Technical Assistance Webinar: Calculating the Substance Use Disorder (SUD) Measures in the Adult Core Set

June 5, 2018

Karen Matsuoka, PhD, Centers for Medicare & Medicaid Services
Lisa Hines, PharmD, Pharmacy Quality Alliance
Irene Nsiah, MPH, Pharmacy Quality Alliance
Lauren Niles, MPH, National Committee for Quality Assurance
Junqing Liu, MPH, National Committee for Quality Assurance
Colleen Staatz, MPH, Mathematica Policy Research
Gigi Raney, LCSW, Centers for Medicare & Medicaid Services
Agenda

• Overview of SUD Measures in the Adult Core Set

• Review of Measure Specifications for the Four Measures
  • Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD)
  • Concurrent Use of Opioids and Benzodiazepines (COB-AD)
  • Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD)
  • Follow-Up After Emergency Department Visit for Mental Illness or Alcohol and Other Drug Abuse or Dependence (FUA/FUM-AD)

• Technical Assistance Resources

• Wrap-up
Overview of SUD Measures in the Adult Core Set

Karen Matsuoka, PhD, CMCS Chief Quality Officer and Director, Division of Quality and Health Outcomes, CMS
Overview of SUD Measures

• Improving outcomes for Medicaid beneficiaries with SUDs is a top priority for CMS

• In keeping with these objectives, the Adult Core Set includes four SUD measures for voluntary reporting by states:
  • Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD)
  • Concurrent Use of Opioids and Benzodiazepines (COB-AD)
  • Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD)
  • Follow-Up After Emergency Department Visit for Mental Illness or Alcohol and Other Drug Abuse or Dependence (FUA/FUM-AD)

• Reporting of these measures will help CMS and states to continue their quality improvement efforts and to monitor progress in combatting the opioid crisis.
# Importance of the Four SUD Measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of Opioids at High Dosage in Persons Without Cancer (OHD-AD)</td>
<td>Examines the rate of beneficiaries who were prescribed opioids with a high daily dosage for 90 or more consecutive days, which is a measure of potential overuse and is linked to an increased risk of morbidity and mortality.</td>
</tr>
<tr>
<td>Concurrent Use of Opioids and Benzodiazepines (COB-AD)</td>
<td>Added to the 2018 Adult Core Set to address two gap measurement areas: early opioid use and polypharmacy.</td>
</tr>
<tr>
<td>Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment (IET-AD)</td>
<td>Includes several revisions to align with the most recent clinical guidelines and improve the utility of performance data for states, including stratifications by SUD diagnosis cohort.</td>
</tr>
<tr>
<td>Follow-Up After Emergency Department Visit for Mental Illness or Alcohol and Other Drug Abuse or Dependence (FUA/FUM-AD)</td>
<td>Examines timely follow-up after ED visits for mental illness or AOD, which is linked to reducing ED revisits.</td>
</tr>
</tbody>
</table>
Use of Opioids at High Dosage in Persons without Cancer (OHD-AD)

Lisa Hines, PharmD, Pharmacy Quality Alliance
Irene Nsiah, MPH, Pharmacy Quality Alliance
Measure Specifications

- **Description**: Rate per 1,000 Medicaid beneficiaries ages ≥18 years without cancer who received prescriptions for opioids with a daily dosage >120 morphine milligram equivalents (MME) for ≥90 consecutive days.

- **Denominator**: Any beneficiary with ≥2 prescription claims for opioids (Table OHD-A) with different dates of service, for which the sum of the days' supply is ≥15.

- **Denominator Exclusions**: Beneficiaries with cancer and/or in hospice.

- **Numerator**: Any beneficiary in the denominator who exceeds the 120 MME threshold for ≥90 consecutive days.

- **Data Sources**: Prescription and Medical claims, enrollment data.
Overview of Measure Eligible Population

1 Identify individuals ≥18 years as of the first day of the measurement year.
2 Identify individuals with ≥2 prescription claims for opioids on different dates for which the sum of the days supply is ≥15 days during the measurement year.
3 Identify individuals with IPSD from Jan 1 – Oct 2, and treatment period ≥90 days in the measurement year.
4 Identify individuals continuously enrolled during the treatment period.

