit (Telephone Visits Value Set) **with** a diagnosis matching the IESD Treatment Period Start Date diagnosis cohort using one of the

following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.

- An e-visit or virtual check-in (Online Assessments Value Set) **with** a diagnosis matching the IESD Treatment Period Start Date diagnosis cohort using one of the following: Alcohol Abuse and Dependence Value Set, Opioid Abuse and Dependence Value Set, Other Drug Abuse and Dependence Value Set.
- If the IESD Treatment Period Start Date Diagnosis cohort was a diagnosis of OD (Opioid Abuse and Dependence Value Set) or an opioid treatment service (OD Weekly Non Drug Service Value Set).

**Engagement
medication
treatment events**

Either of the following meets criteria for an engagement medication treatment event:

- If the IESD Treatment Period Start Date diagnosis was a diagnosis of AUD (Alcohol Abuse and Dependence Value Set), ~~a one or more~~ medication treatment dispensing events (Alcohol Use Disorder Treatment Medications List) ~~or medication treatment during a visit (AOD Medication Treatment Value Set, Naltrexone Injection Value Set)~~, beginning on the day after the initiation encounter through 34 days after the initiation event (total of 34 days), meets criteria for AUD Treatment.
- If the IESD Treatment Period Start Date diagnosis was a diagnosis of OD (Opioid Abuse and Dependence Value Set), ~~a one or more~~ medication dispensing events (Opioid Use Disorder Treatment Medications List) or medication treatment ~~during a visit (AOD Medication Treatment Value Set, Buprenorphine Oral Value Set, Buprenorphine Oral Weekly Value Set, Buprenorphine Implant Value Set, Buprenorphine Injection Value Set, Buprenorphine Naloxone Value Set, Buprenorphine Oral Value Set, Methadone Oral Value Set, Naltrexone Injection Value Set, Methadone Oral Weekly Value Set, OD Weekly Drug Treatment Service Value Set)~~, beginning on the day after the initiation encounter through 34 days after the initiation event (total of 34 days), meets criteria for OD Treatment.

~~If the member is compliant for multiple cohorts, only count the member once for the Total Engagement numerator. The Total column is not the sum of the Diagnosis columns.~~

Alcohol Use Disorder Treatment Medications

Description	Prescription
Aldehyde dehydrogenase inhibitor	• Disulfiram (oral)
Antagonist	• Naltrexone (oral and injectable)
Other	• Acamprosate (oral; delayed-release tablet)

Alcohol Use Disorder Treatment Medications

Description	Prescription	Medication Lists	Value Sets and Days Supply
<u>Metabolic disruptor</u>	• <u>Disulfiram (oral)</u>	<u>Alcohol Use Disorder Treatment Medications List</u>	• <u>NA—Codes do not exist</u>
<u>Antagonist</u>	• <u>Naltrexone (oral)</u>		• <u>NA—Codes do not exist</u>
<u>Antagonist</u>	• <u>Naltrexone (injectable)</u>		• <u>Naltrexone Injection Value Set (31 days supply)</u>
<u>Neuromodulator</u>	• <u>Acamprosate (oral)</u>		• <u>NA—Codes do not exist</u>
<u>Neuromodulator</u>	• <u>Acamprosate (delayed-release tablet)</u>		• <u>NA—Codes do not exist</u>

Opioid Use Disorder Treatment Medications

Description	Prescription
Antagonist	• Naltrexone (oral and injectable)
Partial agonist	• Buprenorphine (sublingual tablet, injection, implant) • Buprenorphine/naloxone (sublingual tablet, buccal film, sublingual film)

Opioid Use Disorder Treatment Medications

<u>Description</u>	<u>Prescription</u>	<u>Medication Lists</u>	<u>Value Sets and Days Supply</u>
<u>Antagonist</u>	• <u>Naltrexone (oral)</u>	• <u>Naltrexone Oral Medications List</u>	• <u>NA—Codes do not exist</u>
<u>Antagonist</u>	• <u>Naltrexone (injectable)</u>	• <u>Naltrexone Injection Medications List</u>	• <u>Naltrexone Injection Value Set (31 days supply)</u>
<u>Partial agonist</u>	• <u>Buprenorphine (sublingual tablet)</u>	• <u>Buprenorphine Oral Medications List</u>	• <u>Buprenorphine Oral Value Set (1 day supply)</u> • <u>Buprenorphine Oral Weekly Value Set (7 days supply)</u>
<u>Partial agonist</u>	• <u>Buprenorphine (injection)</u>	• <u>Buprenorphine Injection Medications List</u>	• <u>Buprenorphine Injection Value Set (31 days supply)</u>
<u>Partial agonist</u>	• <u>Buprenorphine (implant)</u>	• <u>Buprenorphine Implant Medications List</u>	• <u>Buprenorphine Implant Value Set (180 days supply)</u>
<u>Partial agonist</u>	• <u>Buprenorphine/ naloxone (sublingual tablet, buccal film, sublingual film)</u>	• <u>Buprenorphine Naloxone Medications List</u>	• <u>Buprenorphine Naloxone Value Set (1 day supply)</u>
<u>Agonist</u>	• <u>Methadone (oral)</u>	• <u>NA (refer to Note below)</u>	• <u>Methadone Oral Value Set (1 day supply)</u> • <u>Methadone Oral Weekly Value Set (7 days supply)</u>

Note

- Organizations may have different methods for billing intensive outpatient encounters and partial hospitalizations. Some organizations may bill comparable to outpatient billing, with separate claims for each date of service; others may bill comparable to inpatient billing, with an admission date, a discharge date and units of service. Organizations whose billing is comparable to inpatient billing may count each unit of service as an individual visit. The unit of service must have occurred during the required time frame for the rate.
- For members in the “other drug ~~abuse or dependence~~ use disorder” cohort, medication treatment does not meet numerator criteria for Initiation of AODSUD Treatment or Engagement of AODSUD Treatment.

Methadone is not included on the medication lists for this measure. Methadone for OUD administered or dispensed by federally certified opioid treatment programs (OTP) -is billed on a medical -claim. A pharmacy claim for methadone would be indicative of treatment for pain -rather -than OUD. Methadone is not included in the medication lists for this measure. Methadone for opioid use disorder is only administered or dispensed by federally certified opioid treatment programs and does not show up in pharmacy claims data. A pharmacy claim for methadone would be more indicative of treatment for pain than treatment for an opioid use disorder; therefore they are not included in the medication lists. The AOD Medication Treatment Methadone Oral Value Set includes some codes that identify methadone treatment because these codes are used on medical claims, not pharmacy claims.

