NATIONAL QUALITY FORUM
Driving measurable health improvements together

Behavioral Health and Substance Use, Fall 2019 Cycle Track 2: CDP Report

TECHNICAL REPORT
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Contents

Executive Summary

The review and evaluation of behavioral health measures have long been a priority of the National Quality Forum (NQF), with endorsement for mental health and substance use disorder (SUD) measures going back more than a decade. At present, there are 46 NQF-endorsed behavioral health measures. The background and description of NQF's most recent Behavioral Health and Substance Use Standing Committee meeting, as well as previous meetings, are available on NQF's project webpage. This Standing Committee oversees the measurement portfolio used to advance accountability and quality in the delivery of behavioral health and substance use services. The Standing Committee's most recent decision making meeting is detailed in this report, and it includes the evaluation and voting results of measures that include the use of physical restraint and seclusion, follow-up after emergency department visits for two newly submitted measures, and five measures undergoing maintenance review against NQF's standard evaluation criteria.

Due to circumstances surrounding the COVID-19 global pandemic, commenting periods for all measures evaluated in the fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks. If the comments received required a post-comment meeting, the measures were moved to *Track 2* and deferred to the spring 2020 cycle. All other measures continued on *Track 1* as part of the fall 2019 cycle.

Track 1 in the fall 2019 cycle, the Standing Committee evaluated one newly submitted measure and two measures undergoing maintenance review against NQF's standard evaluation criteria. The Standing Committee recommended all three measures for endorsement. The Consensus Standards Approval Committee (CSAC) upheld the Standing Committee's recommendations.

Measures Endorsed:

- **NQF #2800** Metabolic Monitoring for Children and Adolescents on Antipsychotics
- **NQF #2801** Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics
- **NQF #3541** Annual Monitoring for Persons on Long-Term Opioid Therapy (AMO)

Track 2, four measures were deferred to the spring 2020 cycle. The Standing Committee recommended two measures for endorsement (one new measure and one maintenance measure) and did not recommend one new measure for endorsement. One new measure was withdrawn by the developer and subsequently was not reviewed by the CSAC. The CSAC upheld the Standing Committee's recommendations.

Measures Endorsed:

- **NQF #3175** Continuity of Pharmacotherapy for Opioid Use Disorder
- **NQF #3539e** Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Measure Not Endorsed:

- **NQF #3538** All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care

Measure Withdrawn:

- **NQF #3492** Acute Care Use Due to Opioid Overdose

This report contains details of the evaluation of measures assigned to *Track 2* and moved to the spring 2020 cycle. Detailed summaries of the Standing Committee's discussion and ratings of the criteria for each measure are in Appendix A. The detailed evaluation summary of measures assigned to *Track 1* and that remained in the fall 2019 cycle is included in a separate report. The measure listed as withdrawn (NQF #3492) was discussed and voted on by the Standing Committee during the fall 2019 measure evaluation meetings and was included in the draft report posted for public comment but was subsequently withdrawn by the developer prior to an endorsement discussion and vote by the CSAC. The developer is no longer seeking endorsement for the measure.

Introduction

Behavioral health comprises both mental health and substance use disorders (SUDs), representing a key construct of healthcare across the globe, unified by brain-based etiology and behavioral symptomology. Behavioral healthcare refers to a continuum of services for individuals at risk of or suffering from mental or addictive disorders—challenges broadly ranging from mood and anxiety disorders to learning disabilities and substance abuse or dependence (including tobacco dependence). A comprehensive annual report of behavioral health prevalence data is found in the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Survey on Drug Use and Health (NSDUH).[1] Results from the 2019 NSDUH indicated that, in the U.S., 19.2 million persons age18 years or older suffered from an apparent SUD (not including tobacco dependence), and 51.5 million persons age 18 years or older suffered from a mental illness. There were 9.5 million persons age 18 years or older who suffered from both SUD and a mental illness. These numbers jointly suggest that substantive behavioral health disease was evident in at least 61.2 million adult Americans in 2019, or roughly 24 percent of the adult population. This rate is consistent with other epidemiologic studies that have previously revealed the prevalence of behavioral health conditions in the U.S. This includes more than 11 million persons with the most serious forms of mental illness, such as schizophrenia, bipolar disorder, and major depression. Behavioral disorders cause considerable pain and dysfunction in the U.S. population, so much so that it represents the leading cause of death and disability when compared to other major illness clusters, such as cancers, circulatory diseases (e.g., heart disease, stroke, and arteriosclerosis), injuries, and kidney disease.[3]

The NSDUH from 2019 further discusses an important concern about behavioral healthcare in this country: Only 10.3 percent of persons ages 12 years and older with SUDs reported receiving treatment during that year, and only 44.8 percent of persons ages 18 years and older with any mental illness reported receiving care for that condition.[1] This gap between behavioral health pathology and treatment alone represents an unmet need among those with behavioral health conditions.

Opioid overdose deaths have recently become a particular concern in the U.S., and data compiled by the U.S. Centers for Disease Control and Prevention (CDC) placed such deaths at nearly 47,000 in 2017 alone.[2] U.S. suicides in 2018 approached that number,[4] and deaths attributable to alcohol use (e.g., overdose, accidents, cirrhosis, and cancers) numbered approximately 88,000 per annum, according to the 2006-2010 data, thus making alcohol use the third most common cause of preventable mortality behind tobacco use (first) and poor diet and physical inactivity (second).[5] Finally, mental illness strongly correlates with premature death by an average of eight years for all mental illnesses, and 25 years for the most serious forms.[6] The causes for this premature mortality are multifactorial, including tobacco use, suicide, poor self-advocacy, and risk of victimization; however, at least one study found that 95 percent of these premature deaths originate from medical causes.

There are deep challenges posed by behavioral health illnesses. Such illnesses are typically cycling, chronic, and serious. Nonetheless, many evidence-based approaches exist to prevent such illnesses and to treat persons and families affected by them.[7-9] Applications of these strategies are neither easy nor universal; however, they are made challenging by the complexity and uncertainty of the underlying pathology and by stigma that shrouds a category of diseases that often negatively affect social

functioning. [10-13] Accordingly, quality measurement and quality improvement tools are essential to assessing and improving quality of behavioral healthcare and patients' outcomes.

NQF Portfolio of Performance Measures for Behavioral Health and Substance Use Conditions

The Behavioral Health and Substance Use Standing Committee (Appendix C) oversees NQF's portfolio of Behavioral Health and Substance Use measures (Appendix B), which includes measures for serious mental illnesses, such as schizophrenia, mania, major depression, dysthymia, anxiety, attention deficit hyperactivity disorder (ADHD) (as well as other learning and behavioral problems), alcohol and illegal drug use, tobacco dependence, care coordination (between and within the spheres of psychiatric, substance use, and related physical illness), medication use, and patient care experience. This portfolio contains 46 measures: 39 process measures, six outcome and resource use measures, and one composite measure (see Table 1).

Additional behavioral health measures have been assigned to other portfolios. Examples include patient experience measures (Patient Experience and Function project); measures focused on antipsychotics, screening for drugs of abuse in psychosis, and tobacco use (Pediatrics/Patient Safety projects); measures related to pharmacotherapy for opioid use disorder (Patient Safety project); unplanned readmissions following psychiatric hospitalization (All-Cause Admissions and Readmissions project); and smoking prevalence (Prevention and Population Health project).

Table 1. NQF Behavioral Health and Substance Use Portfolio of Measures

	Process	Outcome/Resource Use	Composite
Alcohol and Drug Use	6	0	1
Care Coordination	4	0	0
Depression	5	4	0
Medication Use	10	0	0
Experience of Care	2	0	0
Tobacco	4	0	0
Physical Health	8	2	0
Total	39	6	1

Behavioral Health and Substance Use Measure Evaluation

On January 29 and 31, and February 5, 2020, the Behavioral Health and Substance Use Standing Committee evaluated two new measures and five measures undergoing maintenance review against NQF's standard measure evaluation criteria. The detailed evaluation summary of the three measures assigned to *Track 2* and deferred to the spring 2020 cycle is included in this report. Three measures were assigned to *Track 1* and continued through the fall 2019 cycle. One measure was withdrawn prior to the post-commenting period and was not reviewed for endorsement.

Table 2. Behavioral Health and Substance Use Measure Evaluation Summary, Fall 2019 Track 2

	Maintenance	New	Total
Measures reviewed	1	2	3
Measures recommended for endorsement	1	1	2
Measures in which consensus is not yet reached	0	1	1

Comments Received Prior to Standing Committee Evaluation

NQF accepts comments on endorsed measures on an ongoing basis through the Quality Positioning System (QPS). In addition, NQF solicits comments for a continuous 16-week period during each evaluation cycle via an online tool located on the project webpage. For this evaluation cycle, the commenting period opened on November 26, 2019, and closed on April 9, 2020. No comments were submitted prior to the measure evaluation meetings.

Comments Received After Standing Committee Evaluation

Considering the recent COVID-19 global pandemic, many organizations needed to focus their attention on the public health crisis. In order to provide greater flexibility for stakeholders and continue the important work in quality measurement, NQF extended commenting periods and adjusted measure endorsement timelines for the fall 2019 cycle.

Commenting periods for all measures evaluated in the fall 2019 cycle were extended from 30 days to 60 days. Based on the comments received during this 60-day extended commenting period, measures entered one of two tracks:

Track 1: Measures Remained in Fall 2019 Cycle
Measures that did not receive public comments or only received comments in support of the Standing Committee's recommendations moved forward to the CSAC for review and discussion during its meeting on July 28-29, 2020.

Exceptions
Exceptions were granted to measures if non-supportive comments received during the extended post-comment period were similar to those received during the pre-evaluation meeting period and had already been adjudicated by the respective Standing Committees during the measure evaluation Fall 2019 meetings.

Track 2: Measures Deferred to Spring 2020 Cycle
Fall 2019 measures that required further action or discussion from a Standing Committee were deferred to the spring 2020 cycle. This includes measures in which consensus was not reached or those that required a response to public comments received. Measures undergoing maintenance review retained endorsement during that time.

During the spring 2020 CSAC meeting on November 17-18, 2020, the CSAC reviewed all measures assigned to *Track 2*. A list of measures assigned to *Track 1* can be found in the Executive Summary section of this report for tracking purposes, but these measures were reviewed during the fall 2019 CSAC review period.

The extended public commenting period with NQF member support closed on May 14, 2020. Following the Standing Committee's evaluation of the measures under review, NQF received six comments from four organizations (including three NQF member organizations) and individuals pertaining to the draft report and to the measures under review. All comments for each measure under review have been summarized in Appendix A.

Throughout the extended public commenting period, NQF members had the opportunity to express their support (either "support" or "do not support") for each measure submitted for endorsement consideration to inform the Standing Committee's recommendations. No NQF members provided their expression of support or non-support.

Overarching Issues

During the Standing Committee's discussion of the measures, several overarching issues emerged that were factored into the Standing Committee's ratings and recommendations for multiple measures. Those overarching issues are described in this section and are not repeated in detail with each individual measure.

Interpretation of Year-Over-Year Improvement Data

While reviewing measure submission criteria related to Usability and Use, the Standing Committee noted that several of the measures did not exhibit significant improvements in year-over-year performance data. Standing Committee members noted that this was difficult to interpret. The Standing Committee regarded this as a potential concern, noting that the purpose behind measurement is not a means unto itself, but rather to improve the quality of care that persons with behavioral health conditions receive. The expectation for a good quality measure is that performance on a measure isresponsive to quality improvement efforts. Many measures demonstrate responsiveness to quality improvement efforts, especially during the early stages post implementation. During a measure's life cycle, it is not uncommon for a measure to become topped out in its performance as best practices for quality improvement become better disseminated and adopted across healthcare settings.

