Behavioral Health and Substance Use, Spring 2018 Cycle: CDP Report

TECHNICAL REPORT

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Executive Summary

One in five American adults experience a mental illness in a given year.\textsuperscript{1} Mental illness and substance use disorders are leading causes of disability and premature mortality in the United States. Access to high-quality behavioral healthcare is essential to leading a healthy, productive life. To improve care for individuals with mental illness, performance measurement needs to remain operational and current.

The review and evaluation of behavioral health measures has long been a priority of the National Quality Forum (NQF), and with the ever-changing behavioral health landscape, new measures focusing on identified needs and gaps continue to come to fruition. The background and description of the previous and current projects and an overview of NQF’s behavioral health portfolio are available on NQF’s project webpage. This work aims to endorse performance measures of accountability for improving the delivery of behavioral health and substance use services and achieving better health outcomes for the U.S. population. The most recent work, detailed in this report, examines measures of suicide risk assessments; medication adherence and management; diabetes and cardiovascular screening and monitoring for individuals with schizophrenia and bipolar disorder; concurrent use of opioids and benzodiazepines; and the use of pharmacotherapy for opioid use disorder.

In addition to evaluating performance measures in critical behavioral health and substance use areas, this project focuses on several overarching measurement areas including how to measure medication adherence accurately, as well as how to further drive quality metrics at the point of care in behavioral health settings.

For this project, the Standing Committee evaluated two newly submitted measures and seven measures undergoing maintenance review against NQF’s standard evaluation criteria. All nine measures have been endorsed:

- 0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment (PCPI)
- 0105 Antidepressant Medication Management (AMM) (NCQA)
- 1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia (CMS/NCQA)
- 1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (CMS/NCQA)
- 1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD) (NCQA)
- 1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC) (NCQA)
- 1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD) (NCQA)
- 3389 Concurrent Use of Opioids and Benzodiazepines (COB) (PQA)
- 3400 Use of Pharmacotherapy for Opioid Use Disorder (OUD) (CMS/Mathematica Policy Research)
Brief summaries of the measures are included in the body of the report; detailed summaries of the Committee’s discussion and ratings of the criteria for each measure are in Appendix A.
Introduction

Behavioral healthcare refers to a continuum of services for individuals at risk of—or suffering from—mental (i.e., emotional and/or cognitive [thoughts, problem solving] issues) or addictive disorders, challenges broadly ranging from mood and anxiety disorders, to learning disabilities and substance use disorders. In the United States, nearly one in five adults lives with a mental illness (44.7 million in 2016).¹ Suicide is a leading cause of death in the United States, and the Centers for Disease Control and Prevention (CDC) recently reported that suicide rates have increased more than 30 percent in half of states between 1999 and 2016.² In 2016, 20.1 million people aged 12 or older had a substance use disorder of which 8.2 million also had a mental disorder, also known as a co-occurring disorder.³

Behavioral health disorders are a leading cause of disabilities that contributes to rising healthcare expenditure, costing employers billions of dollars each year. Mental health and substance use disorder treatment spending from all public and private sources is expected to total $280.5 billion in 2020—an increase from $171.7 billion in 2009.⁴

While many of the illnesses and disorders that fall under the behavioral health umbrella are often chronic, people can and do recover when provided with timely, high-quality, coordinated, and evidence-based care. Proper screening and assessment of populations at risk, consistent evaluation and management of illnesses, and ongoing care have the potential to change recovery trajectories over time. Improving quality measures and shifting towards a culture of measurement-based care enhance the quality and, ultimately, the outcomes of behavioral health services.

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; it includes measures for alcohol and drug use, care coordination, depression, medication use, experience of care, tobacco, and physical health (Appendix B). This portfolio contains 54 measures: 45 process measures, eight outcome and resource use measures, and one composite measure (see table below).

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

<table>
<thead>
<tr>
<th></th>
<th>Process</th>
<th>Outcome/Resource Use</th>
<th>Composite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol and Drug Use</td>
<td>8</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Care Coordination</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Depression</td>
<td>5</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Medication Use</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Experience of Care</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Tobacco</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Physical Health</td>
<td>9</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
<td><strong>8</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>
Additional measures related to behavioral health and substance use are assigned to other topic areas. These include various patient experience measures (Patient Experience and Function project), antipsychotic use in persons with dementia measure (Neurology project), unplanned readmission following psychiatric hospitalization in an inpatient psychiatric facility (All-Cause Admissions and Readmissions project), antipsychotic use in children under five measure (Patient Safety project), and a smoking prevalence measure (Prevention and Population Health project).

**Behavioral Health and Substance Use Measure Evaluation**

On June 14, 15, and 19 the Behavioral Health and Substance Use Standing Committee evaluated two new measures and seven measures undergoing maintenance review against NQF’s standard evaluation criteria.

**Table 2. Behavioral Health and Substance Use Measure Evaluation Summary**

<table>
<thead>
<tr>
<th></th>
<th>Maintenance</th>
<th>New</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measures under consideration</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>Measures recommended for endorsement</td>
<td>7</td>
<td>2</td>
<td>9</td>
</tr>
</tbody>
</table>

**Comments Received Prior to Committee Evaluation**

NQF solicits 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 April 24, 2018 and closed on August 22, 2018. As of June 5, 2018, no comments were submitted.

**Comments Received After Committee Evaluation**

Following the Committee’s evaluation of the measures under consideration, NQF received 57 comments from 17 organizations (including nine member organizations) and individuals pertaining to the draft report and to the measures under consideration. Appendix A summarizes all comments for each measure under consideration.