1 Exclude days of supply that occur after the end of the measurement year.
2 The index prescription start date (IPSD) is the earliest date of service (i.e. first fill) for an opioid during the measurement year.
3 The treatment period begins on IPSD and extends through the last day of the measurement year, death or disenrollment, whichever occurs first.
4 Allowable gap: No more than one gap in continuous enrollment of up to 31 days during the treatment period. When enrollment is verified monthly, the beneficiary may have no more than 1-month gap in coverage.
The treatment period begins on the date of the first fill for an opioid (i.e., IPSD) and extends through the last day of the measurement year, death, or disenrollment, whichever occurs first.

- The treatment period must be $\geq 90$ days.

Treatment Period = 354 days

IPSD = index prescription start date
Continuous Enrollment

- Individual must be continuously enrolled during the treatment period, with up to one allowable gap of no more than 31 days (or 1 month when verified monthly).

Example #1: INCLUDED in eligible population

Enroll: Jan 1

IPSD: 12Jan2016
Oxymorphone
HCl Tab 10 MG

2nd fill: 10Apr2016
Oxymorphone
HCl Tab 10 MG

Treatment Period = 354 days

Disenroll: Oct 1

1 month

Re-enroll: Nov 1

Dec 31
Continuous Enrollment, cont.

Example #2: NOT INCLUDED in eligible population

- Enroll: Jan 1
- IPSD: Jan 12
- Disenroll: Sep 1 (2 months later)
- Re-enroll: Nov 1

Treatment Period = 354 days

Example #3: NOT INCLUDED in eligible population

- Enroll: Jan 1
- IPSD: Jan 12
- Disenroll: March 1 (1 month later)
- Re-enroll: Apr 1
- Disenroll: Oct 1 (1 month later)
- Re-enroll: Nov 1

Treatment Period = 354 days
Denominator Exclusions

• Individuals with cancer:
  • Use Table OHD-B to identify individuals with cancer.
  • Exclude any individuals with ≥1 diagnosis for cancer in any position (including primary and secondary) during the measurement year.

• Individuals in hospice:
  • Exclude any individual with ≥1 medical claim with place of service code 34, or other indicator of hospice at any time during the measurement year.
Calculating the Numerator

Step 1: From the denominator population, calculate the daily MME for each opioid prescription claim during the treatment period

<table>
<thead>
<tr>
<th>member_id</th>
<th>disp_dt</th>
<th>qty_disp</th>
<th>days_supply</th>
<th>drug_name</th>
<th>strength</th>
<th>mme_conv_factor*</th>
<th>mme_per_day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12Jan2016</td>
<td>180.00</td>
<td>30.00</td>
<td>Methadone HCl Tab 10 MG</td>
<td>10.00</td>
<td>3</td>
<td>180.00</td>
</tr>
<tr>
<td>1</td>
<td>11Feb2016</td>
<td>180.00</td>
<td>30.00</td>
<td>Oxymorphone HCl Tab 15 MG</td>
<td>15.00</td>
<td>1.5</td>
<td>135.00</td>
</tr>
<tr>
<td>1</td>
<td>12Mar2016</td>
<td>180.00</td>
<td>30.00</td>
<td>Oxymorphone HCl Tab 15 MG</td>
<td>15.00</td>
<td>1.5</td>
<td>135.00</td>
</tr>
<tr>
<td>1</td>
<td>09Apr2016</td>
<td>81.00</td>
<td>9.00</td>
<td>Hydromorphone HCl Tab 4 MG</td>
<td>4.00</td>
<td>4.0</td>
<td>144.00</td>
</tr>
<tr>
<td>2</td>
<td>19Jul2016</td>
<td>180.00</td>
<td>30.00</td>
<td>Methadone HCl Tab 10 MG</td>
<td>10.00</td>
<td>3</td>
<td>180.00</td>
</tr>
<tr>
<td>2</td>
<td>18Aug2016</td>
<td>10.00</td>
<td>5.00</td>
<td>Oxycodone/APAP Tab 5-325 MG</td>
<td>5.00</td>
<td>1.5</td>
<td>15.00</td>
</tr>
<tr>
<td>2</td>
<td>20Aug2016</td>
<td>180.00</td>
<td>30.00</td>
<td>Methadone HCl Tab 10 MG</td>
<td>10.00</td>
<td>3</td>
<td>180.00</td>
</tr>
</tbody>
</table>

MME/day = [Strength * (Quantity Dispensed/Days Supply)] * MME conversion factor
Note: MME conversion factor included in NDC file provided by PQA
Calculating the Numerator, cont.