It was noted that the interpretation of the data related to stagnating improvement is not always simple, and the Standing Committee speculated that improvement deceleration could be due to any of several causes: lack of discernable differences in quality between providers; that the measure is truly capped out in performance; that adequate incentives to address quality challenges have yet to be introduced; or that the behavioral health challenge that the measure intends to address is particularly recalcitrant.

Measure Validity Beyond the Tested Population

During the review of measures for endorsement recommendation this cycle, the Standing Committee reviewed several measures that were intended for broader population health applications, such as within state-level dashboards. The measures were noted to have been tested within a particular state, but the populations of the states where they were tested differ substantially from other U.S. states. This calls into question the applicability of test results from one state program when considering a measure for use in a different state, and the potential need to risk-adjust or stratify measure results at a population level in order to perform appropriate comparisons between state-level performances based on these measures.

Summary of Measure Evaluation: Fall 2019 Measures, Track 2

The following brief summaries of the measure evaluation highlight the major issues that the Standing Committee considered. Details of the Standing Committee's discussion and ratings of the criteria for each measure are included in Appendix A.

3175 Continuity of Pharmacotherapy for Opioid Use Disorder (University of Southern California): Endorsed

Description: Percentage of adults of at least 18 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment; **Measure Type**: Process; **Level of Analysis**: Clinician: Individual, Group/Practice, Health Plan, Population: Regional and State; **Setting of Care**: Outpatient Services; **Data Source**: Claims.

Ad Hoc Review of Scientific Acceptability at the Clinician Level of Analysis

The measure was endorsed in 2017 at the health plan and state levels of analysis. It was presented to the Measure Applications Partnership (MAP) in 2018. The MAP encouraged the developer to test the measure at the clinician level of analysis before it is implemented in the Merit-based Incentive Payment System (MIPS). The Standing Committee conducted a targeted review of reliability and validity at the clinician level; criteria beyond reliability and validity were not re-adjudicated during this review. The Standing Committee voted to pass this measure on reliability and validity at the clinician level based on the new testing provided. The endorsement of this measure is therefore recommended to be expanded to the clinician level of analysis.

The Standing Committee felt data collection was very consistent and the measure has clearly defined exclusions. They agreed that testing results passed the general threshold for reliability. The measure submission noted that two-thirds of an expert panel of nine individuals agreed or strongly agreed that the measure has face validity. The Standing Committee had some concern about the remaining panelists that dissented or were neutral. The developer shared that face validity results presented during the last review also support the measure's validity. NQF staff reminded the Standing Committee that face validity is acceptable for the first evaluation (applicable to the current review) and that empirical testing will be necessary for maintenance review. The Standing Committee generally agreed that the attribution approach presented was thorough and well-developed. The developer added that two-thirds of cases could be attributed to a single provider and that the "plurality rule" using days covered was also used in attribution.

The Standing Committee discussed the data used for testing and whether the sample was representative of the population in which the measure would be used. The developer clarified that the majority of patients in their testing sample were below 65 years of age and dual eligible, which is representative of the opioid use population. The developer noted they were limited to Medicare Fee-For-Service data for their analysis. It was suggested that using an all-payer database would allow for a larger patient volume per clinician, and more clinicians would have enough patients to calculate a performance score. It was discussed that the vast majority of the pharmacotherapy included in the measure was for buprenorphine rather than methadone. The Standing Committee was very interested in reviewing empirical validity testing during the scheduled maintenance review.

The measure passed the reliability and validity criteria, so it is recommended that endorsement is expanded to the individual clinician and clinician group/practice levels of analysis. The measure will retain its existing maintenance review schedule with the next review slated for Spring 2021.

3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting (Mathematica): Endorsed

Description: Proportion of inpatient hospitalizations for patients 65 years of age and older who receive an order for antipsychotic medication therapy; **Measure Type**: Process; **Level of Analysis**: Facility; **Setting of Care**: Inpatient/Hospital; **Data Source**: Electronic Health Records.

The Standing Committee recommended the measure for NQF endorsement. This new electronic clinical quality measure (eCQM) calculates the proportion of hospitalizations for patients 65 years and older where an antipsychotic medication was prescribed in the absence of the threat of harm to self or others. This measure was originally submitted for NQF endorsement in fall 2017 as NQF #3315e. At that time, the Standing Committee recommended additional testing to examine the impact of the exclusions of "antipsychotics prior to admission" and "antipsychotics for treatment resistant depression."

The evidence for the measure includes the American Geriatrics Society 2019 guidelines and literature that indicate harm from prolonged use of antipsychotics (e.g., higher mortality rate, risk of falls, and cerebral vascular events). Based on testing, the developer decided to exclude patients on antipsychotics prior to admission. The Standing Committee was generally supportive of the added exclusion. One member cautioned that antipsychotics might be warranted in some individuals. The developer reiterated that many patients on antipsychotics for depression would be on these medications before hospitalization and would be excluded. For performance gap, the Standing Committee agreed data shows too many older patients are receiving these medications.

In discussing the reliability of the measure, the Standing Committee focused on whether this measure would capture appropriate on-label prescribing since on-label and off-label indications can vary widely between medications. Overall, the Standing Committee supported the measure's reliability. Regarding validity and feasibility, the developer noted that the "threat of harm" element is not collected in a structured field systematically across all sites, but increased implementation of the measure would drive better data collection. The Standing Committee voiced that during the maintenance evaluation, they would like to assess whether "threat of harm" is being captured more consistently. The measure was designed for use in the Inpatient Hospital Quality Reporting program. Members commented that increased restraint use may be a potential consequence of the application of this measure, but overall, the benefits of the measure outweigh the risks.

NQF staff shared that since this measure is applicable to both the patient safety and behavioral health topic areas, a subset of Patient Safety Standing Committee members was given the opportunity to provide comment. One member of that Standing Committee shared preliminary comments which generally supported the measure.

3538 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care (The Lewin Group): Not Endorsed

Description: The measure focuses on emergency department (ED) utilization for four populations of Medicaid beneficiaries who may benefit from integrated physical and behavioral health care. The rates

in this measure are intended to be reported at the state level. This is an inverse measure; lower scores indicate better quality of care. The measure is defined as the all-cause ED utilization rate for Medicaid beneficiaries aged 18 and older who meet the eligibility criteria for any of the four denominator groups: 1) Beneficiaries with co-occurring physical health and mental health conditions (PH+MH), 2) Beneficiaries with a co-occurring physical health condition and a substance use disorder (PH+SUD), 3) Beneficiaries with a co-occurring mental health condition and a SUD (MH+SUD), 4) Beneficiaries with serious mental illness (SMI). The measure is calculated over the period of one calendar year as the number of ED visits that do not result in an inpatient admission or observation stay per 1,000 member-months. It is reported as four separate rates, one for each denominator group. Each of the four denominator groups includes only beneficiaries who were not dually eligible for Medicare and Medicaid, were enrolled in Medicaid for at least 10 months of the measurement year, and had a diagnosis within the measurement year or year prior (depending upon the condition) that placed them into one or more of the denominator groups; **Measure Type**: Outcome; **Level of Analysis**: Population: Regional and State; **Setting of Care**: Emergency Department and Services; **Data Source**: Claims.

The measure failed the Standing Committee's re-vote on evidence, so the measure was not voted on for endorsement and did not receive initial endorsement.

This measure was first reviewed by the Scientific Methods Panel (SMP) before being discussed by the Standing Committee. The SMP found this measure to be reliable and valid with no additional discussion needed.

During the Standing Committee measure endorsement deliberations in January, the Standing Committee was not able to achieve consensus on evidence. Discussions on evidence were therefore the focal point of this measure. The developer reviewed the evidence that they provided, which suggests the connection between integrated services and improved behavioral health outcomes as well as comparable NQF measures that have emergency department utilization as the focus for a given health topic area. The Standing Committee asked about the evidence that supports risk adjustment, as it was noted that a regression model was used to identify condition-based variables such as comorbidities (either physical or mental), but the model did not include social risk factors. The Standing Committee questioned the access to emergency services for rural populations and expressed concerns that emergency room utilization might be appropriate and that results might be skewed based on location. The developer noted that the availability of providers is not factored into the risk model. The Committee expressed concerns that this measure may reduce access to care for individuals with serious mental illness (SMI) and that a measure that assesses mortality rates would be more appropriate. The Standing Committee expressed concerns that the measure's evidence did not suggest that there would be better outcomes for patients if implemented and that there would be a risk of significantly impairing access to care for persons with SMI. Following all discussion, the Standing Committee re-voted on the evidence criterion during the post-comment call. The measure failed this vote; therefore, no vote was held to recommend this measure to the CSAC for endorsement.

References

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Appendix A: Details of Measure Evaluation

Rating Scale: H=High; **M**=Moderate; **L**=Low; **I**=Insufficient; **NA**=Not Applicable

Vote totals may differ between measure criteria and between measures as Standing Committee members often have to join calls late or leave calls early. NQF ensures that a quorum is maintained for all live voting. All voting outcomes are calculated using the number of Standing Committee members present for that vote as the denominator.

Track 2 – Measures Endorsed

#3175 Continuity of Pharmacotherapy for Opioid Use Disorder

Submission | Specifications

Description: Percentage of adults of at least 18 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment

Numerator Statement: Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days

Denominator Statement: Individuals at least 18 years of age who had a diagnosis of OUD and at least one claim for an OUD medication

Exclusions: There are no denominator exclusions.

Adjustment/Stratification: Measure results may be stratified by:
- Age
- Gender
- Race/ethnicity
- Dual eligibility status

No risk adjustment or risk stratification.

Level of Analysis: Clinician : Group/Practice, Health Plan, Clinician : Individual, Population : Regional and State

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: University of Southern California

STANDING COMMITTEE MEETING January 29, 2020; January 31, 2020; February 5, 2020

1. Importance to Measure and Report: The measure meets the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **(N/A)**; 1b. Performance Gap: **(N/A)**

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria.

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

- 2a. Reliability: **H-2; M-11; L-3; I-0**; 2b. Validity: **M-10; L-6; I-0**

Rationale:

- The Standing Committee noted that this measure was being considered for an ad hoc review to expand the level of analysis from population: regional and state, health plan to include clinicians at the individual and group/practice level.
  - The 2018 Measure Applications Partnership Clinician Workgroup conditionally supported the measure for MIPS pending NQF endorsement at the clinician level.
  - Abbreviated submission of new scientific testing presented to this end.
  - The measure is scheduled to be submitted for full maintenance review in 2020.
- The Standing Committee noted good performance for reliability.

#3175 Continuity of Pharmacotherapy for Opioid Use Disorder

• Score-level, signal to noise reliability testing performed using 2013-2016 data.
  o The average reliability score for the clinician level was 0.77 (SD=0.09) for 2013-2014, 0.77 (SD=0.10) for 2014-2015, and 0.80 (SD=0.08) for 2015-2016.
  o The average reliability score at the group/practice level was 0.76 (SD=0.10) for 2013-2014, 0.76 (SD=0.10) for 2014-2015, and 0.79 (SD=0.09) for 2015-2016.
• The measure submission noted that two-thirds of an expert panel of nine individuals agreed or strongly agreed that the measure has face validity.