Throughout the 16-week continuous public commenting period, NQF members had the opportunity to express their support (‘support’ or ‘do not support’) for each measure submitted for endorsement consideration to inform the Committee’s recommendations. Four NQF members provided their expression of support.

**Overarching Themes**

During the Standing Committee’s discussion of the measures, several overarching themes emerged that were factored into the Committee’s ratings and recommendations for multiple measures and are not repeated in detail with each individual measure.
Medication Adherence
The Committee discussed differences in measurement proxies for medication initiation and adherence. Specifically, many of the new substance use disorder measures calculate medication initiation and adherence using different metrics and proxies than mental health disorder medication adherence measures, such as those for antipsychotic and antidepressant medication adherence. In addition, new long acting injectable medications and behavioral risk factors for adherence, such as schizophrenia, were identified by the Committee as topics to consider when developing these types of measures. The Committee would like to see consistent language across behavioral health and substance use for all medication adherence measures.

NQF Measure Criteria Changes
NQF made changes to subcriterion 2b. Validity in August 2017 for maintenance of endorsement. It stated that empirical validity testing is now expected; if it is not possible, a justification is required. The decision to tighten validity testing requirements for maintenance measures was made because NQF believes it is important to have empirical demonstration of validity. For the spring 2018-cycle submissions, NQF received several communications from measure developers expressing concern that the change in the subcriterion allowed for a very short window of time to respond to the new testing requirement. In response, NQF confirmed that the guidance includes provision of justification in lieu of empirical validity testing if it is not possible to provide at the time of maintenance review. In addition, NQF updated its guidance for standing committee members to evaluate justifications in lieu of empirical validity testing for maintenance measures. Unlike other criteria that typically carry over from the previous maintenance review (e.g., evidence), justifications must use specific voting options that include:

- **Moderate.** (highest vote per the algorithm). The Committee should vote Moderate if they accept the previous analysis and results of face validity and they accept the justification provided by the measure developer.
- **Low.** The Committee should vote Low if they do not accept the previous analysis and results of face validity. If the Committee votes Low, the measure will fail the validity criteria and the justification will not hold.
- **Insufficient.** The Committee should vote Insufficient if they accept the previous analysis and results of the face validity and they do not agree with the justification provided by the measure developer.

Overall Performance Improvement Rates
This cycle included the evaluation of seven measures for maintenance of endorsement for which the updated performance data showed little overall performance improvement despite continued variation, indicating a gap in care. The Committee discussed potential reasons for so little change, identifying low rates of use due to the optional reporting of many behavioral health measures in incentive programs. In addition, the Committee questioned keeping measures endorsed that are not showing improvement, to which many argued that without additional data on how the measure is being implemented, or the nature of the denominator population, it is hard to understand exactly why the performance is not improving.
Summary of Measure Evaluation

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

**0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment (PCPI Foundation): Endorsed**

**Description:** Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified; **Measure Type:** Process; **Level of Analysis:** Clinician: Group/Practice, Clinician: Individual; **Setting of Care:** Emergency Department and Services, Other, Outpatient Services; **Data Source:** Electronic Health Records

This process measure, originally endorsed in 2009, aims to improve rates of clinician assessment of suicide risk during an encounter where a new or recurrent episode of major depressive disorder is identified. The Standing Committee agreed that the performance rates reported by the developer continue to indicate a gap in care specific to assessment of suicide risk in individuals with major depressive disorder (MDD). The Committee discussed the frequency of assessment outlined in the measure specifications, and encouraged the developer to increase the frequency to include assessments beyond first diagnosis and recurrence, such as life stressors that may trigger an assessment or other risk factors. In addition, one Committee member suggested that the measure be expanded beyond major depression disorder to a larger more general patient population. The Committee discussed the lack of a standardized suicide risk assessment tool in the measure specifications. The developer responded to the Committee by confirming that the guidelines do not require a specific tool; however, the developer agreed that a standardized approach is important for this measure, so it included four standardized questions in the specifications that can map to a risk assessment SNOMED code. The measure is currently in use in CMS’ MIPS program, and the developer shared that during the annual update later this year, it will add telehealth to the specifications. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for continued endorsement.

**0105 Antidepressant Medication Management (AMM) (NCQA): Endorsed**

**Description:** The percentage of members 18 years of age and older who were treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported. a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks). b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months). **Measure Type:** Process; **Level of Analysis:** Health Plan; **Setting of Care:** Outpatient Services; **Data Source:** Claims

This process measure, originally endorsed in 2009, promotes patient compliance, monitors treatment effectiveness, and aids providers in identifying and managing side effects for individuals who are on an antidepressant medication regimen. The Standing Committee confirmed that the evidence base for the measure has not changed since the 2014 review, and agreed to accept the previous vote on evidence. The updated performance data for the measure indicated only a slight increase in overall performance.
The Committee, however, noted variation in performance despite the small increase and agreed that a performance gap still exists. Some Committee members suggested that the measure should be expanded to include additional treatment modalities such as lifestyle, electroconvulsive therapy, or cognitive behavioral therapy. Other Committee members suggested that measuring the outcomes of medication management would be far more beneficial. The Committee emphasized that this measure, like many other behavioral health measures, is part of optional reporting, which makes overall performance increases difficult, if not impossible. The Committee had no concerns with the updated reliability and validity testing. The measure is currently used in the Medicaid Core Set, CMS’ Quality Payment Program (QPP) and in NCQA’s Healthcare Effectiveness Data and Information Set (HEDIS) program. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for continued endorsement.