Data Elements for Reporting

Organizations that submit HEDIS data to NCQA must provide the following data elements.

Table IET-1/2/3: Data Elements for Initiation and Engagement of ~~Alcohol and Other Drug Dependence~~ Substance Use Disorder Treatment

	Administrative
Measurement year	✓
Eligible population	For each age stratification, diagnosis stratification, <u>BH complexity stratification</u> and total
Numerator events by administrative data	Each rate, for each age stratification, diagnosis stratification, <u>BH complexity stratification</u> and total
Reported rate	Each rate, for each age stratification, diagnosis stratification, <u>BH complexity stratification</u> and total

Identification of Alcohol and Other Drug Services (IAD) and Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET)

Measure Workup

Topic Overview

The HEDIS measure *Identification of Alcohol and Other Drug Services (IAD)* describes the percentage of members diagnosed with an alcohol, opioid or other drug disorder in the year. The measure provides information on the diagnosed prevalence of substance use disorders (SUD) in a health plan's population—adding insight into the potential underdiagnosis of SUD and the approximate population size assessed by SUD quality measures.

Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET) assesses the degree to which members with an SUD initiate and engage in treatment. The measure provides health plan-level data related to access of SUD treatment, both at an aggregate level and across different SUD diagnoses (opioid use disorder [OUD], alcohol use disorder [AUD], other drug use disorders). Plans may use this data to target education and outreach efforts and strengthen patient access to care.

Prevalence and Importance

Prevalence

In 2018, 20.3 million individuals in the U.S. 12 years of age or older (approximately 7.4% of the population) were classified as having an SUD within the past year (SAMHSA, 2019). SUD is characterized as impairment caused by recurrent use of alcohol or other drugs (or both), which may include health problems, disability and failure to meet major responsibilities (e.g., at work, school or home) (SAMHSA, 2019). Commonly misused substances include alcohol, illicit drugs, marijuana, prescription pain relievers, cocaine, methamphetamine, heroin and stimulants (SAMHSA, 2019). SUDs can be mild, moderate or severe, according to the *Diagnostic and Statistical Manual of Mental Disorders*, Fifth Edition (DSM-5) (SAMHSA, 2015).

The number of Americans classified with an SUD remained relatively steady from 2015–2018 (22.7 million–20.3 million) (SAMHSA 2016; SAMHSA 2019).

According to the National Survey on Drug Use and Health (NSDUH), in 2018, 14.8 million individuals over 12 years of age were classified with AOD (SAMHSA, 2019). One in 10 deaths among working adults in the U.S. is due to alcohol misuse (HHS, 2016).

In 2018, 2.0 million people were classified as having an OUD, which includes two categories of drugs: heroin and prescription pain relievers (SAMHSA, 2019). In 2017, drug overdose accounted for more than 70,200 deaths in the U.S. 67.8% were related to opioid use (NIDA, 2018b).

Other drug use disorders include marijuana, tranquilizer, stimulant, cocaine and methamphetamine use disorders. In 2018, 8.1 million individuals over 12 years were classified with an illicit drug use disorder (SAMHSA, 2019). Of the 20.3 million individuals with an SUD in the U.S., marijuana represents the most common illicit drug use disorder (4.4 million individuals) (SAMHSA, 2019).

An estimated 2.7 million people had both an AUD and an illicit drug use disorder in the past year, representing about 1 out of 8 persons who had an SUD in the past year (SAMHSA, 2018a).

Severity and comorbidities

Of the 20.3 million people 12 years and older with an SUD in 2018, 3.7 million received any substance use treatment in the past year; 2.4 million of these received treatment in a specialty SUD program (SAMHSA, 2019). 5.5% of adults who felt they needed SUD treatment did not receive it (SAMHSA, 2018a). The most common reasons for not receiving SUD treatment among those who identified a need for treatment were related to being unready to discontinue drug use and lacking health care coverage to afford SUD treatment (SAMHSA, 2018a).

With the release of the DSM-5, the American Psychiatric Association collapsed the abuse and dependence designations into a single SUD severity index (mild, moderate, severe) (Kopak, 2014). Mild SUDs often respond to brief motivational interventions and supportive monitoring (SAMHSA & Office of the Surgeon General, 2016). In contrast, severe, complex and chronic SUDs often require specialty treatment and continued post-treatment support to achieve full remission and recovery (SAMHSA & Office of the Surgeon General, 2016).

SUD severity is further complicated by comorbidity with other conditions. Comorbidity with mental health conditions is common in the SUD population and the presence of co-occurring conditions increases severity and complicates recovery (Quello, 2005; Kelly, 2013; Lai, 2015). Findings from NSDUH indicate that in 2018, about 47.7% of adults (9.2 million) with an SUD had a co-occurring mental illness (any mental illness or serious mental illness) (SAMHSA, 2019). Although there are fewer studies among adolescents, past research suggests that over 60% of adolescents in community-based SUD treatment programs meet diagnostic criteria for another mental illness (Hser et al., 2001). Narrowing mental illness to major depressive episode (MDE) alone, data from the 2018 NSDUH report indicates that about 44% of adolescents 12–17 with an SUD have a co-occurring MDE (1.5% of the adolescent population) (SAMHSA, 2019).

Research continues to highlight the need for targeted treatment for individuals with polysubstance use disorder (poly SUD). Individuals with poly SUD are more likely to exhibit health complications and utilize high-intensity services such as psychiatric inpatient care and residential and rehabilitative treatment (Jeffirs, 2019; Bhalla, 2017). In a recent study analyzing veterans living with SUDs, about 2.7% of veterans lived with 4 or more SUDs and approximately 24% lived with 2–3 SUDs (Bhalla, 2017). Studies find that multiple SUDs are more prevalent among males, African Americans, Native Americans, Whites and younger adults (McCabe, 2017).