3. Feasibility: (N/A) *(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)*
4. Use and Usability *4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)* 4a. Use: **(N/A)** *4b. Usability:* **(N/A)**
5. Related and Competing Measures • No related or competing measures noted.
6. Standing Committee Recommendation for Endorsement: **(N/A)** The measure passed reliability and validity at the clinician level based on the new testing provided. The endorsement of this measure is therefore recommended to be expanded to the clinician level of analysis.
7. Public and Member Comment: None received
8. Consensus Standards Approval Committee (CSAC) Vote to Uphold the Standing Committee's Recommendation (November 17-18, 2020): Yes-11; No-0 **CSAC Decision**: Approved for Endorsement
9. Appeals: None received

#3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Submission | Specifications

Description: Proportion of inpatient hospitalizations for patients 65 years of age and older who receive an order for antipsychotic medication therapy.

Numerator Statement: Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.

Denominator Statement: Non-psychiatric inpatient hospitalizations for patients who are 65 and older.

Exclusions: Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter.

Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.

Adjustment/Stratification: Results include a total score and the following strata:

Stratum 1 - Patients who were admitted or transferred to the ICU during the inpatient encounter
Stratum 2 - Patients who were not admitted or transferred to the ICU during the inpatient encounter

These strata are identified using the QDM datatype of Encounter, Performed.
ICU Admission or Transfer (OID: 2.16.840.1.113883.17.4077.3.2040)

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

Stratification by risk category/subgroup

Level of Analysis: Facility

Setting of Care: Inpatient/Hospital

Type of Measure: Process

Data Source: Electronic Health Records

Measure Steward: Centers for Medicare & Medicare Services

STANDING COMMITTEE MEETING January 29, 2020; January 31, 2020; February 5, 2020

1. Importance to Measure and Report: The measure meets the Importance criteria

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-1; M-18; L-2; I-0**; 1b. Performance Gap: **H-3; M-18; L-0; I-0**

Rationale:

- The Standing Committee noted that this measure was submitted in Fall 2017 as NQF 3315e and reviewed by the Behavioral Health and Substance Use Standing Committee.
  - The Standing Committee encouraged the developer to adjust the measure. Exclusions have been added.
  - Exclusions: inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette´s syndrome, bipolar disorder, Huntington´s disease during the encounter. New exclusions are inpatient hospitalizations for patients who were taking antipsychotics prior to admission.
- The evidence for the measure includes the American Geriatrics Society 2019 guidelines and literature that indicates harm from prolonged use of antipsychotics (e.g., higher mortality rate, risk of falls, and cerebral vascular events).
- For performance gap, the Standing Committee agreed data show too many older patients are receiving these medications.

2. Scientific Acceptability of Measure Properties: The measure meets the Scientific Acceptability criteria

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability**: H-1; M-14; L-5**; I-0; 2b. Validity: **M-13; L-7; I-0**

Rationale:

#3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

- The reliability discussion focused on whether this measure would capture appropriate on-label prescribing since on-label and off-label indications can vary widely between medications.
- Overall, the Standing Committee supported the measure's reliability.
  - 11 hospitals produced good reliability results (0.98) for years 2013-15.
  - 9 hospitals produced 0.95 for 2018.
- The Standing Committee noted that the "threat of harm" element is not collected in a structured field systematically across all sites, but increased implementation of the measure would drive better data collection. The Standing Committee voiced that, during the maintenance evaluation, they would like to assess whether "threat of harm" is being captured more consistently.

3. Feasibility: H-3; M-11; L-6; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

Rationale:

- The Standing Committee noted that some exclusions may be hard to find (threat to others or self) and may introduce burden; this was addressed during the validity discussion.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-18; No Pass-2** 4b. Usability: **H-1; M-14; L-5; I-0**

Rationale:

- Members commented that a potential unintended consequence of the measure is increased restraint use, but overall, the benefits of the measure outweigh the risks.
- The measure was designed for use in the Inpatient Hospital Quality Reporting program.

5. Related and Competing Measures

- No competing measures noted.

6. Standing Committee Recommendation for Endorsement: **Yes-19; No-1**

The Standing Committee recommended the measure for endorsement.

7. Public and Member Comment:

- Comment by: **Armstrong Institute for Patient Safety and Quality at Johns Hopkins University**:
  We are concerned that prescribing antipsychotics in older adults alone would be a legitimate quality measure. Even with the listed exclusions, there are a number of reasons to prescribe these medications, even in the elderly, with an understanding of the implicit risks. There are conditions -- such as delusional parasitosis - that are not accounted for, where their use is very much indicated. There are also times when they have to be used for treating delirium, as there are no safe alternatives and not treating patients presents a greater risk. A more useful indicator might be the use of neuroleptics in the elderly without a documented rationale.
- Comment by: **American Psychiatric Association**
  APA does not support this measure on the use of antipsychotics in the elderly in hospitals. Two important problems with the measure are that (1) the exclusions do not include certain accepted uses of atypical antipsychotics (e.g., major depression with psychotic features) and (2) it would promote the use of less effective and equally (or more) problematic drugs to treat severe aggression and agitation among delusional/hallucinating patients with delirium or dementia.

8. Consensus Standards Approval Committee (CSAC) Vote to Uphold the Standing Committee's Recommendation (November 17-18, 2020): Yes-11; No-0

CSAC Decision: Approved for Endorsement

#3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting
9. Appeals: None received

Track 2 – Measures Not Endorsed

#3538 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care

Submission

Description: The measure focuses on emergency department (ED) utilization for four populations of Medicaid beneficiaries who may benefit from integrated physical and behavioral health care. The rates in this measure are intended to be reported at the state level. This is an inverse measure; lower scores indicate better quality of care.

The measure is defined as the all-cause ED utilization rate for Medicaid beneficiaries age 18 and older who meet the eligibility criteria for any of the four denominator groups:

1. Beneficiaries with co-occurring physical health and mental health conditions (PH+MH)
2. Beneficiaries with a co-occurring physical health condition and a substance use disorder (PH+SUD)
3. Beneficiaries with a co-occurring mental health condition and a SUD (MH+SUD)
4. Beneficiaries with serious mental illness (SMI)

The measure is calculated over the period of one calendar year as the number of ED visits that do not result in an inpatient admission or observation stay per 1,000 member-months. It is reported as four separate rates, one for each denominator group.

Each of the four denominator groups includes only beneficiaries who were not dually eligible, were enrolled in Medicaid for at least 10 months of the measurement year, and had a diagnosis within the measurement year or year prior (depending upon the condition) that placed them into one or more of the denominator groups.

Numerator Statement: The numerator is the number of ED visits during the measurement year that did not result in an inpatient or observation stay among non-dual eligible Medicaid beneficiaries age 18 and older with at least 10 months of enrollment who met the eligibility criteria for any of the four denominator groups during the look-back year.

Denominator Statement: The number of Medicaid-enrolled months ("beneficiary-months") among Medicaid beneficiaries who meet eligibility criteria for any of the four denominator groups:

1. Beneficiaries with co-occurring physical health and mental health conditions (PH+MH)
2. Beneficiaries with a co-occurring physical health condition and a SUD (PH+SUD)
3. Beneficiaries with a co-occurring mental health condition and a SUD (MH+SUD)
4. Beneficiaries with serious mental illness (SMI)

Exclusions: None.

Adjustment/Stratification: Statistical risk model.

Level of Analysis: Population : Regional and State

Setting of Care: Emergency Department and Services

Type of Measure: Outcome

Data Source: Claims

Measure Steward: Centers for Medicare & Medicaid Services, Centers for Medicaid & CHIP Services

STANDING COMMITTEE MEETING January 29, 2020; January 31, 2020; February 5, 2020

1. Importance to Measure and Report: The measure does not meet the Importance criteria.

(1a. Evidence, 1b. Performance Gap)

1a. Evidence: **Pass-10; No Pass-9** (Measure Evaluation Meeting); **Pass-1; No Pass-14** (Post-Comment Call); 1b. Performance Gap: **H-1; M-14; L-3; I-2**

Rationale:

- The Standing Committee noted that this new measure is intended for use in state Medicaid to improve quality of care for beneficiaries with physical and mental health integration needs.

#3538 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care

- The denominator includes four strata: beneficiaries with co-occurring physical health and mental health conditions, beneficiaries with co-occurring physical health conditions and an SUD, beneficiaries with co-occurring mental health conditions and a SUD, and beneficiaries with SMI.
- The developer proffers integrated care as a process to influence the outcome, and evidence indicates state-level integrated care pilot programs have shown promise in reducing ED use for those with the need for integrated care.
- There was considerable discussion about how the outcome represents true quality of care.
- The Standing Committee agreed that performance data can lead to multiple downstream outcomes and drive change, but they had some concern that there are factors other than adequate outpatient care and appropriate care coordination, including but not limited to, SDOH that play a significant role in why individuals frequent the ED.
- It was also noted that adequate use is determined by whether an ED visit results in an observation or inpatient psychiatric stay, but there are shortages of psychiatric inpatient beds available in some places.
- The Standing Committee discussed that data from 17 states showed high ED use and opportunity for improvement.
- In the future, the Standing Committee is interested in reviewing normative rates of ED use or rates by a single diagnosis to better understand the appropriate measure benchmark.
- The Standing Committee did not achieve consensus on evidence—a must-pass criterion – during the measure evaluation meeting; therefore, the evidence criterion was voted on again during the post-comment call. The measure did not pass the evidence vote during the post-comment call.

2. Scientific Acceptability of Measure Properties: <u>The measure meets the Scientific Acceptability criteria.</u>

(2a. Reliability - precise specifications, testing; 2b. Validity - testing, threats to validity

2a. Reliability: **Yes-18; No-2**; 2b. Validity: **Yes-16; No-5**

<u>Rationale</u>:

- This measure is deemed as complex and was evaluated by the NQF Scientific Methods Panel. SMP subgroup votes:
  - Reliability: H-5; M-1; L-0; I-0
  - Validity: H-5; M-1; L-0; I-0
- Across all states, average signal-to-noise (SNR) ranged from 0.96 and 0.98 for the four denominator groups. The SNR ranged from 0.89 to 0.99 for beneficiaries in the PH+MH group, 0.80 to 0.99 for beneficiaries in the PH+SUD group, 0.83 to 0.99 for beneficiaries in the PH+SUD denominator group, and 0.77 to 0.99 in the SMI denominator group.
- For validity, the Standing Committee noted that test results were mixed, with some modest and low correlations where one would expect to see a correlation.
- Some members expressed that social factors could unfairly impact measure rates, but others noted that the measure should not be adjusted in order to fully understand the factors driving results at the state level.

3. Feasibility: H-6; M-15; L-0; I-0

(3a. Clinical data generated during care delivery; 3b. Electronic sources; 3c. Susceptibility to inaccuracies/ unintended consequences identified; 3d. Data collection strategy can be implemented)

<u>Rationale</u>:

- The Standing Committee agreed that the measure is feasible without additional discussion.

4. Use and Usability

4a. Use; 4a1. Accountability and transparency; 4a2. Feedback on the measure by those being measured and others; 4b. Usability; 4b1. Improvement; 4b2. The benefits to patients outweigh evidence of unintended negative consequences to patients)

4a. Use: **Pass-17; No Pass-4** 4b. Usability: **H-2; M-12; L-6; I-1**

#3538 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care

Rationale:

- The Standing Committee noted that the measure is not yet in use, but a plan for potential use was presented.
- Additional details about how performance is tracked, compared, and used by states to inform integrated care will be useful in the future.