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia (CMS/NCQA): Endorsed

**Description**: Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months); **Measure Type**: Process; **Level of Analysis**: Clinician: Group/Practice, Health Plan, Population: Regional and State; **Setting of Care**: Outpatient Services; **Data Source**: Claims

This process measure, originally endorsed in 2012, helps providers identify and develop interventions for patients who are not adherent to treatment with antipsychotic medications. The measure is currently used and publicly reported in CMS’ Quality Payment Program. The Standing Committee agreed that the evidence base for the measure had not changed since the previous review and consented to the previous vote on evidence. The Committee discussed the adherence proxy detailed in the measure specifications and asked the developer to think about how to identify adherence in ways other than the existence of two prescription drug claims. For example, it was noted that individuals with schizophrenia often fill their prescriptions but do not take the medications. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for continued endorsement. The Committee also suggested that the data from this measure be used to help identify individuals with adherence issues who may be good candidates for long acting antipsychotic medications.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (CMS/NCQA): Endorsed

**Description**: Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months); **Measure Type**: Process; **Level of Analysis**: Clinician: Group/Practice, Health Plan, Integrated Delivery System, Population: Regional and State; **Setting of Care**: Outpatient Services; **Data Source**: Claims

This process measure, originally endorsed in 2009, calculates the percentage of adults with bipolar I disorder who adhere to mood stabilizer medications. The intent of this measure is to help providers
identify and develop interventions for patients with bipolar I disorder who are not adherent to
treatment with mood stabilizer medications. The Standing Committee agreed that the evidence for the
measure had not changed significantly since the previous evaluation, and consented to the previous
vote. The Committee had no concerns with the reliability of the measure, other than a brief discussion in
regards to the criteria for adherence in the measure specification. Several members of the Committee
suggested broadening the adherence criteria beyond two prescriptions. The Committee did not reach
consensus when voting on validity—a must-pass criterion. The measure developer submitted a
justification for not providing updated empirical validity testing; however, there was some confusion on
the Committee’s part in regards to how to interpret the justification, which was reflected in their vote.
The Committee completed the evaluation of the measure with the exception of a vote for overall
endorsement. The measure was brought to the post-evaluation web meeting for further discussion on
June 27, 2018.

NQF staff provided the Committee with additional guidance on how to vote on the validity criterion with
a justification in advance of the post-evaluation meeting. Following the guidance, the Committee re-
voted on validity, taking into consideration the existing face validity testing and the developer’s
justification for not having empirical testing. The measure passed on the validity vote during the post-
evaluation meeting. Overall, the Committee agreed that this is an important measure and voted to
recommend this measure for continued endorsement.

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using
Antipsychotic Medications (SSD) (NCQA): Endorsed

Description: The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who
were dispensed an antipsychotic medication and had a diabetes screening test during the measurement
year; Measure Type: Process; Level of Analysis: Health Plan, Integrated Delivery System, Population:
Regional and State; Setting of Care: Outpatient Services, Other; Data Source: Claims

Evidence suggests that individuals with serious mental illness (SMI), specifically those with schizophrenia
and bipolar disorder, are at increased risk of developing diabetes due to a higher prevalence of risk
factors including tobacco use, poor nutrition, and obesity and weight gain from the use of
antipsychotics.5 Despite these risks, people with SMI are less likely to have annual A1c testing or glucose
screening.5–7 This measure, initially endorsed in 2012, assesses if patients with schizophrenia or bipolar
disorder were dispensed an antipsychotic medication and had a diabetes screening test. The Committee
agreed that the evidence base for the measure has not changed since the last evaluation and moved to
accept the previous vote on evidence. The measure is currently used in the Medicaid Adult Core Set and
NCQA’s Healthcare Effectiveness Data and Information Set (HEDIS) programs. Updated performance
data were submitted, and the Committee agreed that the data indicate room for improvement. In
addition, the developer submitted updated empirical validity testing, and the Committee agreed with
the construct hypothesis that the measure correlates to other diabetes monitoring measures. The
Committee questioned whether a screening measure for this population guaranteed improved
outcomes, but all agreed that screening is the first step on the improvement pathway. One Committee
member also mentioned that states that have higher rates of screening individuals with schizophrenia or
bipolar disorder for diabetes also have higher rates of monitoring, which leads to improved health
outcomes. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for continued endorsement.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC) (NCQA): Endorsed

**Description**: The percentage of patients 18 – 64 years of age with schizophrenia and cardiovascular disease, who had an LDL-C test during the measurement year; **Measure Type**: Process; **Level of Analysis**: Health Plan, Integrated Delivery System, Population: Regional and State; **Setting of Care**: Outpatient Services; **Data Source**: Claims

Evidence suggests that individuals with SMI, specifically those with schizophrenia, are at increased risk of developing metabolic syndrome and subsequent cardiometabolic disorders due to a higher prevalence of risk factors including poor diet, lack of physical activities, smoking, substance abuse, older age, higher body mass index, and side effects from the use of antipsychotics.8,9 Despite these risks, people on antipsychotics, including individuals with schizophrenia, are less likely to receive routine, cardiovascular monitoring.10 This process measure, initially endorsed in 2012, assesses if patients with schizophrenia and cardiovascular disease had an LDL-C test. The Committee agreed that the evidence base for the measure had not changed since the last evaluation and moved to accept the previous vote on evidence. Given that cardiovascular disease is often not diagnosed in patients with schizophrenia, the Committee questioned why the denominator requires a prior diagnosis of cardiovascular disease rather than giving all patients with schizophrenia an LDL-C test annually. The developer responded that this is based on the evidence guidelines and that the developer has a separate cardiovascular screening measure in addition to this monitoring measure that strictly looks at individuals who already have a diagnosis of cardiovascular disease. Ultimately, the Committee agreed that performance results are critical to improving outcomes for individuals with schizophrenia and to addressing early mortality in this population, and that the benefits of this measure far outweigh any possible unintended consequences. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for continued endorsement.