The National Epidemiologic Survey on Alcohol and Related Conditions found that the majority of past-year non-alcohol SUDs were accompanied by at least one co-occurring SUD, ranging from about 56.8% for prescription OUD to 97.5% for hallucinogen use disorder (Hasin, 2016; McCabe, 2017). One study indicated that approximately 12% of study participants had a high-moderate prevalence of SUDs for tobacco, alcohol and cannabis, while 4.3% of members had a high prevalence of SUDs for tobacco, opioids and cocaine (John, 2018).

It is estimated that roughly 64% of cocaine users also engage in illicit cannabis use, while concurrent alcohol use among cocaine users is 77% (Liu, 2018).

**Health
importance**

Individuals with SUD are at increased risk of overdose, injury, soft tissue infections and mortality (Bahorik, 2017). Treatment of medical problems caused by SUD and mental health comorbidities places a significant burden on the health care system, but interventions may help diminish the social and economic impact (SAMHSA, 2013; HHS, 2016).

Guidelines recommend that individuals with SUD receive patient-centered and timely follow-up care to reduce negative health outcomes, such as disengagement from the health care system and substance use relapse (Appendix). Many traditional forms of SUD treatment (e.g., methadone maintenance, therapeutic communities, outpatient drug-free treatment) have been shown to be effective. Benefits typically extend beyond reduction of substance misuse to reduced crime, reduced risk of infectious diseases and improved patient function (Pew, 2016).

The primary goals of SUD treatment are abstinence, relapse prevention, rehabilitation and recovery (NIDA, 2018a). Individuals who receive timely follow-up care may be more likely to complete treatment or receive more days of treatment than those who leave care prematurely (Proctor & Herschman, 2014).

Evidence Related to Outcomes**Evidence
supporting
engagement of
treatment**

Engaging in treatment is an intermediate step between initially accessing care and completing a full course of treatment. Several studies have explored the association between key outcomes (e.g., mortality, criminal justice involvement, addiction severity) and initiation, engagement and continuation of SUD treatment. In a study of VA beneficiaries with SUD, both initiation and engagement in treatment were associated with decreased odds of both 12- and 24-month mortality (Paddock, et al., 2017). In another study of VA beneficiaries, individuals with both SUD and co-occurring mental health conditions who engaged in treatment (defined as the *Initiation and Engagement* “engagement” numerator) and in ongoing continuity of care (defined as at least one visit per quarter over the measurement year) had lower odds of mortality at both 12 and 24 months (Watkins, et al., 2016).

Decreased odds of mortality at both 12 and 24 months were also observed in another study of VA beneficiaries with SUD who engaged in ongoing continuity of care (quarterly visits over a year) (Watkins, et al., 2017). A cohort study among VA SUD program patients found that the engagement indicator of the *Initiation and Engagement* measure was modestly associated with improvement in patient scores on the Addiction Severity Index (Harris, et al., 2010). In a study of adult clients treated in publicly funded state SUD outpatient programs, engagement in SUD treatment (defined as the *Initiation and Engagement* “engagement” numerator) was associated with lower risk of criminal justice involvement (subsequent arrest and incarceration) (Garnick, et al., 2007),

Research shows that treatment reduces drug use, improves health outcomes, improves job performance, reduces involvement with the criminal justice system, reduces family dysfunction and mortality and improves quality of life (Frederic, 2010; SAMHSA, 2006; Garnick et al., 2007, Watkins et al., 2017).

Treatment options

For individuals with co-occurring SUD and mental illness, evidence is lacking on an ideal approach to treatment (Antai-Ontong et al., 2016; Hunt et al., 2014). Literature suggests that although no single intervention has been shown to be consistently superior over another, individuals with co-occurring SMI require additional attention and consideration. Effective treatment includes a combination of medication and addiction-based psychosocial interventions, with an emphasis on patient retention and ongoing monitoring (Cockford and Addington, 2017).

Psychosocial care is regarded as standard treatment for SUD: addiction-focused counseling, comprehensive treatment programs that include counseling, cognitive behavioral therapy, other psychosocial therapies, social supports and mutual help groups (Appendix).

Medication-assisted treatment (MAT) is defined as the use of medications to treat SUDs in conjunction with psychosocial interventions (e.g., behavioral therapy) (SAMHSA, 2016). The majority of guidelines recommend FDA-approved medications for AUD and OUD (Appendix). Table 1 includes a complete list of medications used for pharmacotherapy, stratified by substance dependency.

According to a systematic review, MAT is typically categorized by intended use for AUD or OUD and specified by treatment stage (assessment, management, detoxification, maintenance) (Pietras et al., 2015).

Pharmacotherapy for AUD can be prescribed by any treatment provider. Pharmacotherapy for OUD is more regulated (specifically, methadone and buprenorphine). Methadone is only dispensed in federally approved Opioid Treatment Programs (OTP) that provide comprehensive treatment services, including psychotherapy, for individuals with SUD (ASAM, 2014). Buprenorphine can be administered and prescribed in OTPs, as well as by any licensed physician in an office setting who has a waiver from the Substance Abuse and Mental Health Services Administration (SAMHSA) (Alderks, 2017; ASAM, 2014; SAMHSA, 2016).

Some guidelines still recommend the use of pharmacotherapy in conjunction with psychosocial care. Newer guidelines, such as the 2020 American Society for Addiction Medicine OUD guideline *Focused Update* (Kampman & Freedman, 2020), as well as a growing body of evidence, recommend pharmacotherapy as an effective sole treatment modality for individuals with AUD and OUD (Mattick, 2009; Carroll, 2016; Dugosh, 2016).

The majority of the clinical practice guideline recommendations are consensus-based.

Table 1: Guideline-Recommended and FDA-Approved Pharmacotherapy for Use in Treatment of Alcohol and Opioid Use Disorders**Alcohol Use Disorder Treatment Medications**

Description	Prescription
Aldehyde dehydrogenase inhibitor	• Disulfiram (oral)
Antagonist	• Naltrexone (oral and injectable)
Other	• Acamprosate (oral; delayed-release tablet)

Opioid Use Disorder Treatment Medications

Description	Prescription
Antagonist	• Naltrexone (oral and injectable)
Partial agonist	• Buprenorphine (sublingual tablet, injection, implant) • Buprenorphine/naloxone (sublingual tablet, buccal film, sublingual film)

Gap in Quality of Care and Disparities**Health care disparities**

Illicit drug use in 2017 varied by educational status. While the rate of illicit drug use in the past year among adults 18 or older saw little variation by educational status, adults who graduated from college were more likely to have tried illicit drugs in their lifetime, compared with adults who had not completed high school (53.7% vs. 39.0%) (SAMHSA, 2018b). However, the rate of illicit drug use “in the past year” among adults who had not completed high school increased from 16.1% in 2016 to 17% in 2017 (SAMSHA, 2018b).