5. Related and Competing Measures

- No competing measures noted.

6. Standing Committee Recommendation for Endorsement: N/A

The Standing Committee did not pass the measure on evidence, a must-pass criterion, and was 'consensus not reached' during the measure evaluation meetings and during the re-vote at the post-comment meeting; therefore, the Standing Committee did not vote on an overall recommendation for endorsement.

7. Public and Member Comment:

- Comment by**: American Psychiatric Association**
  APA agrees that it is extremely important to support and incentivize integrated care and we support to development of measures in this area. We would suggest that it would be helpful to be able to see rates across the different groups included in the denominator to facilitate targeted interventions and quality improvement efforts.
- Comment by: **No Health without Mental Health**
  As a patient advocacy organization working to advance BHI in primary, NHMH – No Health without Mental Health understands it may be difficult to tie reduced ED use by this population directly to their receipt of integrated care. It seems to us that addressing both co-morbidities would naturally lead to less need to visit hospital EDs as it is often untreated BH conditions that cause additional avoidable medical expense. That said, for the present we agree with the NQF report that quality measure 3538 should not currently be endorsed as a BH quality measure. NHMH strongly supports primary care transformation in payment and services delivery now underway, such as advanced PCMHs, PCMH Level 3 w/ BH Distinction, and provider-led ACOs. We will never truly have BH integration into medical settings unless clinicians are paid according to a value-based payment system. Integrated med/psych care, in medical settings under the existing FFS payment system, is not financially sustainable. Our top priority is therefore maintenance and acceleration of value-based care reforms, and steadily transitioning a majority of U.S. medical practices to providing and being paid for medical and BH value-based care in a unified medical setting. Increasingly, our healthcare system is looking to primary care to play a key integrator role as part of delivery and payment reforms. The integration of BH services into primary care is one such key reform. Others include: integrated medical and BH care coordination services; multi-disciplinary care teams; redesigned clinic workflows; advanced patient engagement; referral to social services, inter alia. All practitioners of these advanced services should be paid from an integrated medical and BH funding pool. Thus, a key concern is that a vastly underfunded, under-resourced, overburdened and overwhelmed part of our healthcare system - primary care - is being asked to do more and more at a time when they face tremendous operational, administrative, and financial pressures. While we support a greater role for primary care, it must be matched by funding that supports and incentivizes primary care to take on these additional tasks. Pilots and trials now demonstrate the improved health and cost savings that integrated services bring in the primary care setting. The subject of primary care's role in reducing hospital use is complex and more research is needed. Research does show continuity of care by a PCP improves patients health status over time. Research shows that untreated and/or poorly treated BH conditions do contribute to increased hospital use. For a start, much needs to be done to improve coordination, communications and information exchange between hospitalists and PC clinicians during and after patient hospital visits. Another means to reduce the use of EDs among the SMI is the appropriate use of long-acting injectables (LAI) antipsychotics and clozapine. There is data showing the superiority of LAIs and clozapine in reducing relapse, rehospitalizations, arrests/jail, and mortality.

#3538 All-Cause Emergency Department Utilization Rate for Medicaid Beneficiaries Who May Benefit from Integrated Physical and Behavioral Health Care
• Comment by: **American Association on Health and Disability** Regarding NQF #3538: EMERGENCY DEPARTMENT USE RATE AS A BEHAVIORAL HEALTH QUALITY MEASURE FOR MEDICAID PATIENTS WITH SMI AND/OR CO-OCCURRING MEDICAL-BEHAVIORAL CONDITIONS: AAHD and the Lakeshore Foundation supports the NHMH submission to the NQF: "As a patient advocacy organization working to advance BHI in primary care, NHMH – No Health without Mental Health - understands it may be difficult to tie reduced ED use by this population directly to their receipt of integrated care. It seems to us that addressing both co-morbidities would naturally lead to less need to visit hospital EDs as it is often untreated BH conditions that cause additional avoidable medical expense. That said, for the present we agree with the NQF report that quality measure 3538 should not currently be endorsed as a BH quality measure." We further support the NHMH submitted observation: "The subject of primary care's role in reducing hospital use is complex and more research is needed. Research does show continuity of care by a primary care provider improves patients' health status over time."
8. Consensus Standards Approval Committee (CSAC) Vote to Uphold the Standing Committee's Recommendation (November 17-18, 2020): Yes-11; No-0 **CSAC Decision**: Not Endorsed

Appendix B: Behavioral Health and Substance Use—Use in Federal Programs[1]

NQF #	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
0004	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment	Marketplace Quality Rating System (QRS) Medicaid
0004e	Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (eMeasure)	MIPS Medicaid Promoting Interoperability Program for Eligible Professionals
0028	Preventive Care & Screening: Tobacco Use: Screening & Cessation Intervention	MIPS Medicare Shared Savings Program (MSSP)
0028e	Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention (eMeasure)	MIPS Medicaid Promoting Interoperability Program
0104	Adult Major Depressive Disorder: Suicide Risk Assessment	None
0104e	Adult Major Depressive Disorder: Suicide Risk Assessment (eMeasure)	MIPS Medicaid Promoting Interoperability Program
0105	Antidepressant Medication Management (AMM)	Marketplace QRS Medicaid
0105e	Antidepressant Medication Management (AMM) (eMeasure)	None
0108	Follow-Up Care for Children Prescribed ADHD Medication (ADD)	Medicaid
0108e	Follow-Up Care for Children Prescribed ADHD Medication (ADD) (eMeasure)	MIPS Medicaid Promoting Interoperability Program
0576	Follow-Up After Hospitalization for Mental Illness (FUH)	MIPS Inpatient Psychiatric Facility Quality Reporting Marketplace QRS Medicaid
0640	HBIPS-2 Hours of physical restraint use	Inpatient Psychiatric Facility Quality Reporting
0641	HBIPS-3 Hours of seclusion use	Inpatient Psychiatric Facility Quality Reporting
0710e	Depression Remission at Twelve Months (eMeasure)	MIPS Medicaid Promoting Interoperability Program
0711	Depression Remission at Six Months	None
0712e	Depression Utilization of the PHQ-9 Tool (eMeasure)	None
1365	Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment	None

[1] Per CMS Measures Inventory Tool as of January 29, 2021

NQF #	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
1365e	Child and Adolescent Major Depressive Disorder: Suicide Risk Assessment (eMeasure)	MIPS Medicaid Promoting Interoperability Program
1884	Depression Response at Six Months – Progress Towards Remission	None
1885	Depression Response at 12 Months – Progress Towards Remission	None
1879	Adherence to Antipsychotic Medications for Individuals with Schizophrenia	MIPS Medicaid
1932	Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)	Medicaid
1933	Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)	None
1934	Diabetes Monitoring for People with Diabetes and Schizophrenia (SMD)	None
2152	Preventive Care and Screening: Unhealthy Alcohol Use: Screening & Brief Counseling	MIPS
2597	Substance Use Screening and Intervention Composite	None
2605	Follow-up after Discharge from the Emergency Department for Mental Health or Alcohol or Other Drug Dependence	None
2606	Diabetes Care for People with Serious Mental Illness: Blood Pressure Control (<140/90 mm Hg)	None
2607	Diabetes Care for People with Serious Mental Illness: Hemoglobin A1c (HbA1c) Poor Control (>9.0%)	Medicaid
2608	Diabetes Care for People with Serious Mental Illness: Hemoglobin A1c (HbA1c) Control (<8.0%)	None
2609	Diabetes Care for People with Serious Mental Illness: Eye Exam	None
2800	Metabolic Monitoring for Children and Adolescents on Antipsychotics	Medicaid
2801	Use of First-Line Psychosocial Care for Children and Adolescents on Antipsychotics	Medicaid

NQF #	Title	Federal Programs: Finalized or Implemented as of June 22, 2020
2806	Pediatric Psychosis: Screening for Drugs of Abuse in the Emergency Department	Prospective Payment System-Exempt Cancer Hospital Quality Reporting
3205	Medication Continuation Following Inpatient Psychiatric Discharge	Inpatient Psychiatric Facility Quality Reporting
3175	Continuity of Pharmacotherapy for Opioid Use Disorder	MIPS Program
3312	Continuity of Care for Medicaid Beneficiaries after Detoxification (Detox) from Alcohol and/or Drugs	Medicaid
3313	Follow-Up Care for Adult Medicaid Beneficiaries Who are Newly Prescribed an Antipsychotic	Medicaid
3317	Medication Reconciliation on Admission	None
3332	Psychosocial Screening Using the Pediatric Symptom Checklist-Tool (PSC-Tool)	None
3400	Use of pharmacotherapy for opioid use disorder (OUD)	Medicaid
3453	Continuity of care after inpatient or residential treatment for substance use disorder (SUD)	Medicaid
3488	Follow-Up After Emergency Department Visit for Alcohol and Other Drug Abuse or Dependence	Medicaid
3489	Follow-Up After Emergency Department Visit for Mental Illness	Medicaid
3539e	Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting	None
3541	Annual Monitoring for Persons on Long-Term Opioid Therapy (AMO)	Marketplace QRS

Appendix C: Behavioral Health and Substance Use Standing Committee and NQF Staff

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**Inactive Standing Committee members do not participate in the entirety of a measure evaluation cycle, including measure discussion and voting. Inactive members remain on the Standing Committee and rejoin measure evaluation and voting for the following cycle.*

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Analyst

Appendix D: Measure Specifications (Tabular)

	3175 Continuity of Pharmacotherapy for Opioid Use Disorder: Specifications
Steward	University of Southern California
Description	Percentage of adults of at least 18 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment
Type	Process
Data Source	Claims For measure calculation, the following files from the Truven MarketScan® Commercial Database and the Medicare 100% Research Identifiable Files (RIF) were used: • Enrollment data • Drug claims/prescription drug events • Medical claims We used data from these files for calendar years 2010-2016. The MarketScan database has long been a commonly used data source to study patterns of commercially insured patients. The Medicare RIF files contain all claims for beneficiaries in traditional Medicare. Both databases contain fully adjudicated, patient-level claims. All records in these files were used as input to identify individuals that met the measure's eligibility criteria.
Level	Clinician : Group/Practice, Health Plan, Clinician : Individual, Population : Regional and State
Setting	Outpatient Services
Numerator Statement	Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days
Numerator Details	The measure numerator is calculated based on claims data for rolling two-year periods. The measure numerator is defined as individuals in the denominator with at least 180 days of "continuous pharmacotherapy" with an OUD medication. Continuous pharmacotherapy for OUD is identified on the basis of the days covered by the days' supply of all prescription claims for any OUD medication (see list below) or number of days for which the drug was dispensed in a physician office or treatment center with the exceptions noted in this paragraph. The period of continuous pharmacotherapy starts on the day the first claim for an OUD medication is filled/supplied (index date) and lasts through the days' supply of the last claim for an OUD medication. To meet the 180-day requirement and be eligible for the measure, the date on the first claim for an OUD medication must fall at least 180 days before the end of the measurement period. For claims with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. If two or more prescription claims occur on the same day or overlap, the surplus based on the days' supplies accumulates over all prescriptions. However, if another claim is submitted after a claim for an injectable/implantable OUD medication or an oral OUD medication that is dispensed in an office or treatment center, the surplus from the day's supply for the injectable/implantable or office-dispensed medication is not retained. An individual is considered to have continuous pharmacotherapy with OUD medication if there is no treatment gap of more than seven days. A gap is defined as a period during which the individual does not have oral OUD medication available based on the days' supply, or is more than 7 days overdue for having an injection of an extended-release OUD medication. OUD medications were identified using National Drug Codes (NDCs) for the following: • Buprenorphine • Naltrexone (oral) • Buprenorphine and Naloxone