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD) (NCQA): Endorsed

**Description**: The percentage of patients 18 – 64 years of age with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year; **Measure Type**: Process; **Level of Analysis**: Health Plan, Integrated Delivery System, Population: Regional and State; **Setting of Care**: Outpatient Services; **Data Source**: Claims

Evidence suggests that individuals with SMI, specifically those with schizophrenia, are at increased risk of developing diabetes due to a higher prevalence of risk factors including tobacco use, poor nutrition, and obesity and weight gain from the use of antipsychotics.5 Despite these risks, people with SMI and diabetes receive less ongoing diabetes monitoring and have a higher risk for diabetes complications and diabetes-related mortality compared to non-mental health patients.7 This process measure, initially endorsed in 2012, assesses if patients with schizophrenia and diabetes have had both an LDL-C test and an HbA1c test. The Committee agreed that the evidence base for the measure had not changed since the last evaluation and moved to accept the previous vote on evidence. The Committee noted that
collecting data on diabetes management in this population is a critical public health priority and is essential to improving the health of people with schizophrenia and addressing early mortality. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for continued endorsement.

**3389 Concurrent Use of Opioids and Benzodiazepines (COB) (PQA, Inc.): Endorsed**

**Description:** The percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines during the measurement year. A lower rate indicates better performance; **Measure Type:** Process; **Level of Analysis:** Health Plan; **Setting of Care:** Health Plan; **Data Source:** Claims

Overdose deaths involving prescription opioids were five times higher in 2016 than in 1999, and more than 200,000 people have died in the U.S. from overdoses related to prescription opioids. Scientific research has identified high-risk prescribing practices that have contributed to the opioid overdose epidemic, including overlapping opioid and benzodiazepine prescriptions. Concurrent use of opioids and benzodiazepines—both central nervous system (CNS) depressants—increases the risk for severe respiratory depression, which can be fatal. This newly submitted measure evaluates concurrent use of benzodiazepines and opioids, which is associated with an increased risk of opioid overdose. The Standing Committee agreed that the measure addresses a significant performance gap and had no concerns in regards to the scientific acceptability testing of the measure. There was a brief discussion about the feasibility of the measure with respect to the impact on claims measurement if beneficiaries start to pay for their prescriptions out of pocket, but ultimately the Committee agreed that this was something worth monitoring in future performance rates. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for endorsement.

**3400 Use of Pharmacotherapy for Opioid Use Disorder (OUD) (CMS/Mathematica Policy Research): Endorsed**

**Description:** The percentage of Medicaid beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year. The measure will report any medications used in medication-assisted treatment of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone. **Measure Type:** Process; **Level of Analysis:** Population: Regional and State; **Setting of Care:** Emergency Department and Services, Inpatient/Hospital, Outpatient Services; **Data Source:** Claims

Of the 52,404 drug overdose deaths in the United States in 2015, 33,091 (63.1 percent) were due to opioid use, and an estimated 2.5 million individuals have an OUD for abuse or dependence with most not receiving treatment or not receiving the most effective care. There is evidence that pharmacotherapy is related to improved outcomes; therefore, this newly submitted measure, which is intended to increase access to pharmacotherapy, is expected to yield better care for beneficiaries with an OUD. The measure is currently in voluntary use in CMS' Quality Payment Program. The measure developer provided state-level performance data indicating a large amount of variation on state-level performance. The measure developer noted that there are higher documented rates of pharmacotherapy for elderly, male, and urban beneficiaries that contribute to the wide range of
variation. The Standing Committee discussed the omission of psychosocial support in the measure and agreed that it would be beneficial to include this in future versions. The Committee also discussed the impact on the denominator of including individuals in remission and not on pharmacotherapy. The measure developer provided additional background that patients in remission tend to be on pharmacotherapy and that they excluded the remission cohort of patients in testing but there was minimal change. The measure developer shared with the Committee that two states participating in the measure testing did not have methadone billing codes, so it is possible that there was under reporting. Overall, the Committee agreed that this is an important measure and voted to recommend this measure for endorsement.

Measures Withdrawn from Consideration

Two measures previously endorsed by NQF were not re-submitted for maintenance of endorsement or have been withdrawn during the endorsement evaluation process. Endorsement for these measures has been removed.

Table 3. Measures Withdrawn from Consideration

<table>
<thead>
<tr>
<th>Measure</th>
<th>Reason for withdrawal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1927 Cardiovascular Health Screening for People With Schizophrenia or Bipolar Disorder Who Are Prescribed Antipsychotic Medications</td>
<td>This measure was withdrawn by the developer given that it is not currently in use in the Healthcare Effectiveness Data and Information Set (HEDIS) measurement set, and therefore may not provide sufficient data to meet NQF’s updated use/usability and validity standards.</td>
</tr>
<tr>
<td>1937 Follow-Up After Hospitalization for Schizophrenia (7- and 30-day)</td>
<td>The developer withdrew this measure given that the developer has an existing Follow-Up After Hospitalization measure for the general population, which is already endorsed through NQF and includes this subpopulation.</td>
</tr>
</tbody>
</table>
References


12. U.S. Food and Drug Administration. Drug safety and availability - FDA drug safety communication: FDA warns about serious risks and death when combining opioid pain or cough...

Appendix A: Details of Measure Evaluation

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

Endorsed Measures

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

Submission | Specifications

Description: Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified.