In 2017, the rate of illicit drug use among persons 12 years of age or older differed by race and ethnicity. Non-Hispanic or Latino persons had higher rates of illicit drug use than Hispanic or Latino persons (19.3% compared to 17.5%) (SAMHSA, 2018b). Among non-Hispanic or Latino persons, American Indian/Alaskan Natives had the highest rate of illicit drug use (29.3%) compared to Blacks (20.5%), Whites (19.7%), Native Hawaiian/Other Pacific Islanders (12.7%) and Asians (9.5%) in the past year (SAMSHA, 2018b).

The Centers for Medicare & Medicaid Services Office of Minority Health, in collaboration with the RAND Corporation, releases the *Racial and Ethnic Disparities in Health Care in Medicare Advantage* report each year to highlight disparities in national health care quality (CMS, 2018). The report includes data on Medicare beneficiaries collected through clinical care measures and patient experience measures, including IET. Clinical care data is reported for Medicare Advantage beneficiaries via medical records and insurance claims for hospitalizations, medical office visits and procedures. In 2016, IET results indicated that Asians or Pacific Islanders and Hispanics initiated treatment within 14 days of a new episode and diagnosis of SUD less frequently than Whites (CMS, 2018). Overall, 19.2% of Asians or Pacific Islanders, 18.2% of Hispanics and 29.5% of Whites initiated appropriate treatment (CMS, 2018).

In 2014, Asian or Pacific Islander patients and Hispanic patients with a new episode of SUD and who initiated treatment were less likely than White patients to have had two or more additional services within 30 days of the initiation visit. Overall, 1.6% of Asian and Pacific Islanders, 1.9% of Hispanic and 2.2% of Whites had two or more additional services for their new diagnosis of SUD after initiation of treatment (CMS, 2018). Conversely, Blacks (27.0%) were more likely than Whites (26.1%) to initiate treatment within 14 days of an SUD diagnosis (CMS, 2018). However, Blacks (1.9%) were less likely than Whites (2.2%) to engage in treatment (i.e., two or more additional services with a diagnosis of SUD within 30 days of the initiation of treatment), according to 2014 findings (CMS, 2018).

Currently, SUD is underreported in administrative data (Fairman, 2017; Thomas, 2018). One study found that 1% of emergency department (ED) patients received a diagnosis of SUD recorded in administrative ED records, while 27% of ED patients needed treatment based on a separate assessment of substance use and toxicology (Rockett, 2003). Underreporting can occur due to stigma, reimbursement policies and confidentiality concerns (Fairman, 2017).

Gaps in care

Data from the most recent NSDUH highlights common reasons why individuals with an SUD do not access treatment: 40% said that they were not ready to stop using and 30% indicated that they did not have health care coverage or could not incur the expense of treatment (SAMHSA, 2018). Other frequently cited reasons for not receiving treatment included fear that SUD treatment could have a negative effect on their employment (20%), fear of stigma (17%), the feeling that they could self-treat their diagnosis (13%) and not knowing where to go for treatment (11%) (SAMHSA, 2018).

Because individuals who use substances are more likely to seek ED care than nonusers, the ED presents an opportunity for initiation and engagement in treatment (Blow, 2010). One study found that with ED-initiated buprenorphine and a brief negotiation interview (BNI), almost 80% of patients accessed OUD treatment within 30 days, compared to 37% with referral only or 45% with a BNI and facilitated referral (D'Onofrio, 2015). Despite the promising results, literature suggests that even referrals from the ED to SUD treatment programs are uncommon (Samuels, 2016).

Although evidence-based and guideline-supported, pharmacotherapy for AUD and OUD is an underutilized treatment option. Studies estimate that fewer than 14% of individuals with AUD receive pharmacotherapy (Williams, 2019). Identified barriers to the use of AUD pharmacotherapy include lack of provider education on prescribing and stigma and bias against pharmacotherapy as a treatment modality (Williams, 2018). Literature suggests that fewer than 40% of U.S. residents over 12 years of age with an OUD diagnosis receive pharmacotherapy (Volkow, 2014). Identified impediments to the use of OUD pharmacotherapy include gaps between treatment need and provider capacity, insurance coverage and reimbursement, stigma and bias against pharmacotherapy use and access to providers and treatment facilities (Jones, 2015; ASAM, 2016).

While evidence underscores the benefits of integrated mental health and SUD treatment for those living with co-occurring SUD and mental health conditions, gaps in care persist. National surveys indicate that in 2018, 9.2 million adults lived with both a mental illness and an SUD diagnosis, yet more than 90% of these individuals did not receive services for both conditions (SAMHSA, 2019a). Literature shows that although dual-diagnosis treatments are effective in improving care outcomes, basic interventions such as training staff in dual-diagnosis care and developing a phased approach to treatment are rarely integrated into mental health programs (SAMHSA, 2009). The 2018 National Mental Health Services Survey found that only 46% of mental health service facilities provided treatment for individuals with co-occurring conditions, despite the fact that the proportion of individuals with co-occurring conditions had increased in recent years (SAMHSA, 2019b).

Financial Impact

Total overall costs of substance misuse and SUDs in the U.S., including loss of work productivity, direct health care expenditures and crime-related costs, exceeds \$400 billion annually (NIDA, 2017). Conservative estimates suggest that for every dollar invested in addiction treatment programs, between \$4 and \$7 are directly returned in decreased drug-related crime, criminal justice costs and theft (NIDA, 2018c).

Using NSDUH data from 2009–2013, annual hospitalization costs were estimated to be \$1,122 per person among those with an AUD (17.6 million people) and \$2,783 per person among those with an SUD involving another illicit drug (3.5 million people) (Gryczynski et al., 2016). In 2011, Medicaid readmissions for alcohol-related disorders and substance-related disorders cost \$141 million and \$103 million, respectively (Hines, et al., 2014).