Step 2: Sum the daily MMEs of all opioid claims for each day to arrive at a total daily MME for each beneficiary

<table>
<thead>
<tr>
<th>Member: 1</th>
<th>Date</th>
<th>Tot_mme_day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12Jan2016</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>13Jan2016</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>11Feb2016</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>12Feb2016</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>12Mar2016</td>
<td>270</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Member: 1</th>
<th>Date</th>
<th>Tot_mme_day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13Mar2016</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>14Mar2016</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>09Apr2016</td>
<td>279</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Member: 2</th>
<th>Date</th>
<th>Tot_mme_day</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19Jul2016</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>20Jul2016</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>18Aug2016</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>19Aug2016</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>20Aug2016</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>21Aug2016</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>22Aug2016</td>
<td>195</td>
</tr>
<tr>
<td></td>
<td>23Aug2016</td>
<td>180</td>
</tr>
</tbody>
</table>

Note: There is no adjustment for early refills or overlapping days of supply
Calculating the Numerator, cont.

Step 3: Identify the days where the MME threshold is exceeded

### Member: 1

<table>
<thead>
<tr>
<th>Day</th>
<th>Tot_mme_day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>180</td>
</tr>
<tr>
<td>31</td>
<td>135</td>
</tr>
<tr>
<td>32</td>
<td>135</td>
</tr>
<tr>
<td>60</td>
<td>270</td>
</tr>
</tbody>
</table>

- >120MME/day for 90 consecutive days – INCLUDED in numerator

### Member: 2

<table>
<thead>
<tr>
<th>Day</th>
<th>Tot_mme_day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>180</td>
</tr>
<tr>
<td>2</td>
<td>180</td>
</tr>
<tr>
<td>31</td>
<td>15</td>
</tr>
<tr>
<td>32</td>
<td>15</td>
</tr>
<tr>
<td>33</td>
<td>195</td>
</tr>
<tr>
<td>34</td>
<td>195</td>
</tr>
</tbody>
</table>

Dropped below 120MME on days 31 and 32 – EXCLUDED from numerator
Concurrent Use of Opioids and Benzodiazepines (COB-AD)

Lisa Hines, PharmD, Pharmacy Quality Alliance
Irene Nsiah, MPH, Pharmacy Quality Alliance
Measure Specifications

- **Description:** Percent of Medicaid beneficiaries ages ≥18 with concurrent use of prescription opioids and benzodiazepines for ≥30 cumulative days

- **Denominator:** Any beneficiary with ≥2 prescription claims for opioids (Table COB-A) with different dates of service, for which the sum of the days' supply is ≥15

- **Denominator Exclusions:** Beneficiaries with cancer and/or in hospice

- **Numerator:** Any beneficiary in the denominator with ≥2 prescription claims for benzodiazepines on different dates of service and concurrent use of opioids and benzodiazepines for ≥30 cumulative days

- **Data Sources:** Prescription and Medical claims, enrollment data
Overview of Measure Eligible Population

Identify individuals ≥18 years as of the first day of the measurement year

Identify individuals with ≥2 prescription claims for opioids on different dates for which the sum of the days supply is ≥15 days during the measurement year

Identify individuals with IPSD from Jan 1 – Dec 2 of the measurement year

Identify individuals continuously enrolled during the measurement year

The denominator is the same as the eligible population above, with the same exclusions as the OHD-AD measure (i.e., cancer and/or hospice)
Calculating the Numerator

Step 1: From the denominator population, identify individuals with ≥2 prescription claims for any benzodiazepine (Table COB-B) on different dates of service during the measurement year

<table>
<thead>
<tr>
<th>member_id</th>
<th>disp_dt</th>
<th>days_supply</th>
<th>drug_name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12Jan2016</td>
<td>30.00</td>
<td>Methadone HCl Tab 10 MG</td>
</tr>
<tr>
<td>1</td>
<td>31Jan2016</td>
<td>30.00</td>
<td>Diazepam Tab 10 MG</td>
</tr>
<tr>
<td>1</td>
<td>11Feb2016</td>
<td>30.00</td>
<td>Oxymorphone HCl Tab 15 MG</td>
</tr>
<tr>
<td>1</td>
<td>4Mar2016</td>
<td>15.00</td>
<td>Flurazepam HCl Cap 15 MG</td>
</tr>
<tr>
<td>2</td>
<td>19Jul2016</td>
<td>30.00</td>
<td>Methadone HCl Tab 10 MG</td>
</tr>
<tr>
<td>2</td>
<td>19Jul2016</td>
<td>30.00</td>
<td>Oxazepam Cap 30 MG</td>
</tr>
<tr>
<td>2</td>
<td>20Aug2016</td>
<td>30.00</td>
<td>Methadone HCl Tab 10 MG</td>
</tr>
</tbody>
</table>

Member #1 has 2 prescription claims for benzodiazepines on different dates of service – INCLUDED

Member #2 has only 1 prescription claim for benzodiazepine during the measurement year – EXCLUDED
Calculating the Numerator, cont.