Numerator Statement: Patients with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified.

Denominator Statement: All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD).

Exclusions: None

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician : Group/Practice, Clinician : Individual

Setting of Care: Emergency Department and Services, Other, Outpatient Services

Type of Measure: Process

Data Source: Electronic Health Records

Measure Steward: PCPI

STANDING COMMITTEE MEETING 6/19/2018

1. Importance to Measure and Report: The measure meets the Importance criteria
(1a. Evidence, 1b. Performance Gap)

1a. Evidence: Previous Evidence Evaluation Accepted; 1b. Performance Gap: H-6; M-9; L-0; I-0

Rationale:

- The measure developer provided updates to the previous evidence submitted for the 2014 review, including a 2015 reaffirmation of the American Psychiatric Association (APA) guideline for the treatment of patients with major depressive disorder.
- The Standing Committee agreed that the evidence base for the measure has not changed and consented to the prior 2014 vote on evidence.
- The measure developer provided performance data from the 2015 CMS Physician Quality Reporting System (PQRS) for which the average performance rate was 71.3%.
- The measure developer was not able to provide updated disparities data as the reporting programs have not yet made these data available. The developer, however, was able to identify studies that examine disparities in suicide assessment rates among people with MDD including a 2017 Centers for Disease Control and Prevention report on suicide.
• The Committee agreed that based on the performance data provided by the developer, a gap in care continues to exist. One Committee member requested the developer include racial and ethnic disparities data for the next maintenance review.

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-4; M-11; L-0; I-0 2b. Validity: H-2; M-13; L-0; I-0

Rationale:
• The measure developer used a beta-binomial model to assess the signal to noise ratio. The overall average reliability is 0.94.
• The Standing Committee encouraged the developer to increase the frequency of assessment to include assessments beyond initial diagnosis and recurrent episodes.
• The Committee expressed concern regarding the reliability of the measure due to the lack of a designated standardized tool to assess suicide risk in the measure specifications. The Committee also indicated that telehealth should be included in the specifications.
• The measure developer provided rationale for not including a specific tool in the specifications and noted that four standard questions based on the guidelines are included in the specifications and implementers of the measure can map the risk assessment to a SNOMED code.
• The Committee agreed that the four standardized questions included in the measure specifications were acceptable.
• The measure developer provided updated empirical validity testing that included a correlation analysis with the Depression Utilization of the PHQ-9 Tool measure. A positive correlation was found between the measures with a coefficient of 0.39 and p-value of 0.45.
• The Committee agreed that there was a moderate, but positive correlation.

3. Feasibility: H-2; M-12; L-1; 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 agreed the measure is feasible for implementation. Data element feasibility scorecard was calculated across three EHR vendors (Epic, NextGen, and Point Click Care), and all data elements are in a structured format across the EHRs with the exception of “ED visit”, which was not defined in two EHRs. In addition, identifying patients to meet the numerator may be challenging as suicide risk assessment is consistently documented in free text notes requiring manual review.

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-15; No Pass-0 4b. Usability: H-1; M-14; L-0; I-0

Rationale:
• The measure is publically reported and used in accountability programs: CMS’ Merit-based Incentive Payment System (MIPS) and prior to 2016, Physician Quality Reporting System (PQRS).
• The Committee had no other concerns, and agreed that the measure meets the use and usability criterion.

5. Related and Competing Measures
• There are no competing measures. The developer provided one related measure:
  o NQF# 1365: Child and Adolescent Major Depressive Disorder (MDD) Suicide Risk Assessment
• Both measures, #1365 and #0104, were developed by PCPI and harmonized to the extent possible.

6. Standing Committee Recommendation for Endorsement: Y-15; N-0

7. Public and Member Comment
• Six comments were received on this measure during the post-evaluation commenting period. Two comments were in support of the Committee’s decision to recommend the measure and three additional commenters encouraged the developer to expand the measure to require suicide risk assessment for all patients with any mental health or substance use condition rather than only focusing on those with major depressive disorder. Another commenter raised concerns with the feasibility of the measure noting that clinicians who are administering a suicide risk assessment are not always working in an environment where an EHR is available (e.g. non-hospital based clinicians) so data collection could present a challenge.
  o Developer response: Thank you for your comment. This measure is specified and has been tested within the population with major depressive disorder. Expanding the measure beyond this population would require consultation with our TEP and additional testing to assess the feasibility, reliability and validity of the measure within a broader population. We plan to bring this suggestion back to our TEP for consideration in future updates and maintenance of this measure.
    Your point about EHR availability is a good one. The PCPI has long recognized the great potential of Electronic Health Records (EHRs) and clinical data registries to advance quality measurement and quality improvement initiatives. As such, the PCPI has been an advocate for “next generation” methods that leverage clinical data for measure development, specification and testing. Access to clinical data has the potential to provide feedback to physicians and other health care providers that is timely, actionable and leads to improvement in the care delivered to patients. We hope that providers and other stakeholders continue to consider the implementation of EHR technology to advance their quality improvement efforts.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0
CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals
No appeals were received.
0105 Antidepressant Medication Management (AMM)

Submission | Specifications

**Description:** The percentage of members 18 years of age and older who were treated antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported.

a) **Effective Acute Phase Treatment.** The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).

b) **Effective Continuation Phase Treatment.** The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).

**Numerator Statement:** Adults 18 years of age and older who were newly treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment.

**Denominator Statement:** Patients 18 years of age and older with a diagnosis of major depression and were newly treated with antidepressant medication.