	3175 Continuity of Pharmacotherapy for Opioid Use Disorder: Specifications
	And HCPCS codes for the following: • Buprenorphine or Buprenorphine/naloxone, oral Buprenorphine (extended-release injectable or implant) • Methadone administration • Naltrexone (extended-release injectable) The National Drug Codes (NDCs) for the oral medications and the HCPCS codes for the injectable medications and office-dispensed oral medications (methadone and buprenorphine/naloxone) are contained in the sheets called "NDCs" and "HCPCS Codes", respectively, in the Excel file called "NQF 3175 OUD Code Lists" which is attached to this form under Item S.2b. Note that the NDC code list DOES NOT include NDC codes for methadone, as it can legally only be dispensed as OUD pharmacotherapy in licensed treatment centers. Buprenorphine can be dispensed through a pharmacy or in an office and is therefore identified based on either NDC or HCPCS codes. Justification of Measure Definition: We define treatment continuity as (1) receiving at least 180 days of treatment and (2) no gaps in medication use of more than 7 days. Our definition of minimum duration is based on the fact that the FDA registration trials for OUD drugs studied the effect of treatment over three to six months (US FDAa, undated; US FDAb, undated), and we have no evidence for effectiveness of shorter durations. In addition, several recommendations support a minimum six-month treatment period as the risk of relapse is the highest in the first 6-12 months after start of opioid abstinence (US FDAa, undated; US FDAb, undated; US DHHS, 2015). Longer treatment duration is associated with better outcomes compared to shorter treatments and the best outcomes have been observed among patients in long-term methadone maintenance programs ("Effective medical treatment of opiate addiction", 1998; Gruber et al., 2008; Moos et al., 1999; NIDA, 1999; Ouimette et al., 1998; Peles et al., 2013). Studies with long-term follow-up suggest that ongoing pharmacotherapy is associated with improved odds of opioid abstinence (Hser et al., 2015; Weiss et al., 2015). We did not specify a maximum duration of treatment, as no upper limit for duration of treatment has been empirically established (US DHHS, 2015). We opted for using a treatment gap of more than seven days in our definition, given that the measure includes three active ingredients with different pharmacological profiles. There is substantial evidence for an elevated mortality risk immediately after treatment cessation (Cornish et al., 2010; Cousins et al., 2016; Davoli et al, 2007; Degenhardt et al., 2009; Gibson & Degenhardt, 2007; Pierce et al., 2016). Research suggests that methadone tolerance is lost after three days and this three-day threshold has been used in other observational methadone studies and in developing a United Kingdom treatment guideline which recommends revaluating patients for intoxication and withdrawal after a three-day methadone treatment gap (Cousins et al., 2016; Cousins et al., 2011; "Drug Misuse and Dependence—Guidelines on Clinical Management", 1999). Across all the medications, the mortality risk is highest in the first four weeks out of treatment, with many studies showing an increase in mortality in days 1-14 after treatment cessation. Citations Cornish R, Macleod J, Strang J, Vickerman P, Hickman M. Risk of death during and after opiate substitution treatment in primary care: prospective observational study in UK General Practice Research Database. BMJ. 2010;341:c5475. Cousins G, Teljeur C, Motterlini N, McCowan C, Dimitrov BD, Fahey T. Risk of drug-related mortality during periods of transition in methadone maintenance treatment: a cohort study. J Subst Abuse Treat 2011; 41: 252–60.

	3175 Continuity of Pharmacotherapy for Opioid Use Disorder: Specifications
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	3175 Continuity of Pharmacotherapy for Opioid Use Disorder: Specifications
Denominator Statement	Individuals at least 18 years of age who had a diagnosis of OUD and at least one claim for an OUD medication
Denominator Details	The measure denominator is calculated for rolling two-year periods. The denominator includes individuals of at least 18 years of age during their treatment period who had a diagnosis code of OUD during an inpatient, intensive outpatient, partial hospitalization, outpatient, detoxification or emergency department encounter at any time during the measurement period. To meet the 180-day requirement and be eligible for the measure, the date on the first claim for an OUD medication must fall at least 180 days before the end of the measurement period. The diagnosis codes used to identify individuals with OUD included: • ICD-9: 304.0x, 305.5x • ICD-10: F11.xxx These codes and descriptions are contained in the sheets called "ICD-9 Diagnosis Codes" and "ICD-10 Diagnosis Codes" in the Excel file called "NQF 3175 OUD Code Lists" which is attached to this form under Item S.2b. OUD medications were identified using National Drug Codes (NDCs) for the following: • Buprenorphine • Naltrexone (oral) • Buprenorphine and Naloxone And HCPCS codes for the following: • Buprenorphine or Buprenorphine/naloxone, oral • Buprenorphine (extended release injectable or implant) • Methadone administration • Naltrexone (extended-release injectable) The National Drug Codes (NDCs) for the oral medications and the HCPCS codes for the injectable medications and office-or treatment-center dispensed oral medications (methadone and buprenorphine) are contained in the sheets called "NDCs" and "HCPCS Codes", respectively, in the Excel file called "NQF 3175 OUD Code Lists" which is attached to this form under Item S.2b. Note that the NDC code list DOES NOT include NDC codes for methadone, as it can legally only be dispensed as OUD pharmacotherapy in licensed treatment centers. Buprenorphine can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.
Exclusions	There are no denominator exclusions.
Exclusion details	There are no denominator exclusions.
Risk Adjustment	No risk adjustment or risk stratification
Stratification	Measure results may be stratified by: • Age • Gender • Race/ethnicity • Dual eligibility status
Type Score	Rate/proportion better quality = higher score
Algorithm	The measure score is calculated for rolling two-year periods. DENOMINATOR: Individuals of at least 18 years of age who had a diagnosis of OUD and at least one claim for an OUD medication CREATE DENOMINATOR:

	3175 Continuity of Pharmacotherapy for Opioid Use Disorder: Specifications
	1. For each two-year period, identify individuals who are at least 18 years of age for the duration of the first year during which they appear in the period. 2. Of individuals identified in Step 1, keep those who had at least one encounter with any diagnosis (primary or secondary) of OUD in an outpatient setting, acute inpatient setting, or emergency department setting at any time during the two-year measurement period. The OUD diagnosis codes with descriptions are contained in the sheets called "ICD-9 Diagnosis Codes" and "ICD-10 Diagnosis Codes" in the Excel file called "NQF 3175 OUD Code Lists", which is attached to this form under Item S.2b. 3. Of individuals identified in Step 2, keep those who have at least one claim with a National Drug Code (NDC) for any of the following oral OUD medications during the two-year period with a date at least 180 days before the end of the final calendar year of the measurement period: • Buprenorphine • Naltrexone (oral) • Buprenorphine and Naloxone Or a HCPCS code for any of the following OUD medications: • Buprenorphine or Buprenorphine/naloxone, oral • Buprenorphine (extended release injectable or implant) • Methadone administration • Naltrexone (extended-release injectable) Claims for oral medications with negative, missing, or zero days' supply were not included. The NDCs for the oral medications and the HCPCS codes for the injectable and office- or treatment center-dispensed medications are contained in the sheets called "NDCs" and "HCPCS Codes", respectively, in the Excel file called "NQF 3175 OUD Code Lists," which is attached to this form under Item S.2b. 4. Of individuals identified in Step 3, keep individuals who were continuously enrolled in a commercial health plan captured by our data for at least 6 months after the month with the first OUD medication claim in the measurement period, with no gap in enrollment. Individuals who are not enrolled for 6 months, including those who die during the period, are not eligible and are not included in the analysis. This is the denominator. NUMERATOR: Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days CREATE NUMERATOR: For the individuals in the denominator, identify those who have at least 180 days of continuous pharmacotherapy with an OUD medication without a gap of more than seven days using the following method: 1. Determine the number of days for the PDC denominator. The start date is the service date (fill date) of the first prescription or injection/dispensing claim for an OUD medication in the two-year measurement period. The end date is defined as the earliest of: • The date on which the individual exhausts their days' supply, including any pre-existing surplus, following their final claim (assuming daily use). • The individual's death date. • December 31st of the second year in the two-year period. 2. For each individual: Count the days during the observation period for which the individual was covered by at least one OUD medication based on the prescription drug or injection/dispensing claim service dates and days' supply.

	3175 Continuity of Pharmacotherapy for Opioid Use Disorder: Specifications
	2a. Sort OUD medication claims by individual's ID and service date. Scan the claims in order, calculating a rolling surplus which accumulates any remaining days' supply from other prior or same-day fills. 2b. Naltrexone and buprenorphine injections contribute 30 days' supply and a buprenorphine implant 180 days unless another claim is found sooner, in which case the injection or implant covers only the days up to the next claim. 2c. Methadone and buprenorphine/naloxone supply is determined by the start and end dates on the outpatient claims with the codes for in-office/treatment center dispensation of methadone (H0020) and buprenorphine/naloxone (J0571-J0575). 2d. Claims for injections/implants and for licensed treatment center-dispensed methadone and office-dispensed buprenorphine/naloxone are not added to the surplus supply and only one such claim per day is counted. 2e. For claims with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. 3. Determine treatment gaps as periods, in which the individual has exhausted his/her available supply, defined as the days' supply from the most recent previous fill/dispensing and any pre-existing surplus available before that fill/dispensing. 4. Of the individuals in Step 2, count the number of individuals who have a period of 180 days or greater from the start date of the first claim for OUD medication to the end date of the last claim for OUD medication within the two-year period and who do not have a gap of more than seven days without OUD medication available. This is the numerator. CALCULATE MEASURE SCORE: 1. Calculate the measure score by dividing the numerator by the denominator. 2. Calculate the measure score for each state. The state code on the claim record is used to identify individuals in each state. The measure score is then reported for each state that has at least 20 individuals in the denominator. 3. Calculate the measure score for each health plan. Health plan membership is approximated based on a combination of two variables found on the claim record, industry type and Metropolitan Statistical Area (MSA). A health plan identifier is assigned based on each unique combination of industry and MSA. The health plan identifier is used to group individuals into health plans. The measure score is then reported for each health plan that has at least 20 individuals in the denominator. 4. Calculate the measure score for each clinician and clinician-group/practice level. Attribute individuals to clinicians and clinician-groups/practices based on the plurality of treatment days covered. Clinicians are identified based on their National Provider Identifier and clinician-groups/practices based on their Tax Identification Number. The measure score is reported for clinicians and clinician-group/practices with at least 25 denominator-eligible patients attributed to them. Details of the attribution method and its empirical justification are described in the attached Attribution Analysis document 123001| 148777| 141015
Copyright / Disclaimer	Some proprietary codes are contained in the measure specifications for convenience of the user. Use of these codes may require permission from the code owner or agreement to a license. ICD-10 codes are copyrighted © World Health Organization (WHO), Fourth Edition, 2019. CPT © 2019 American Medical Association. CPT is a registered trademark of the American Medical Association. All rights reserved.