Step 2: Determine the total days of overlap (concurrent use) between the opioids and benzodiazepine prescriptions during the measurement year

<table>
<thead>
<tr>
<th>Date</th>
<th>Concurrent Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>12Jan2016</td>
<td>N</td>
</tr>
<tr>
<td>13Jan2016</td>
<td>N</td>
</tr>
<tr>
<td>31Jan2016</td>
<td>Y</td>
</tr>
<tr>
<td>01Feb2016</td>
<td>Y</td>
</tr>
<tr>
<td>29Feb2016*</td>
<td>Y</td>
</tr>
<tr>
<td>01Mar2016</td>
<td>N</td>
</tr>
<tr>
<td>04Mar2016</td>
<td>Y</td>
</tr>
</tbody>
</table>

*2016 was a leap year
Note: There is no adjustment for early refills or overlapping days of supply

Total Days of overlap:
Jan 31 to Feb 29 = 30 days of overlap
Additional overlap starts from Mar 4

Member #1 has ≥30 cumulative days of concurrent use of opioids and benzodiazepines – INCLUDED in numerator
Questions?
Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence (IET-AD)

Lauren Niles, MPH
Senior Health Care Analyst, Performance Measurement, NCQA
IET-AD Measure Description

- Percentage of beneficiaries ages 18 and older with a new episode of alcohol or other drug (AOD) abuse or dependence who received the following:
  - **Initiation of AOD Treatment**: Percentage of beneficiaries who initiated AOD treatment within 14 days of the initial diagnosis
  - **Engagement of AOD Treatment**: Percentage of beneficiaries who initiated treatment and who had two or more additional AOD services (or MAT) within 34 days of initiation
Denominator Overview

1. Include beneficiaries age 18 and older with a new episode of AOD abuse or dependence on or between January 1–November 14 of the measurement year.
   
   • Acceptable encounters include: Outpatient visit, telehealth, intensive outpatient visit, partial hospitalization, detoxification visit, ED visit, observation visits, acute or nonacute inpatient discharge

2. Report the following three diagnosis cohorts and total: (1) alcohol abuse or dependence, (2) opioid abuse or dependence, (3) other drug abuse or dependence, (4) total

3. Remove beneficiaries with a diagnosis of AOD abuse or dependence or a MAT dispensing event in the 60 days before the index episode

4. Remove beneficiaries who were not continuously enrolled 60 days prior to the new episode through 48 days after the episode (109 days total)
Numerator Overview

• Initiation of treatment: One of any of the following within 14 days of index AOD abuse or dependence
  • A visit addressing a diagnosis of AOD abuse or dependence
  • A dispensing event or claim for medication assisted treatment (MAT) for alcohol or opioid abuse or dependence

• Engagement in treatment: Any of the following within 34 days of treatment initiation
  • Two visits addressing a diagnosis of AOD abuse or dependence
  • A dispensing event or claim for MAT for alcohol or opioid abuse or dependence
    • If MAT was used in the initiation of treatment, a visit is required to satisfy the engagement numerator (1 visit + MAT, or 2 visits)
Diagnosis Cohorts

• Denominator
  • Beneficiaries placed in cohort based on index episode
  • If beneficiary has multiple diagnoses on index episode claim, they are placed in each cohort they meet the criteria for
  • “Total” is not a sum of the diagnosis cohorts. Only count members once in the “total”

• Numerator
  • For both initiation and engagement numerators:
    • Beneficiaries must have services and medications that correspond to their diagnosis cohort
    • Example: Beneficiary in opioid abuse or dependence diagnosis cohort cannot satisfy initiation numerator criteria with a disulfiram dispensing event
Example