**Exclusions:** Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.

Exclude patients who filled a prescription for an antidepressant 105 days prior to the IPSD.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Health Plan

**Setting of Care:** Outpatient Services

**Type of Measure:** Process

**Data Source:** Claims

**Measure Steward:** National Committee for Quality Assurance

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**STANDING COMMITTEE MEETING 6/15/2018**

1. **Importance to Measure and Report:** The measure meets the Importance criteria (1a. Evidence, 1b. Performance Gap)

1a. **Evidence:** Previous Evidence Evaluation Accepted; 1b. Performance Gap: H-4; M-11; L-0; I-0

**Rationale:**

- The measure developer provided updates to the evidence submitted previously for the 2014 review, including guidelines and systematic reviews to support the diagnosis and treatment of patients with major depressive disorder with antidepressant medications. In addition, the measure developer provided an updated logic model linking the continuation of antidepressant medications to less episodes of major depression and lower morbidity.

- The Standing Committee agreed that the evidence base for the measure has not changed and consented to the previous vote on evidence.

- The Committee noted the low overall change in performance of the measure, but agreed that there was still evidence of variation in care indicating a performance gap.
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-9; M-7; L-0; I-0**

2b. Validity: **H-4; M-12; L-0; I-0**

**Rationale:**
- The measure developer provided updated measure score reliability testing using 2016 Healthcare Effectiveness Data and Information Set (HEDIS) data that included Medicare, Medicaid, and commercial health plans.
- A beta-binomial model was used to calculate the signal to noise ratio for the two reported rates of the measure (acute phase treatment and continuation phase treatment) across all three plan types: Commercial, acute phase and continuation phase were both 0.97; Medicare, acute phase and continuation phase were both 0.97; and Medicaid, acute phase and continuation phase were both 0.99.
- The measure developer provided updated empirical testing for construct validity by exploring whether the Antidepressant Medication Management measure correlated with the Statin Therapy for Patients with Diabetes measure in Medicare, Commercial, and Medicaid plans. The Pearson correlation coefficient was used and the results indicate a positive correlation across all three plans:
  - Medicaid: correlation coefficient for acute phase is 0.50 and continuation phase is 0.49;
  - Commercial: correlation coefficient for the acute phase is 0.69 and continuation phase is 0.69; and
  - Medicare: correlation coefficient for the acute phase is 0.56 and continuation phase is 0.60.
- The Standing Committee had no concerns with the updated reliability and validity testing.

3. Feasibility: **H-10; M-6; 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)

**Rationale:**
- The Standing Committee agreed the measure is feasible for implementation. The measure is specified for claims and electronic health records. All data elements are in defined fields and available in a combination of electronic sources.

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-16; No Pass-0**

4b. Usability: **H-3; M-13; L-0; I-0**

**Rationale:**
- The measure is publically reported and used in accountability programs, including: Medicaid Adult Core Set; Merit Based Incentive Payment System (MIPS) Quality Payment Program (QPP); Health Insurance Exchange Quality Rating System (QRS); State of Health Care Annual Report; Health Plan Rating/Report Cards; Health Plan Accreditation; and Quality Compass.
The Standing Committee questioned the overall 1% increase in performance, but agreed that without implementation data (e.g. how stable is the denominator population, how the measure is being implemented, or how the measure is incentivized) it was difficult to determine what a reasonable increase in performance should be.

5. Related and Competing Measures

- This measure is related to NQF #1880 – Adherence to Mood Stabilizers for People with Bipolar I Disorder. Measures #1880 and #0105 both assess medication adherence for specific populations. The developer notes measure #1880 differs from #0105 in two ways: 1) it focuses on a population with bipolar disorder, rather than major depressive disorder, and 2) it tracks medication adherence using a “proportion of days covered” method, rather than a calculation of number of days of a dispensed prescription. The developer has not submitted a plan to harmonize the two measures. The developer’s rationale was acceptable to the Committee and no additional action was taken.

6. Standing Committee Recommendation for Endorsement: Y-16; N-0

7. Public and Member Comment

- Four comments were received on this measure during the post-evaluation commenting period. Two comments were in support of the Committee’s decision to recommend the measure and one commenter encouraged the developer to expand the measure’s population to consist of anyone prescribed antidepressants as guided by current evidence.
  - Developer response: The measure in question specifically assesses the management of anti-depressant medication among members with major depression. Expanding the measure to include populations receiving anti-depressant medication for conditions other than major depression is outside the current scope of the measure, but is something we can explore.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0

CSAC Decision: Approved for endorsement

9. Appeals

No appeals were received.
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Submission | Specifications

**Description:** Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months).

**Numerator Statement:** Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

**Denominator Statement:** Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months).

**Exclusions:** Individuals with any diagnosis of dementia during the measurement period.

**Adjustment/Stratification:** No risk adjustment or risk stratification

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

**Setting of Care:** Outpatient Services

**Type of Measure:** Process

**Data Source:** Claims

**Measure Steward:** Centers for Medicare and Medicaid Services

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STANDING COMMITTEE MEETING 6/15/2018

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

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

   1a. Evidence: Previous Evidence Evaluation Accepted 1b. Performance Gap: H-0; M-16; L-0; I-0

   **Rationale:**
   - The measure developer provided updates to evidence including two clinical practice guidelines.
   - The measure developer provided updated performance data from 2015, Physician Compare, reflecting a continued opportunity for improvement.
   - Updated disparities data were also submitted by the measure developer demonstrating low rates of adherence among individuals with schizophrenia who are prescribed antipsychotic medications.
   - The Standing Committee agreed that the overall evidence for the measure had not changed since the prior review and consented to hold the previous vote.
   - The Committee was satisfied with the updated performance data but noted that this is a disparities sensitive measure and they would like to see additional analysis in a future submission.