References

- Alderks, C.E. August 22, 2017. "Trends in the Use of Methadone, Buprenorphine, and Extended-release Naltrexone at Substance Abuse Treatment Facilities: 2003–2015 (Update)." *The CBHSQ Report*. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration, Rockville, MD.
- American Society of Addiction Medicine. 2016. *Access to Medications Talking Points*. <https://www.asam.org/docs/default-source/advocacy/mat-talking-points-final.pdf?sfvrsn=0>
- Antai-Otong, D., K. Theis, & D.D. Patrick. 2016. "Dual Diagnosis: Coexisting Substance Use Disorders and Psychiatric Disorders." *The Nursing Clinics of North America*, 51(2), 237–47.
- ASAM. 2014. *Public Policy Statement on Office-Based Opioid Agonist Treatment (OBOT)*. <https://www.asam.org/docs/default-source/public-policy-statements/1obot-treatment-7-04.pdf?sfvrsn=0>
- Bahorik, A.L., D.D. Satre, A.H. Kline-Simon, C.M. Weisner, C.L. Campbell. 2017. "Alcohol, Cannabis, and Opioid Use Disorders, and Disease Burden in an Integrated Health Care System." *J Addiction Medicine* 11(1),3–9.
- Bhalla, I.P., E.A. Stefanovics, & R.A. Rosenheck, R. A. 2017. "Clinical Epidemiology of Single Versus Multiple Substance Use Disorders: Polysubstance Use Disorder." *Medical Care* 55, S24–32.
- Blow, F.C., M.A. Walton, R. Murray, R.M. Cunningham, S.T. Chermack, K.L. Barry, ... & B.A.M. Booth. 2010. "Intervention Attendance Among Emergency Department Patients with Alcohol-and Drug-Use Disorders." *Journal of Studies on Alcohol and Drugs* 71(5), 713–19.
- Carroll, K.M., & R.D. Weiss. 2016. "The Role of Behavioral Interventions in Buprenorphine Maintenance Treatment: A Review." *American Journal of Psychiatry* 174(8), 738–47.
- Centers for Medicare & Medicaid Services Office of Minority Health. 2018. *Racial, Ethnic, and Gender Disparities in Health Care and Medicare Advantage*. Baltimore, MD.
- Crockford, D., & D. Addington. 2017. "Canadian Schizophrenia Guidelines: Schizophrenia and Other Psychotic Disorders with Coexisting Substance Use Disorders." *Canadian Journal of Psychiatry* 62(9),624–34.
- D'Onofrio, G., P.G. O'Connor, M.V. Pantalon, M.C. Chawarski, S.H. Busch, P.H. Owens, ... & D.A. Fiellin. 2015. "Emergency Department–Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence: A Randomized Clinical Trial." *JAMA* 313(16), 1636–44.
- Dugosh, K., A. Abraham, B. Seymour, K. McLoyd, M. Chalk, & D. Festinger. 2016. "A Systematic Review on the Use of Psychosocial Interventions in Conjunction with Medications for the Treatment of Opioid Addiction." *Journal of Addiction Medicine* 10(2), 91.
- Fairman, B.J., S. Hwang, P.K. Alexandre, J.J. Gallo, & W.W. Eaton. 2017. "Costs of Substance Use Disorders from Claims Data for Medicare Recipients from a Population-Based Sample." *Journal of Substance Abuse Treatment* 77, 174–7.
- Frederic, C.B., S.J. Bartels, L.M. Brockmann, A.D. Van Citters. 2010. *Evidence-Based Practices for Preventing Substance Abuse and Mental Health Problems in Older Adults*. Excerpt: "Prevention of Substance Misuse Problems: Alcohol Misuse." www.public-health.uiowa.edu/icmha/.../Evidence-basedCareForAlcohol.DOC (June 10, 2011)
- Garnick, D.W., C.M. Horgan, M.T. Lee, L. Panas, G.A. Ritter, S. Davis, T. Leeper, R. Moore, M. Reynolds. 2007. "Are Washington Circle Performance Measures Associated with Decreased Criminal Activity Following Treatment?" *J Subst Abuse Treat* Dec,33(4),341–52.
- Gryczynski, J., R.P. Schwartz, K.E. O'Grady, L. Restivo, S.G. Mitchell, J.H. Jaffe. 2016. "Understanding Patterns Of High-Cost Health Care Use Across Different Substance User Groups." *Health Aff (Millwood)*,35(1), 12–19.
- Harris, A.H.S., K. Humphreys, T. Bowe, Q. Tiet, J.W. Finney. 2010. "Does Meeting the HEDIS Substance Abuse Treatment Engagement Criterion Predict Patient Outcomes?" *Journal of Behavioral Health Services and Research*.
- Hasin, D.S., B.T. Kerridge, T.D. Saha, B. Huang, R. Pickering, S.M. Smith, J. Jung, H. Zhang, & B.F. Grant. 2016. "Prevalence and Correlates of DSM-5 Cannabis Use Disorder, 2012-2013: Findings from the National Epidemiologic Survey on Alcohol and Related Conditions–III." *American Journal of Psychiatry* 173(6), 588–99.
- Hines, A., M. Barrett, H. Joanna Jiang, C. Steiner. 2014. "Conditions With the Largest Number of Adult Hospital Readmissions by Payer, 2011." *Agency for Healthcare Research and Quality. Healthcare Cost and Utilization Project (HCUP)*. <https://www.hcup-us.ahrq.gov/reports/statbriefs/sb172-Conditions-Readmissions-Payer.jsp>
- Hser, Y.I., C.E. Grella, R.L. Hubbard, S.C. Hsieh, B.W. Fletcher, B.S. Brown, M.D. Anglin. 2001. "An Evaluation of Drug Treatments for Adolescents in 4 US Cities." *Arch Gen Psychiatry* 58(7),689–95.