	3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting: Specifications
Steward	Centers for Medicare & Medicare Services
Description	Proportion of inpatient hospitalizations for patients 65 years of age and older who receive an order for antipsychotic medication therapy.
Type	Process
Data Source	Electronic Health Records Hospitals collect EHR data using certified electronic health record technology (CEHRT). The human readable format and XML are contained in the eCQM specifications attached in question S.2a. No additional tools are used for data collection for eMeasures.
Level	Facility
Setting	Inpatient/Hospital
Numerator Statement	Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.
Numerator Details	The time period for data collection is the measurement year (12-month period). Numerator: Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter. Antipsychotic orders are represented with the QDM datatype and value set of Medication, Order: Antipsychotic Medications (OID:2.16.840.1.113883.3.464.1003.196.12.1255). Numerator exclusions: Inpatient hospitalizations for patients with documented indication that they are threatening harm to self or others. Threat to self or others is represented with the QDM datatype and value set of Symptom: Threat to themselves or others (OID:2.16.840.1.113883.3.464.1003.195.12.1020). To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Denominator Statement	Non-psychiatric inpatient hospitalizations for patients who are 65 and older.
Denominator Details	The time period for data collection is the measurement year (12-month period). Denominator: Non-psychiatric inpatient hospitalizations for patients who are 65 and older. Inpatient hospitalizations are represented with the QDM datatype and value set of Encounter, Performed: Encounter Inpatient (OID:2.16.840.1.113883.3.666.5.3001). To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Exclusions	Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter. Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.
Exclusion details	The following data elements are used to define the measure exclusions: Denominator Exclusions: Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter. These exclusions are represented with the QDM datatype of Diagnosis. Schizophrenia or Psychotic Disorder (OID: 2.16.840.1.113883.3.464.1003.105.12.1104) Tourette's Syndrome (OID: 2.16.840.1.113883.3.464.1003.105.12.1030) Bipolar Disorder (OID: 2.16.840.1.113883.3.67.1.101.1.128) Huntington's Disease (OID: 2.16.840.1.113883.3.464.1003.105.12.1032) Denominator Exclusions: Inpatient hospitalizations for patients who were taking antipsychotics prior to admission. Antipyschotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255)

	3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting: Specifications
	This exclusion is represented with the QDM datatype of Medication, Active: Antipsychotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255) To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Risk Adjustment	Stratification by risk category/subgroup
Stratification	Results include a total score and the following strata: Stratum 1 - Patients who were admitted or transferred to the ICU during the inpatient encounter Stratum 2 - Patients who were not admitted or transferred to the ICU during the inpatient encounter These strata are identified using the QDM datatype of Encounter, Performed. ICU Admission or Transfer (OID: 2.16.840.1.113883.17.4077.3.2040) To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.
Type Score	Rate/proportion better quality = lower score
Algorithm	See '1a._AP_Logic_Flow.pdf' submitted as an attachment under S.2a above. 138817| 141015
Copyright / Disclaimer	Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets. CPT(R) contained in the Measure specifications is copyright 2004-2016 American Medical Association. LOINC(R) copyright 2004-2016 Regenstrief Institute, Inc. This material contains SNOMED Clinical Terms(R) (SNOMED CT[R]) copyright 2004-2016 International Health Terminology Standards Development Organisation. ICD-10 copyright 2016 World Health Organization. All Rights Reserved.

Appendix D: Measure Specifications (Narrative)

3175 Continuity of Pharmacotherapy for Opioid Use Disorder

STEWARD

University of Southern California

DESCRIPTION

Percentage of adults of at least 18 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment

TYPE

Process

DATA SOURCE

Claims For measure calculation, the following files from the Truven MarketScan® Commercial Database and the Medicare 100% Research Identifiable Files (RIF) were used:

- Enrollment data
- Drug claims/prescription drug events
- Medical claims

We used data from these files for calendar years 2010-2016. The MarketScan database has long been a commonly used data source to study patterns of commercially insured patients. The Medicare RIF files contain all claims for beneficiaries in traditional Medicare. Both databases contain fully adjudicated, patient-level claims. All records in these files were used as input to identify individuals that met the measure's eligibility criteria.

LEVEL

Clinician : Group/Practice, Health Plan, Clinician : Individual, Population : Regional and State

SETTING

Outpatient Services

NUMERATOR STATEMENT

Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days

NUMERATOR DETAILS

The measure numerator is calculated based on claims data for rolling two-year periods. The measure numerator is defined as individuals in the denominator with at least 180 days of "continuous pharmacotherapy" with an OUD medication.

Continuous pharmacotherapy for OUD is identified on the basis of the days covered by the days' supply of all prescription claims for any OUD medication (see list below) or number of days for which the drug was dispensed in a physician office or treatment center with the exceptions noted in this paragraph. The period of continuous pharmacotherapy starts on the day the first claim for an OUD medication is filled/supplied (index date) and lasts through the days' supply of

the last claim for an OUD medication. To meet the 180-day requirement and be eligible for the measure, the date on the first claim for an OUD medication must fall at least 180 days before the end of the measurement period. For claims with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period. If two or more prescription claims occur on the same day or overlap, the surplus based on the days' supplies accumulates over all prescriptions. However, if another claim is submitted after a claim for an injectable/implantable OUD medication or an oral OUD medication that is dispensed in an office or treatment center, the surplus from the day's supply for the injectable/implantable or office-dispensed medication is not retained.

An individual is considered to have continuous pharmacotherapy with OUD medication if there is no treatment gap of more than seven days. A gap is defined as a period during which the individual does not have oral OUD medication available based on the days' supply, or is more than 7 days overdue for having an injection of an extended-release OUD medication.

OUD medications were identified using National Drug Codes (NDCs) for the following:

- Buprenorphine
- Naltrexone (oral)
- Buprenorphine and Naloxone

And HCPCS codes for the following:

- Buprenorphine or Buprenorphine/naloxone, oral

Buprenorphine (extended-release injectable or implant)

- Methadone administration
- Naltrexone (extended-release injectable)

The National Drug Codes (NDCs) for the oral medications and the HCPCS codes for the injectable medications and office-dispensed oral medications (methadone and buprenorphine/naloxone) are contained in the sheets called "NDCs" and "HCPCS Codes", respectively, in the Excel file called "NQF 3175 OUD Code Lists" which is attached to this form under Item S.2b. Note that the NDC code list DOES NOT include NDC codes for methadone, as it can legally only be dispensed as OUD pharmacotherapy in licensed treatment centers. Buprenorphine can be dispensed through a pharmacy or in an office and is therefore identified based on either NDC or HCPCS codes.

Justification of Measure Definition: We define treatment continuity as (1) receiving at least 180 days of treatment and (2) no gaps in medication use of more than 7 days.

Our definition of minimum duration is based on the fact that the FDA registration trials for OUD drugs studied the effect of treatment over three to six months (US FDAa, undated; US FDAb, undated), and we have no evidence for effectiveness of shorter durations. In addition, several recommendations support a minimum six-month treatment period as the risk of relapse is the highest in the first 6-12 months after start of opioid abstinence (US FDAa, undated; US FDAb, undated; US DHHS, 2015). Longer treatment duration is associated with better outcomes compared to shorter treatments and the best outcomes have been observed among patients in long-term methadone maintenance programs ("Effective medical treatment of opiate addiction", 1998; Gruber et al., 2008; Moos et al., 1999; NIDA, 1999; Ouimette et al., 1998; Peles et al., 2013). Studies with long-term follow-up suggest that ongoing pharmacotherapy is associated with improved odds of opioid abstinence (Hser et al., 2015; Weiss et al., 2015). We did not specify a maximum duration of treatment, as no upper limit for duration of treatment has been empirically established (US DHHS, 2015).

We opted for using a treatment gap of more than seven days in our definition, given that the measure includes three active ingredients with different pharmacological profiles. There is substantial evidence for an elevated mortality risk immediately after treatment cessation (Cornish et al., 2010; Cousins et al., 2016; Davoli et al, 2007; Degenhardt et al., 2009; Gibson & Degenhardt, 2007; Pierce et al., 2016). Research suggests that methadone tolerance is lost after three days and this three-day threshold has been used in other observational methadone studies and in developing a United Kingdom treatment guideline which recommends revaluating patients for intoxication and withdrawal after a three-day methadone treatment gap (Cousins et al., 2016; Cousins et al., 2011; "Drug Misuse and Dependence—Guidelines on Clinical Management", 1999). Across all the medications, the mortality risk is highest in the first four weeks out of treatment, with many studies showing an increase in mortality in days 1-14 after treatment cessation.

Citations

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DENOMINATOR STATEMENT

Individuals at least 18 years of age who had a diagnosis of OUD and at least one claim for an OUD medication

DENOMINATOR DETAILS

The measure denominator is calculated for rolling two-year periods. The denominator includes individuals of at least 18 years of age during their treatment period who had a diagnosis code of OUD during an inpatient, intensive outpatient, partial hospitalization, outpatient, detoxification or emergency department encounter at any time during the measurement period. To meet the 180-day requirement and be eligible for the measure, the date on the first claim for an OUD medication must fall at least 180 days before the end of the measurement period.

The diagnosis codes used to identify individuals with OUD included:

- ICD-9: 304.0x, 305.5x
- ICD-10: F11.xxx

These codes and descriptions are contained in the sheets called “ICD-9 Diagnosis Codes” and “ICD-10 Diagnosis Codes” in the Excel file called “NQF 3175 OUD Code Lists” which is attached to this form under Item S.2b.

OUD medications were identified using National Drug Codes (NDCs) for the following:

- Buprenorphine
- Naltrexone (oral)
- Buprenorphine and Naloxone

And HCPCS codes for the following:

- Buprenorphine or Buprenorphine/naloxone, oral
- Buprenorphine (extended release injectable or implant)

- Methadone administration
- Naltrexone (extended-release injectable)

The National Drug Codes (NDCs) for the oral medications and the HCPCS codes for the injectable medications and office-or treatment-center dispensed oral medications (methadone and buprenorphine) are contained in the sheets called “NDCs” and “HCPCS Codes”, respectively, in the Excel file called “NQF 3175 OUD Code Lists” which is attached to this form under Item S.2b. Note that the NDC code list DOES NOT include NDC codes for methadone, as it can legally only be dispensed as OUD pharmacotherapy in licensed treatment centers. Buprenorphine can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

EXCLUSIONS

There are no denominator exclusions.

EXCLUSION DETAILS

There are no denominator exclusions.

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

Measure results may be stratified by:

- Age
- Gender
- Race/ethnicity
- Dual eligibility status

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

The measure score is calculated for rolling two-year periods.

DENOMINATOR: Individuals of at least 18 years of age who had a diagnosis of OUD and at least one claim for an OUD medication

CREATE DENOMINATOR:

1. For each two-year period, identify individuals who are at least 18 years of age for the duration of the first year during which they appear in the period.

2. Of individuals identified in Step 1, keep those who had at least one encounter with any diagnosis (primary or secondary) of OUD in an outpatient setting, acute inpatient setting, or emergency department setting at any time during the two-year measurement period. The OUD diagnosis codes with descriptions are contained in the sheets called “ICD-9 Diagnosis Codes” and “ICD-10 Diagnosis Codes” in the Excel file called “NQF 3175 OUD Code Lists”, which is attached to this form under Item S.2b.