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-12; L-1; I-0 2b. Validity: M-15; L-0; I-0
Rationale:
- The measure developer provided updated reliability testing at the health plan level that included inter-rater agreement of measure scores randomly selected from Medicare Part D plans. The results indicate moderate to high reliability.
- Previous state and physician level reliability testing, for the measure’s last endorsement evaluation, included beta-binomial model to assess signal to noise ratio demonstrating reliable scores.
- The measure developer provided a justification for not submitting empirical validity testing with an analysis plan and timeline for updated testing submission.

3. Feasibility: H-6; M-9; 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)

Rationale:
- The Standing Committee had no concerns in regards to feasibility, but noted that it is typical for schizophrenics to fill prescriptions and not take medications.

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-14; No Pass-0 4b. Usability: H-3; M-12; L-0; I-0

Rationale:
- The measure is currently in use in CMS’ Quality Payment Program, New York State DSRIP Program, and a SAMHSA demonstration program.
- The measure went through a re-evaluation process through NCQA’s measure advisory panel for which medications were added or removed based on FDA approvals.
- No unintended consequences were identified during testing or have been brought to the developer’s attention since implementation.

5. Related and Competing Measures

- There are no competing measures.
- This measure is related to multiple adherence measures including:
  - NQF #0541 Proportion of Days Covered: 3 Rates by Therapeutic Category;
  - NQF# 1880: Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder.
- The measure developer states that the measure specifications are harmonized with the related measures where possible using the same calculation for adherence across.

6. Standing Committee Recommendation for Endorsement: Y-14; N-0

7. Public and Member Comment

- Six comments were received on this measure during the post-evaluation commenting period. Three comments were in support of the Committee’s decision to recommend the measure and
several commenters suggested additional medication and diagnosis exclusions. Another commenter expressed concern about data collection for the measure due to the nature of separating pharmaceutical claims data from regular claims by many health plans.

- Developer response: We appreciate and agree with the comment. The measure currently includes long-acting (depot) injectable antipsychotic medications in the adherence calculation. The days’ supply is imputed for depot injectable antipsychotic medications billed under Medicare Part D and Part B, and include the below (see S.7 of the submission):
  - fluphenazine decanoate
  - haloperidol decanoate
  - aripiprazole
  - aripiprazole lauroxil
  - olanzapine pamoate
  - paliperidone palmitate
  - risperidone microspheres

We appreciate your comments about the challenges of data collection for this measure. At this time, we believe claims data is the most appropriate data source for this measure. We will encourage measure implementers, such as CMS or NCQA, to work closely with health plans that are submitting data to minimize data collection burdens.

Although some members with dementia who have schizophrenia or schizoaffective disorder may be appropriately managed on an antipsychotic medication, we exclude these members from the measure because of the public health advisory and black box warning issued by the Food and Drug Administration (FDA). In April 2005, the FDA issued a Public Health Advisory warning of increased risk of mortality associated with the use of atypical antipsychotics in elderly patients with dementia. This warning was based on the findings of a meta-analysis of 17 short-term, randomized, placebo-controlled trials and showed that the risk of death in drug-treated patients was 1.6 to 1.7 times the risk of death in placebo-treated patients (Schneider et al., 2005). In 2008, the FDA advisory and black box warning was extended to all antipsychotic medications when further studies (Liperoti et al., 2009; Schneeweiss et al., 2007; Setoguchi et al., 2008) showed that conventional antipsychotics were associated with a similar increased risk of death when administered to elderly patients with a diagnosis of dementia. (See section 2b2 in the testing attachment). Excluding individuals with dementia from the measure denominator does not preclude physicians from prescribing antipsychotic medications to these individuals. Physicians may still decide with patients through shared decision making whether the benefits of treatment with antipsychotic medications outweigh the risks.

References:


8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0

CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals

No appeals were received.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Description: Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).

Numerator Statement: Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

Denominator Statement: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

Exclusions: Not Applicable

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Clinician: Group/Practice, Health Plan, Integrated Delivery System, Population: Regional and State

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: Centers for Medicare & Medicaid Services

STANDING COMMITTEE MEETING 6/15/2018

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

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

1a. Evidence: Previous Evidence Evaluation Accepted 1b. Performance Gap: H-3; M-11; L-0; I-0

Rationale:
The measure developer provided updates to the evidence submitted previously for the 2014 review, including two clinical practice guidelines. Additionally, the developer provided an updated logic model outlining how the process of identifying patients with Bipolar I Disorder who are not adherent to mood stabilizer medication treatment is related to improved symptom control for those patients identified and a reduction in hospitalization.

The Standing Committee agreed that the evidence base for the measure has not changed and consented to the previous vote on evidence.

The measure developer provided updated performance data. The previous submission included 2007 and 2008 Medicare claims data indicating performance gaps and a wide variation in adherence to mood stabilizer medications across health plans, states and provider groups.

The measure developer provided an updated literature review on disparities reporting higher adherence rates among White persons with Bipolar I Disorder than among African-American and Hispanic persons with Bipolar I Disorder.

The Committee agreed that based on the performance and disparities data provided by the developer, a gap in care continues to exist.