- **Beneficiary A**
  - 5/4/2017: Detoxification encounter with diagnosis of alcohol use disorder and opioid use disorder
  - Beneficiary has no history of AOD use or dependence
  - 5/10/2017: Outpatient encounter for diagnosis of alcohol use disorder
  - 5/12/2017: Medication dispensing event: disulfiram
  - 5/12/2017: Telehealth visit with alcohol diagnosis
  - **Beneficiary A is included in:**
    - Alcohol, Opioid, and Total denominators
    - Alcohol Initiation, Alcohol Engagement, Total Initiation, and Total Engagement numerators
Follow-Up After ED Visit for Mental Illness and Alcohol or Other Drug Abuse or Dependence (FUA/FUM-AD)

Junqing Liu, Ph.D., MSW
Research Scientist, Performance Measurement, NCQA
FUA/FUM-AD Measure Description

- Percentage of emergency department (ED) visits for beneficiaries 18 years of age and older who had a principal diagnosis of mental illness or alcohol or other drug (AOD) abuse or dependence, and who had a follow up visit with a corresponding principal diagnosis for mental illness or AOD

- Four rates are reported:
  - **Mental Illness**
    - Follow-up within 7 days of the ED visit
    - Follow-up within 30 days of the ED visit
  - **AOD Abuse or Dependence**
    - Follow-up within 7 days of the ED visit
    - Follow-up within 30 days of the ED visit
Overview of Denominators

• Include beneficiaries ages 18 and older with an ED visit with a principal diagnosis of mental illness or AOD abuse or dependence on or between January 1- December 1 of the measurement year

• Remove beneficiaries who have had a ED visit followed by an admission to an acute or nonacute inpatient care setting on the date of the ED visit or within 30 days following, regardless of the principal diagnosis for the admission

• Report mental illness and AOD abuse or dependence beneficiaries in two separate denominators
Numerator Overview: Mental Illness

- **7-Day Follow-Up:** A visit with any practitioner, with a principal diagnosis of a mental health disorder within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit.

- **30-Day Follow-Up:** A visit with any practitioner, with a principal diagnosis of a mental health disorder within 30 days after the ED visit (31 total days). Include visits that occur on the date of the ED visit.

- Any of the following meet criteria for a follow-up visit:
  - A visit with a principal diagnosis of a mental health disorder
  - A telehealth visit with a principal diagnosis of a mental health disorder
  - A visit to a behavioral healthcare facility
  - A visit to a non-behavioral healthcare setting with a principal diagnosis of a mental health disorder
Numerator Overview: AOD Abuse or Dependence

- **7-Day Follow-Up:** A visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 7 days after the ED visit (8 total days). Include visits that occur on the date of the ED visit.

- **30-Day Follow-Up:** A visit with any practitioner, with a principal diagnosis of AOD abuse or dependence within 30 days after the ED visit (31 total days). Include visits that occur on the date of the ED visit.

- Any of the following meet criteria for a follow-up visit:
  - A visit with a principal diagnosis of AOD abuse or dependence
  - A telehealth visit with a principal diagnosis of AOD abuse or dependence
Questions?
Technical Assistance Resources

Colleen Staatz, MPH, Research Analyst
Mathematica Policy Research
Technical Assistance


• Technical assistance is available to help states report these measures
  • The OHD-AD and COB-AD measures require use of National Drug Codes (NDCs) for opioid and benzodiazepine medications, which are available to states on request by contacting MACQualityTA@cms.hhs.gov. This file also contains guidance on morphine milligram equivalent (MME) conversion factors.
  • Submit a TA request as part of the webinar evaluation, or send your questions to the TA mailbox at MACqualityTA@cms.hhs.gov.
Questions?
Wrap-Up

Gigi Raney, LCSW
Division of Quality and Health Outcomes, CMS
Next Steps

- State reporting of the Adult Core Set SUD measures is voluntary, but a high priority for CMS

- Adult Core Set reporting for FFY 2018 in MACPro will open in the fall
  - Please note any deviations from the measure specifications (such as measurement year, data source), as well as any eligible populations excluded from the measure

- If you have questions, email the TA mailbox at MACqualityTA@cms.hhs.gov
  - Please submit specific questions or request a phone consultation for general support
  - You may also request TA by filling out the webinar evaluation when you sign off today
Thank you for participating in the webinar.

Reminder… to obtain technical assistance, fill out the evaluation at the end of the webinar OR contact the TA mailbox at MACQualityTA@cms.hhs.gov