3. Of individuals identified in Step 2, keep those who have at least one claim with a National Drug Code (NDC) for any of the following oral OUD medications during the two-year period with a date at least 180 days before the end of the final calendar year of the measurement period:

- Buprenorphine
- Naltrexone (oral)
- Buprenorphine and Naloxone

Or a HCPCS code for any of the following OUD medications:

- Buprenorphine or Buprenorphine/naloxone, oral
- Buprenorphine (extended release injectable or implant)
- Methadone administration
- Naltrexone (extended-release injectable)

Claims for oral medications with negative, missing, or zero days' supply were not included. The NDCs for the oral medications and the HCPCS codes for the injectable and office- or treatment center-dispensed medications are contained in the sheets called "NDCs" and "HCPCS Codes", respectively, in the Excel file called "NQF 3175 OUD Code Lists," which is attached to this form under Item S.2b.

4. Of individuals identified in Step 3, keep individuals who were continuously enrolled in a commercial health plan captured by our data for at least 6 months after the month with the first OUD medication claim in the measurement period, with no gap in enrollment. Individuals who are not enrolled for 6 months, including those who die during the period, are not eligible and are not included in the analysis. This is the denominator.

NUMERATOR: Individuals in the denominator who have at least 180 days of continuous pharmacotherapy with a medication prescribed for OUD without a gap of more than seven days

CREATE NUMERATOR:

For the individuals in the denominator, identify those who have at least 180 days of continuous pharmacotherapy with an OUD medication without a gap of more than seven days using the following method:

1. Determine the number of days for the PDC denominator. The start date is the service date (fill date) of the first prescription or injection/dispensing claim for an OUD medication in the two-year measurement period. The end date is defined as the earliest of:

- The date on which the individual exhausts their days' supply, including any pre-existing surplus, following their final claim (assuming daily use).
- The individual's death date.
- December 31st of the second year in the two-year period.

2. For each individual: Count the days during the observation period for which the individual was covered by at least one OUD medication based on the prescription drug or injection/dispensing claim service dates and days' supply.

2a. Sort OUD medication claims by individual's ID and service date. Scan the claims in order, calculating a rolling surplus which accumulates any remaining days' supply from other prior or same-day fills.

2b. Naltrexone and buprenorphine injections contribute 30 days' supply and a buprenorphine implant 180 days unless another claim is found sooner, in which case the injection or implant covers only the days up to the next claim.

2c. Methadone and buprenorphine/naloxone supply is determined by the start and end dates on the outpatient claims with the codes for in-office/treatment center dispensation of methadone (H0020) and buprenorphine/naloxone (J0571-J0575).

2d. Claims for injections/implants and for licensed treatment center-dispensed methadone and office-dispensed buprenorphine/naloxone are not added to the surplus supply and only one such claim per day is counted.

2e. For claims with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period.

3. Determine treatment gaps as periods, in which the individual has exhausted his/her available supply, defined as the days' supply from the most recent previous fill/dispensing and any pre-existing surplus available before that fill/dispensing.

4. Of the individuals in Step 2, count the number of individuals who have a period of 180 days or greater from the start date of the first claim for OUD medication to the end date of the last claim for OUD medication within the two-year period and who do not have a gap of more than seven days without OUD medication available. This is the numerator.

CALCULATE MEASURE SCORE:

1. Calculate the measure score by dividing the numerator by the denominator.

2. Calculate the measure score for each state. The state code on the claim record is used to identify individuals in each state. The measure score is then reported for each state that has at least 20 individuals in the denominator.

3. Calculate the measure score for each health plan. Health plan membership is approximated based on a combination of two variables found on the claim record, industry type and Metropolitan Statistical Area (MSA). A health plan identifier is assigned based on each unique combination of industry and MSA. The health plan identifier is used to group individuals into health plans. The measure score is then reported for each health plan that has at least 20 individuals in the denominator.

4. Calculate the measure score for each clinician and clinician-group/practice level. Attribute individuals to clinicians and clinician-groups/practices based on the plurality of treatment days covered. Clinicians are identified based on their National Provider Identifier and clinician-groups/practices based on their Tax Identification Number. The measure score is reported for clinicians and clinician-group/practices with at least 25 denominator-eligible patients attributed to them. Details of the attribution method and its empirical justification are described in the attached Attribution Analysis document 123001| 148777| 141015

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3539e Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

STEWARD

Centers for Medicare & Medicare Services

DESCRIPTION

Proportion of inpatient hospitalizations for patients 65 years of age and older who receive an order for antipsychotic medication therapy.

TYPE

Process

DATA SOURCE

Electronic Health Records Hospitals collect EHR data using certified electronic health record technology (CEHRT). The human readable format and XML are contained in the eCQM specifications attached in question S.2a. No additional tools are used for data collection for eMeasures.

LEVEL

Facility

SETTING

Inpatient/Hospital

NUMERATOR STATEMENT

Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.

NUMERATOR DETAILS

The time period for data collection is the measurement year (12-month period).

Numerator: Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.

Antipsychotic orders are represented with the QDM datatype and value set of Medication, Order: Antipsychotic Medications (OID:2.16.840.1.113883.3.464.1003.196.12.1255).

Numerator exclusions: Inpatient hospitalizations for patients with documented indication that they are threatening harm to self or others.

Threat to self or others is represented with the QDM datatype and value set of Symptom: Threat to themselves or others (OID:2.16.840.1.113883.3.464.1003.195.12.1020).

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

DENOMINATOR STATEMENT

Non-psychiatric inpatient hospitalizations for patients who are 65 and older.

DENOMINATOR DETAILS

The time period for data collection is the measurement year (12-month period).

Denominator: Non-psychiatric inpatient hospitalizations for patients who are 65 and older.

Inpatient hospitalizations are represented with the QDM datatype and value set of Encounter, Performed: Encounter Inpatient (OID:2.16.840.1.113883.3.666.5.3001).

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

EXCLUSIONS

Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter.

Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.

EXCLUSION DETAILS

The following data elements are used to define the measure exclusions:

Denominator Exclusions: Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter. These exclusions are represented with the QDM datatype of Diagnosis.

Schizophrenia or Psychotic Disorder (OID: 2.16.840.1.113883.3.464.1003.105.12.1104)

Tourette's Syndrome (OID: 2.16.840.1.113883.3.464.1003.105.12.1030)

Bipolar Disorder (OID: 2.16.840.1.113883.3.67.1.101.1.128)

Huntington's Disease (OID: 2.16.840.1.113883.3.464.1003.105.12.1032)

Denominator Exclusions: Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.

Antipyschotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255)

This exclusion is represented with the QDM datatype of Medication, Active:

Antipsychotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255)

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

RISK ADJUSTMENT

Stratification by risk category/subgroup

STRATIFICATION

Results include a total score and the following strata:

Stratum 1 - Patients who were admitted or transferred to the ICU during the inpatient encounter

Stratum 2 - Patients who were not admitted or transferred to the ICU during the inpatient encounter

These strata are identified using the QDM datatype of Encounter, Performed.

ICU Admission or Transfer (OID: 2.16.840.1.113883.17.4077.3.2040)

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

TYPE SCORE

Rate/proportion better quality = lower score

ALGORITHM

See '1a._AP_Logic_Flow.pdf' submitted as an attachment under S.2a above. 138817| 141015

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Limited proprietary coding is contained in the Measure specifications for user convenience. Users of proprietary code sets should obtain all necessary licenses from the owners of the code sets.

Appendix E: Related and Competing Measures (Narrative)

Comparison of NQF #3539e and NQF #2993

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting
2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Steward

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Centers for Medicare & Medicare Services

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

National Committee for Quality Assurance

Description

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Proportion of inpatient hospitalizations for patients 65 years of age and older who receive an order for antipsychotic medication therapy.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

The percentage of patients 65 years of age and older who have evidence of an underlying disease, condition or health concern and who are dispensed an ambulatory prescription for a potentially harmful medication, concurrent with or after the diagnosis. Four rates are reported for this measure:

-Rate 1: The percentage of those with a history of falls that received a potentially harmful medication

-Rate 2: The percentage of those with dementia that received a potentially harmful medication

-Rate 3: The percentage of those with chronic kidney disease that received a potentially harmful medication

-Rate 4: Total rate

A lower rate represents better performance for all rates.

Type

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Process

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Process

Data Source

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Electronic Health Records Hospitals collect EHR data using certified electronic health record technology (CEHRT). The human readable format and XML are contained in the eCQM specifications attached in question S.2a. No additional tools are used for data collection for eMeasures.

No data collection instrument provided Attachment AP_value_sets_codes.xlsx

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Claims, Electronic Health Data, Electronic Health Records This measure is based on administrative claims collected in the course of providing care to health plan members. NCQA collects the Healthcare Effectiveness Data and Information Set (HEDIS) data for this measure directly from Health Management Organizations and Preferred Provider Organizations via NCQA's online data submission system.

No data collection instrument provided Attachment DDE_Value_Sets-635979522717911582.xlsx

Level

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Facility

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Health Plan, Integrated Delivery System

Setting

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Inpatient/Hospital

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Outpatient Services

Numerator Statement

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Numerator 1: Patients with a history of falls who received at least one potentially harmful medication from Table DDE-A or Table DDE-B

Numerator 2: Patients with a diagnosis of dementia who received at least one potentially harmful medication from Table DDE-D

Numerator 3: Patients with chronic kidney disease who received at least one potentially harmful medication from Table DDE-E

Numerator 4: The sum of the three numerators

Numerator Details

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

The time period for data collection is the measurement year (12-month period).

Numerator: Inpatient hospitalizations for patients who received an order for an antipsychotic medication during the inpatient encounter.

Antipsychotic orders are represented with the QDM datatype and value set of Medication, Order: Antipsychotic Medications (OID:2.16.840.1.113883.3.464.1003.196.12.1255).

Numerator exclusions: Inpatient hospitalizations for patients with documented indication that they are threatening harm to self or others.

Threat to self or others is represented with the QDM datatype and value set of Symptom: Threat to themselves or others (OID:2.16.840.1.113883.3.464.1003.195.12.1020).

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Rate 1 numerator: Dispensed an ambulatory prescription for an anticonvulsant, nonbenzodiazepine hypnotic, or SSRI (Table DDE-A), antipsychotic, benzodiazepine, nonbenzodiazepine hypnotic or tricyclic antidepressant (Table DDE-B) on or between the index episode start data and December 31 of the measurement year.

Rate 2 numerator: Dispensed an ambulatory prescription for an antipsychotic, benzodiazepine, nonbenzodiazepine hypnotic or tricyclic antidepressant (Table DDE-B), or H2 receptor antagonist or anticholinergic agent (Table DDE-D) on or between the IESD and December 31 of the measurement year.

Rate 3 numerator: Dispensed an ambulatory prescription for an NSAID or Cox-2 selective NSAID (Table DDE-E) on or between the IESD and December 31 of the measurement year.

Rate 4 numerator: The sum of numerators 1, 2 and 3.

Note: Do not include denied claims.