- Hunt, G.E., N. Siegfried, K. Morley, T. Sitharthan, M. Cleary. 2013. "Psychosocial Interventions for People with Both Severe Mental Illness and Substance Misuse." *The Cochrane Database of Systematic Reviews* (10):CD001088.
- Institute of Medicine (IOM). 1990. *Broadening the Base of Treatment for Alcohol Problems*. Washington, DC: National Academy Press.
- Jeffirs, S.M., A.M. Jarnecke, J.C. Flanagan, T.K. Killeen, T.F. Laffey, & S.E. Back. 2019. "Veterans with PTSD and Comorbid Substance Use Disorders: Does Single Versus Poly-Substance Use Disorder Affect Treatment Outcomes?" *Drug and Alcohol Dependence* 199, 70–5.
- John, W.S., H. Zhu, P. Mannelli, R.P. Schwartz, G.A. Subramaniam, & L.-T. Wu. 2018. "Prevalence, Patterns, and Correlates of Multiple Substance Use Disorders Among Adult Primary Care Patients." *Drug and Alcohol Dependence* 187, 79–87.
- Jones, C.M., M. Campopiano, G. Baldwin, & E. McCance-Katz. 2015. "National and State Treatment Need and Capacity for Opioid Agonist Medication-Assisted Treatment." *American Journal of Public Health* 105(8), e55–e63. <https://doi.org/10.2105/AJPH.2015.302664>
- Kampman, K., K. Freedman. 2020. "American Society of Addiction Medicine (ASAM) National Practice Guideline for the Treatment of Opioid Use Disorder: 2020 Focused Update." *Journal of Addiction Medicine* 14, no. 2S: 1–91. <https://doi.org/10.1097/ADM.0000000000000633>
- Kelly, T.M., & D.C. Daley. 2013. "Integrated Treatment of Substance Use and Psychiatric Disorders." *Social Work in Public Health* 28(3–4), 388–406.
- Kopak, A.M., S.L. Proctor, & N.G. Hoffmann. 2014. "The Elimination of Abuse and Dependence in DSM-5 Substance Use Disorders: What Does This Mean for Treatment?" *Current Addiction Reports* 1(3), 166–71.
- Lai, H.M.X., M. Cleary, T. Sitharthan, & G.E. Hunt. 2015. "Prevalence of Comorbid Substance Use, Anxiety and Mood Disorders in Epidemiological Surveys, 1990–2014: A Systematic Review and Meta-Analysis." *Drug and Alcohol Dependence* 154, 1–13.
- Lee, M.T., C.M. Horgan, D.W. Garnick, A. Acevedo, L. Panas, G.A. Ritter, . . . M. Reynolds. 2014. *A Performance Measure for Continuity of Care After Detoxification: Relationship With Outcomes*. 47(2), 130–9. doi: 10.1016/j.jsat.2014.04.002.
- Liu, Y., V. Williamson, B. Setlow, L.B. Cottler, & L.A. Knackstedt. 2018. "The Importance of Considering Polysubstance Use: Lessons from Cocaine Research." *Drug and Alcohol Dependence* 192, 16–28.
- Mattick, R.P., C. Breen, J. Kimber, & M. Davoli. 2009. "Methadone Maintenance Therapy versus No Opioid Replacement Therapy for Opioid Dependence." *Cochrane Database of Systematic Reviews* (3).
- Mattson, M.E., & S. Lynch,. 2015. "The CBHSQ Report: Medication Prescribing and Behavioral Treatment for Substance Use Disorders in Physician Office Settings." *Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality*. Rockville, MD.
- McCabe, S.E., B.T. West, E.M. Jutkiewicz, & C.J. Boyd. 2017. "Multiple DSM-5 Substance Use Disorders: A National Study of US Adults." *Human Psychopharmacology: Clinical and Experimental* 32(5), e2625.
- National Institute on Drug Abuse (NIDA). 2018a. *Drugs, Brains, and Behavior: The Science of Addiction*. <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/treatment-recovery>
- NIDA. 2018b. *Overdose Death Rates*. <https://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>
- NIDA. 2018c. *Principles of Drug Addiction Treatment: A Research-Based Guide* (Third Edition). <https://www.drugabuse.gov/publications/principles-drug-addiction-treatment-research-based-guide-third-edition>
- NIDA. 2017. *Trends & Statistics*. National Institute on Drug Abuse. <https://www.drugabuse.gov/related-topics/trends-statistics#supplemental-references-for-economic-costs>
- Paddock, S.M., K.A. Hepner, T. Hudson, et al. 2017. "Association Between Process-Based Quality Indicators and Mortality for Patients with Substance Use Disorders." *J Stud Alcohol Drugs* 78:588–96.
- Pew. 2016. *Medication-Assisted Treatment Improves Outcomes for Patient with Opioid Use Disorder*. <https://www.pewtrusts.org/en/research-and-analysis/fact-sheets/2016/11/medication-assisted-treatment-improves-outcomes-for-patients-with-opioid-use-disorder#1-background>
- Pietras, S., M. Azur, J. Brown. 2015. *Review of Medication-Assisted Treatment Guidelines and Measures for Opioid and Alcohol Use*. ASPE. Report prepared by Mathematica Policy Research for the U.S. Department of Health and Human Services, Assistant Secretary for Planning and Evaluation, Office of Disability, Aging and Long-Term Care Policy. <https://aspe.hhs.gov/sites/default/files/pdf/205171/MATguidelines.pdf> (November 16, 2016)
- Quello, S.B., K.T. Brady, & S.C. Sonne. 2005. "Mood Disorders and Substance Use Disorder: A Complex Comorbidity." *Science & Practice Perspectives* 3(1), 13.
- Reif, S., A. Acevedo, D. Garnick, C. Fullerton. 2017. "Reducing Behavioral Health Inpatient Readmissions for People With Substance Use Disorders: Do Follow-Up Services Matter?" *Psychiatric Services* (68)8, 810–18.

- Rockett, I.R., S.L. Putnam, H. Jia, & G.S. Smith. 2003. "Assessing Substance Abuse Treatment Need: A Statewide Hospital Emergency Department Study." *Annals of Emergency Medicine* 41(6), 802–13.
- Samuels, E. A., Dwyer, K., Mello, M. J., Baird, J., Kellogg, A. R., & Bernstein, E. 2016. Emergency department-based opioid harm reduction: moving physicians from willing to doing. *Academic Emergency Medicine*, 23(4), 455-465.
- Schneider Institute for Health Policy, Brandeis University. (2001). *Substance Abuse: The Nation's Number One Health Problem*, for The Robert Wood Johnson Foundation. Princeton, New Jersey.
- Substance Abuse and Mental Health Services Administration (SAMHSA). 2019. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health*. Retrieved from: <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.htm#mhisud>
- SAMHSA. 2019a. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2018 National Survey on Drug Use and Health*. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHNationalFindingsReport2018/NSDUHNationalFindingsReport2018.pdf>
- SAMHSA. 2019b. *National Mental Health Services Survey (N-MHSS): 2018 Data on Mental Health Treatment Facilities*. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NMHSS-2018.pdf>
- SAMHSA. 2018a. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health*. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHFFR2017/NSDUHFFR2017.htm#sud11>
- SAMHSA. 2018b. *Results from the 2017 National Survey on Drug Use and Health: Detailed Tables*. <https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHDetailedTabs2017/NSDUHDetailedTabs2017.pdf>
- SAMHSA. 2017. *Receipt of Services for Substance Use and Mental Health Issues among Adults: Results from the 2016 National Survey on Drug Use and Health*. <https://www.samhsa.gov/data/sites/default/files/NSDUH-DR-FFR2-2016/NSDUH-DR-FFR2-2016.pdf>
- SAMHSA. 2016. *Buprenorphine*. <https://www.samhsa.gov/medication-assisted-treatment/treatment/buprenorphine>
- SAMHSA. 2015. *Substance Use Disorders*. <http://www.samhsa.gov/disorders/substance-use>
- SAMHSA. 2014. *Substance Use and Mental Health Estimates from the 2013 National Survey on Drug Use and Health: Overview of Findings*. <https://www.samhsa.gov/data/sites/default/files/NSDUH-SR200-RecoveryMonth-2014/NSDUH-SR200-RecoveryMonth-2014.htm>
- SAMHSA. 2013. *Substance Abuse Treatment for Persons with Co-Occurring Disorders*. <https://store.samhsa.gov/system/files/sma13-3992.pdf>
- SAMHSA. 2009. *Integrated Treatment for Co-Occurring Disorders: The Evidence*. <https://store.samhsa.gov/sites/default/files/d7/priv/ebp-kit-the-evidence-10242019.pdf>
- SAMHSA. 2006. *Report to Congress: Addictions Treatment Workforce Development*. http://www.pfr.samhsa.gov/docs/Report_to_Congress.pdf
- SAMHSA; Office of the Surgeon General (US). *Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs, and Health*. Washington (DC): US Department of Health and Human Services; 2016. Chapter 4, "Early Intervention, Treatment, and Management of Substance Use Disorders." <https://www.ncbi.nlm.nih.gov/books/NBK424859/>
- Thomas, C.P., G.A. Ritter, A.H. Harris, D.W. Garnick, K.I. Freedman, & B. Herbert. 2018. "Applying American Society Of Addiction Medicine Performance Measures in Commercial Health Insurance and Services Data." *Journal of Addiction Medicine* 12(4), 287–94.
- Volkow, N.D., T.R. Frieden, P.S. Hyde, & S.S. Cha. 2014. "Medication-Assisted Therapies—Tackling the Opioid-Overdose Epidemic." *New England Journal of Medicine* 370(22), 2063–6.
- Watkins, K.E., S.M. Paddock, T.J. Hudson, et al. 2016. "Association Between Quality Measures and Mortality in individuals with Co-Occurring Mental Health and Substance Use Disorders." *J Subst Abuse Treat* 69:1–8
- Watkins, K., S. Paddock, T. Hudson, et al. 2017. "Association Between Process Measures and Mortality in Individuals with Opioid Use Disorders." *Drug Alcohol Depend* 177:307–14.
- Williams, E.C., T.E. Matson, & A.H. Harris. 2019. "Strategies to Increase Implementation of Pharmacotherapy for Alcohol Use Disorders: A Structured Review of Care Delivery and Implementation Interventions." *Addiction Science & Clinical Practice* 14(1), 6.
- Williams, E.C., C.E. Achtmeyer, J.P. Young, D. Berger, G. Curran, K.A. Bradley, ... & M. Forehand. 2018. "Barriers to and Facilitators of Alcohol Use Disorder Pharmacotherapy in Primary Care: A Qualitative Study in Five VA Clinics." *Journal of General Internal Medicine* 33(3), 258–67.

Appendix A: Specific Guideline Recommendations

Organization & Year	Guideline Summary	Guideline Citation	Guideline Rating
APA 2006	• Patients require long-term treatment [I] • Treatment should be intensified during periods when patients are at a high risk of relapsing [I] • Outpatient treatment is appropriate when patients do not require a more intensive level of care [I]. A comprehensive approach is optimal (i.e., psychotherapeutic and pharmacological interventions in conjunction with behavioral monitoring) [I] • Naltrexone, injectable naltrexone, acamprosate, a γ-aminobutyric acid (GABA) are recommended for patients with alcohol dependence [I]. Disulfiram is also recommended for patients with alcohol dependence [II]. • Methadone and buprenorphine are recommended for patients with opioid dependence [I]. Naltrexone is an alternative strategy [I].	Kleber HD, et al. (2018). Treatment of patients with substance use disorders , second edition. <i>American Journal of Psychiatry</i> , 164(4),1–276.	[I] Recommended with substantial clinical confidence. [II] Recommended with moderate clinical confidence.
APA 2018	• Patients with alcohol use disorder should have a documented comprehensive and person-centered treatment plan that includes evidence-based nonpharmacological and pharmacological treatments. [1C] • Naltrexone or acamprosate be offered to patients with moderate to severe alcohol use disorder who have a goal of reducing alcohol consumption or achieving abstinence, prefer pharmacotherapy or have not responded to nonpharmacological treatments alone, and have no contraindications to the use of these medications. [1B] • Disulfiram should be offered to patients with moderate to severe alcohol use disorder who have a goal of achieving abstinence, prefer disulfiram or are intolerant to or have not responded to naltrexone and acamprosate, are capable of understanding the risks of alcohol consumption while taking disulfiram, and have no contraindications to the use of this medication. [2C]	Reus, V. et al. (2018). Practice Guideline for the Pharmacological Treatment of Patients with Alcohol Use Disorder . <i>American Journal of Psychiatry</i> , 175(1), 86-90. doi:10.1176/appi.ajp.2017.175.0101	[1] Recommend with confidence that the benefits of the intervention clearly outweigh harms. [2] Suggests the that although the benefits of the statement are still viewed as outweighing the harms, the balance of benefits and harms is more difficult to judge, or either the benefits or the harms may be less clear. With a suggestion, patient values and preferences may be more variable, and this can influence the clinical decision that is ultimately made. [A] High confidence that the evidence reflects the true effect. Further research is very unlikely to change our confidence in the estimate of effect.