…

Table DDE-A: Potentially Harmful Drugs – Rate 1

Anticonvulsants:

Carbamazepine, Clobazam, Divalproex sodium, Ethosuximide, Ethotoin, Ezogabine, Felbamate, Fosphenytoin, Gabapentin, Lacosamide, Lamotrigine, Levetiracetam, Mephobarbital, Methsuximide, Oxcarbazepine, Phenobarbital, Phenytoin, Pregabalin, Primidone, Rufinamide, Tiagabine HCL, Topiramate, Valproate sodium, Valproic acid, Vigabatrin, Zonisamide

SSRIs:

Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Setraline

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Table DDE-B: Potentially Harmful Drugs – Rate 1 (History of Falls) and Rate 2 (Dementia)

Antipsychotics:

Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Chlorpromazine, Clozapine, Fluphenazine, Haloperidol, Iloperidone, Loxapine, Lurasidone, Molindone, Olanzapine, Paliperidone, Perphenazine, Pimozide, Quetiapine, Risperidone, Thioridazine, Thiothixene, Trifluoperazine, Ziprasidone

Benzodiazepine hypnotics:

Alprazolam, Chlordiazepoxide products, Clonazepam, Clorazepate-Dipotassium, Diazepam, Estazolam, Flurazepam HCL, Lorazepam, Midazolam HCL, Oxazepam, Quazepam, Temazepam, Triazolam

Nonbenzodiazepine hypnotics:

Eszopiclone, Zaleplon, Zolpidem

Tricyclic antidepressants:

Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6 mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine

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Table DDE-D: Potentially Harmful Drugs – Rate 2 (Dementia)

H2 receptor antagonists:

Cimetidine, Famotidine, Nizatidine, Ranitidine

Anticholinergic agents, antiemetics:

Prochlorperazine, Promethazine

Anticholinergic agents, antihistamines:

Carbinoxamine, Chlorpheniramine, Hydroxyzine products, Brompheniramine, Clemastine, Cyproheptadine, Promethazine, Triprolidine, Dimenhydrinate, Diphenhydramine, Meclizine, Dexbromphenirmine, Dexchlorpheniramine, Doxylamine

Anticholinergic Agents, antimuscarinics (oral)

Atropine, Homatropine, Belladonna alkaloids, Dicyclomine, Hyoscyamine, Propantheline, Scopolamine, Clidinium-chlordiazepoxide

Anticholinergic agents, antimuscarinics (oral)

Darifenacin, Fesoterodine, Solifenacin, Trospium, Flavoxate, Oxybutynin, Tolterodine

Anticholinergic agents, anti-Parkinson agents

Benztropine, Trihexyphernidyl

Anticholinergic agents, skeletal muscle relaxants

Cyclobenzaprine, Orphenadrine

Anticholinergic agents, SSRIs:

Paroxetine

Anticholinergic agents, antiarrhythmic:

Disopyramide

Table DDE-E: Cox-2 Selective NSAIDs and Nonasprin NSAIDs

Cox-2 Selective NSAIDs:

Celecoxib

Nonaspirin NSAIDs:

Diclofenac potassium, Diclofenac sodium, Etodolac, Fenoprofen, Flurbiprofen, Ibuprofen, Indomethacin, Ketoprofen, Ketorolac, Meclofenamate, Mefenamic acid, Meloxicam, Nabumetone, Naproxen, Naproxen sodium, Oxaprozin, Piroxicam, Sulindac, Tolmetin

Denominator Statement

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Non-psychiatric inpatient hospitalizations for patients who are 65 and older.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

All patients ages 65 years of age and older with a history of falls, dementia or chronic kidney disease in the measurement year or the year prior to the measurement year.

Denominator Details

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

The time period for data collection is the measurement year (12-month period).

Denominator: Non-psychiatric inpatient hospitalizations for patients who are 65 and older.

Inpatient hospitalizations are represented with the QDM datatype and value set of Encounter, Performed: Encounter Inpatient (OID:2.16.840.1.113883.3.666.5.3001).

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

All patients ages 67 years and older as of December 31 of the measurement year with a history of falls, dementia or chronic kidney disease. Each of the four rates in the measure has a different denominator:

Rate 1 denominator: Patients with an accidental fall or hip fracture (Note: hip fractures are used as a proxy for identifying accidental falls). Individuals with either of the following on or between January 1 of the year prior to the measurement year and December 1 of the measurement year meet criteria:

-An accidental fall (Falls Value Set).

-An outpatient visit (Outpatient Value Set), an observation visit (Observation Value Set) or an ED visit (ED Value Set), with a hip fracture (Hip Fractures Value Set).

-An acute or nonacute inpatient discharge with a hip fracture (Hip Fractures 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.

Rate 2 denominator: Patients with a diagnosis of dementia (Dementia Value Set) or a dispensed dementia medication (Table DDE-C) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

Rate 3 denominator: Patients with chronic kidney disease as identified by a diagnosis of ESRD (ESRD Value Set), stage 4 chronic kidney disease (CKD Stage 4 Value Set) or kidney transplant (Kidney Transplant Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

Rate 4 denominator: The sum of the denominators for rates 1, 2 and 3

Note: Patients with more than one disease or condition may appear in the measure multiple times (i.e., in each indicator for which they qualify).

See S.2.b for all Value Sets

Table DDE-C: Prescriptions to Identify Members with Dementia

Cholinesterase inhibitors:

Donepezil, Galantamine, Rivastigmine

Miscellaneous central nervous system agents:

Memantine

Exclusions

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter.

Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

The following are exclusions for the condition-specific rates and total rate:

For those who meet denominator criteria for the history of falls rate (Rate 1): exclude those with a diagnosis of psychosis, schizophrenia, bipolar disorder or seizure disorder.

For those who meet denominator criteria for those with dementia rate (Rate 2): exclude those with a diagnosis of psychosis, schizophrenia or bipolar disorder.

Exclusion Details

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

The following data elements are used to define the measure exclusions:

Denominator Exclusions: Inpatient hospitalizations for patients with a diagnosis of schizophrenia, Tourette's syndrome, bipolar disorder, Huntington's disease during the encounter. These exclusions are represented with the QDM datatype of Diagnosis.

Schizophrenia or Psychotic Disorder (OID: 2.16.840.1.113883.3.464.1003.105.12.1104)

Tourette's Syndrome (OID: 2.16.840.1.113883.3.464.1003.105.12.1030)

Bipolar Disorder (OID: 2.16.840.1.113883.3.67.1.101.1.128)

Huntington's Disease (OID: 2.16.840.1.113883.3.464.1003.105.12.1032)

Denominator Exclusions: Inpatient hospitalizations for patients who were taking antipsychotics prior to admission.

Antipyschotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255)

This exclusion is represented with the QDM datatype of Medication, Active:

Antipsychotic Medications (OID: 2.16.840.1.113883.3.464.1003.196.12.1255)

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

For those who meet denominator criteria for the history of falls rate (Rate 1): Exclude patients with a diagnosis of psychosis (Psychosis Value Set), schizophrenia (Schizophrenia Value Set), bipolar disorder (Bipolar Disorder Value Set; Other Bipolar Disorder Value Set) or seizure disorder (Seizure Disorders Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

For those who meet denominator criteria for those with dementia rate (Rate 2): Exclude patients with a diagnosis of psychosis (Psychosis Value Set), schizophrenia (Schizophrenia Value Set) or bipolar disorder (Bipolar Disorder Value Set; Other Bipolar Disorder Value Set) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year.

See S.2.b for all Value Sets

Risk Adjustment

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Stratification by risk category/subgroup

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

No risk adjustment or risk stratification

Stratification

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Results include a total score and the following strata:

Stratum 1 - Patients who were admitted or transferred to the ICU during the inpatient encounter

Stratum 2 - Patients who were not admitted or transferred to the ICU during the inpatient encounter

These strata are identified using the QDM datatype of Encounter, Performed.

ICU Admission or Transfer (OID: 2.16.840.1.113883.17.4077.3.2040)

To access the value sets for the measure, please visit the Value Set Authority Center, sponsored by the National Library of Medicine, at https://vsac.nlm.nih.gov/. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

No risk adjustment or risk stratification

Type Score

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

Rate/proportion better quality = lower score

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Rate/proportion better quality = lower score

Algorithm

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

See '1a._AP_Logic_Flow.pdf' submitted as an attachment under S.2a above.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

Step 1. Determine the eligible population: All patients 67 years of age and older as of the end (i.e., December 31) of the measurement year.

Step 2: Identify the denominators for each of the four rates:

Rate 1: Those in the eligible population with a history of falls (see S.9 for details) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Exclude patients with a diagnosis of psychosis, schizophrenia, bipolar disorder, or seizure disorder (see S.11 for details). Identify the index episode start date.

Rate 2: Those in the eligible population with a dementia (see S.9 for details) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Exclude patients with a diagnosis of psychosis, schizophrenia or bipolar disorder (see S.11 for details). Identify the index episode start date.

Rate 3: Those in the eligible population with end stage renal disease (see S.9 for details) on or between January 1 of the year prior to the measurement year and December 1 of the measurement year. Identify the index episode start date.

Rate 4: The sum of denominators for Rates 1, 2 and 3.

Step 3: Identify the numerators: Individuals in each of the denominators who have received at least one potentially harmful medication on or after the index episode start date (see definitions of potentially harmful medications for each numerator in section S.6).

Step 4: Calculate the rates:

Rate 1 – Numerator 1 divided by denominator 1.

Rate 2 – Numerator 2 divided by denominator 2.

Rate 3 – Numerator 3 divided by denominator 3.

Rate 4 – The sum of the three numerators divided by the sum of the three denominators.

Note: for this measure a lower rate indicates better performance for all four rates.

Index Episode Start Date. The earliest diagnosis, procedure or prescription between January 1 of the year prior to the measurement year and December 1 of the measurement year.

For an outpatient claim/encounter, the IESD is the date of service.

For an inpatient claim/encounter, the IESD is the discharge date.

For dispensed prescriptions, the IESD is the dispense date.

Submission items

3539e: Use of Antipsychotics in Older Adults in the Inpatient Hospital Setting

5.1 Identified measures:

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: These measures are harmonized to the extent possible. While all measures assess the potentially inappropriate use of antipsychotic medications, this is the only measure that assesses use of antipsychotic medications in the inpatient hospital setting. CMS N011.01 and CMS N031.02 are intended for use in the nursing home setting. Measures NQF 2111 and NQF 2993 assess health plan performance. This measure's eligible population includes all patients in an inpatient hospital setting who are age 65 and older, which aligns with the age for measures NQF 2111 and NQF 2993. NQF 2111 and NFQ 2993 only assess older adults with dementia, whereas this measure includes all older adults. The denominator exclusions are similar across measures. The exclusions in this measure—schizophrenia (including psychotic disorders), Tourette's syndrome, Huntington's disease, and bipolar disorder—are similar to exclusions in related measures. CMS N011.01, CMS N031.02, and NQF 2111 exclude patients with schizophrenia, Tourette's syndrome, or Huntington's disease. NQF 2111 also excludes patients with bipolar disorder. NQF 2993 excludes patients with psychosis, schizophrenia, or bipolar disorder. This measure also excludes from the numerator people in the inpatient setting who are identified as a threat to themselves or others. No other measure excludes these patients, although this exclusion is appropriate for the hospital setting. The specific antipsychotic medications included in each measure are aligned.

5b.1 If competing, why superior or rationale for additive value: Not applicable.

2993: Potentially Harmful Drug-Disease Interactions in the Elderly

5.1 Identified measures: 0022 : Use of High-Risk Medications in the Elderly (DAE)

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: This measure and NQF 0022 have a similar focus (measuring potentially inappropriate medication use in the elderly) and reporting level (health plan), however they have different target populations. This measure targets patients with a specific condition or disease that can experience adverse effects when combined with certain medications that are recommended to be avoided for that condition. NQF 0022 targets a larger population of all older adults and assesses use of high-risk medications that have been recommended to be avoided in all older adults.

5b.1 If competing, why superior or rationale for additive value: N/A

Appendix F: Pre-Evaluation Comments

Pre-meeting commenting closed on January 21, 2020. As of that date, no comments were submitted.

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