	• “Topiramate or gabapentin be offered to patients with moderate to severe alcohol use disorder who have a goal of reducing alcohol consumption or achieving abstinence, prefer topiramate or gabapentin or are intolerant to or have not responded to naltrexone and acamprosate, and have no contraindications to the use of these medications. [2C]		[B] Moderate confidence that the evidence reflects the true effect. Further research may change our confidence in the estimate of effect and may change the estimate. [C] Low confidence that the evidence reflects the true effect. Further research is likely to change our confidence in the estimate of effect and is likely to change the estimate.
ASAM 2020	• All FDA approved medications for the treatment of opioid use disorder should be available to all patients. Clinicians should consider the patient’s preferences, past treatment history, current state of illness, and treatment setting when deciding between the use of methadone, buprenorphine, and naltrexone. • There is no recommended time limit for pharmacological treatment • Patients’ psychosocial needs should be assessed, and patients should be offered or referred to psychosocial treatment based on their individual needs. However, a patient’s decision to decline psychosocial treatment or the absence of available psychosocial treatment should not preclude or delay pharmacotherapy, with appropriate medication management. Motivational interviewing or enhancement can be used to encourage patients to engage in psychosocial treatment services appropriate for addressing individual needs.	Kampman, K., Freedman, K. (2020). American Society of Addiction Medicine (ASAM) National Practice Guideline for the Treatment of Opioid Use Disorder: 2020 Focused Update. <i>Journal of Addiction Medicine</i> ; 14, no. 2S: 1–91, https://doi.org/10.1097/ADM.0000000000000633 .	The methods used to search the literature and subsequently develop guideline statements were consistent with the RAM methodology employed for the 2015 publication. Criteria for inclusion in the focused update included new evidence and guidelines that were considered a) clinically meaningful and applicable to a broad range of clinicians treating addiction involving opioid use, and b) urgently needed to ensure the guideline reflects the current state of the science for the existing recommendations, aligns with other relevant practice guidelines, and reflects newly approved medications and formulations. Relevant evidence and current practices not meeting these criteria will be reviewed and incorporated into the full update as appropriate.
ASAM 2015	• Methadone and buprenorphine are recommended for opioid use disorder treatment and withdrawal management. • Naltrexone (oral; extended-release injectable) is recommended for relapse prevention.	Kampman, K., Jarvis, M. (2015). American Society of Addiction Medicine (ASAM) National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use. <i>Journal of Addiction Medicine</i> ; 9(5): 358–367. DOI: 10.1097/ADM.0000000000000166.	All statements required to meet criteria for both appropriateness and necessity as defined by expert group. Appropriateness was defined as “a statement, procedure or treatment is considered to be appropriate if the expected health benefit) e.g. increased life expectancy, relief of pain, reduction in anxiety, improved functional capacity) exceeds the expected negative consequences (e.g. mortality, morbidity, anxiety, pain) by a sufficiently wide margin that the procedure is worth doing, exclusive of cost.”

			A statement was considered necessary when all the following criteria were met: 1. It would be considered improper care not to provide this service 2. Reasonable chance exists that this procedure and/or service will benefit the patient 3. The benefit to the patient is of significance and certainty
Michigan Quality Improvement Consortium 2015	• Patient education and brief intervention should be conducted by the Primary Care Physician (PCP) or trained staff (e.g., RN, MSW) [A] • Refer patients with high risk behavior or symptoms to substance abuse health specialist, an addiction physician specialist, or a physician experienced in pharmacologic management of addiction. Also consider referral to community-based services or an Employee Assistance Program [D] • Initiate treatment within 14 days of substance use disorder diagnosis • Frequent follow-up, i.e. 2 visits within 30 days supports behavior change.	Michigan Quality Improvement Consortium. Screening, diagnosis and referral for substance use disorders . Southfield (MI): Michigan Quality Improvement Consortium; 2015 Aug. 1 p.	[A] Randomized controlled trials [D] Opinion of expert panel
VA/DoD 2015	• Offer referral to specialty SUD care for addiction treatment if based on willingness to engage. [B] • For patients with moderate-severe alcohol use disorder, we recommend: Acamprosate, Disulfiram, Naltrexone- oral or extended release, or Topiramate. [A] • Medications should be offered in combined with addiction-focused counseling. offering one or more of the following interventions considering patient preference and provider training/competence: Behavioral Couples Therapy for alcohol use disorder, Cognitive Behavioral Therapy for substance use disorders, Community Reinforcement Approach, Motivational Enhancement Therapy, 12-Step Facilitation. [A]	Department of Veteran Affairs, Department of Defense. (2015). VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders . Washington DC: Department of Veterans Affairs, Department of Defense.	[A] “Strong For,” A strong recommendation that the clinicians provide the intervention to eligible patients. [B] “Weak For,” Recommend offering this option to eligible patients. <i>Good evidence was found that the intervention improves important health outcomes and concludes that benefits substantially outweigh harm.</i>

	• For patients with opioid use disorder we recommend buprenorphine/naloxone or methadone in an Opioid Treatment Program. For patients for whom agonist treatment is contraindicated, unacceptable, unavailable, or discontinued, we recommend extended-release injectable naltrexone. [A] • For patients initiated in an intensive phase of outpatient or residential treatment, recommend ongoing systematic relapse prevention efforts or recovery support, individualized on the basis of treatment response. [A]		
USPSTF 2013	• Clinicians should screen adults aged 18 years or older for alcohol misuse and provide brief behavioral counseling interventions to patients engaged in risky or hazardous drinking.	<i>Final Recommendation Statement: Alcohol Misuse: Screening and Behavioral Counseling Interventions in Primary Care. U.S. Preventive Services Task Force. May 2013.</i> https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/alcohol-misuse-screening-and-behavioral-counseling-interventions-in-primary-care	[B] The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.