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-3; M-11; L-0; I-0 2b. Validity: M-7; L-4; I-3 Validity re-vote on June 27, 2018: M-13; L-0; I-0

Rationale:

- The measure developer provided updated reliability testing at the health plan level. Reliability was assessed using Cohen’s Kappa. The measure scores for five randomly selected Medicare Part D plans from two states were compared, and inter-rater agreement was calculated. Results obtained by two independent programmers were 1.00, which is greater than the Kappa threshold of 0.9.
- Previously submitted reliability testing included signal-to-noise ratio to assess variability across multiple measurement units including states, prescription drug plans, Accountable Care Organizations, and physician groups.
- The Standing Committee agreed the measure was reliable. One Committee member recommended the developer broaden the measure criteria by broadening the proxy for adherence, which is currently specified as two prescriptions.
- The measure developer provided a justification that included a plan with a timeline and methodological details to support previous face validity in lieu of updated empirical validity testing.
- During the initial evaluation webinar, the Committee did not reach consensus on the validity vote.
- After the initial evaluation webinar, NQF refined its guidance for Committee members on how to consider and vote on validity when only face validity and justification are submitted for a maintenance measure in lieu of empirical validity. The Committee re-voted and agreed to accept the existing face validity analysis and the measure developer’s justification for not having empirical testing.
3. Feasibility: H-0; M-7; L-7; 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 agreed the measure is feasible for implementation. The measure is specified for electronic claims. All data elements are in defined fields and readily available and accessible.

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-14; No Pass-0 4b. Usability: H-1; M-13; L-0; I-0
Rationale:
• The measure is publically reported and used in accountability programs, including: New York State Delivery System Reform Incentive Payment (DSRIP) Program, Value Based Payment (VBP) Quality Measure Set for the Health and Recovery Plan (HARP) subpopulation and Substance Abuse and Mental Health Services Administration (SAMHSA) Section 223 Demonstration Program.
• The Committee agreed that the measure meets the use and usability criterion.

5. Related and Competing Measures
• There are no competing measures.
• The developer notes the following related measures:
  o NQF# 0541: Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
  o NQF# 1879: Adherence to Antipsychotic Medications for Individuals with Schizophrenia
  o NQF# 1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
  o N/A: Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NCQA measure)
• The measure developer indicates measure #1880 has been harmonized to the extent possible with measures #1879, #0542, #0543, #0545, #0541, #1879, #1927, and #1932.

6. Standing Committee Recommendation for Endorsement: Y-13; N-0
Rationale
• During the post-evaluation meeting on June 27, 2018, the Standing Committee voted on overall suitability and recommended the measure for endorsement
7. Public and Member Comment

- Six comments were received on this measure during the post-evaluation commenting period. Three comments were in support of the Committee’s decision to recommend the measure and one comment was specific to unintended consequence of medication adherence. Two additional comments were received specific to the measure specifications list of mood stabilizer drugs.
  - Developer response: We appreciate and agree with the comment. The measure currently includes long-acting (depot) injectable antipsychotic medications FDA-approved for the treatment of bipolar disorder in the adherence calculation. The days’ supply is imputed for these medications billed under Medicare Part D and Part B, and include the below (see S.7 of the submission):
    - aripiprazole
    - risperidone microspheres

This measure includes all FDA-approved treatments for bipolar disorder (anticonvulsants, atypical antipsychotics, phenothiazine/related antipsychotics, other antipsychotics, lithium salts, and long-acting injectable antipsychotic medications). Based on feedback from our expert panel, the measure developer decided to not include any medications used off-label to treat bipolar I disorder. This decision is consistent with our approach for measure #1879. Experts who advised on this measure agreed that while individuals with bipolar I disorder are sometimes treated with medications which are not FDA-approved for that condition, it is not appropriate to include those medications in a quality measure. We also want to note that individuals treated with off-label medications would not be included in the denominator of this measure, and thus, taking this approach, a provider’s or health plan’s performance on the measure would not be penalized. In order to qualify for the denominator, the patient must be dispensed two prescriptions for one of the medications included in the measure.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0

CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals

No appeals were received.
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

**Submission | Specifications**

**Description:** The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

**Numerator Statement:** Among patients 18-64 years old with schizophrenia or bipolar disorder, those who were dispensed an antipsychotic medication and had a diabetes screening testing during the measurement year.

**Denominator Statement:** Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.

**Exclusions:** Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients with diabetes during the measurement year or the year prior to the measurement year. Exclude patients who had no antipsychotic medications dispensed during the measurement year.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Health Plan, Integrated Delivery System, Population : Regional and State

**Setting of Care:** Other, Outpatient Services

**Type of Measure:** Process

**Data Source:** Claims

**Measure Steward:** National Committee for Quality Assurance

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### STANDING COMMITTEE MEETING 6/19/2018

1. **Importance to Measure and Report:** The measure meets the Importance criteria (1a. Evidence, 1b. Performance Gap)

1a. **Evidence:** Previous Evidence Evaluation Accepted; 1b. Performance Gap: H-3; M-10; L-0; I-0

**Rationale:**

- In the previous submission, the measure developer provided evidence in the form of guidelines and recommendations from the American Diabetes Association that suggested that individuals with schizophrenia and bipolar disorder are at higher risk for diabetes than the general population and that use of certain antipsychotic medications increases this risk.

- For this submission, the measure developer provided updated guidelines from the American Diabetes Association and the American Psychiatric Association, which show that patients with schizophrenia or bipolar disorder are at an increased risk for diabetes, and antipsychotic medications are an expected treatment that increases the risk of metabolic diseases. Therefore, screening for diabetes will allow for proper diagnosis and treatment.

- The Standing Committee agreed these updates were directionally the same as the evidence presented in the last review, hence there was no need to repeat the discussion and revote on evidence.
The measure developer summarized the performance data at the health plan level using Healthcare Effectiveness Data and Information Set (HEDIS) health plan performance rates from 2015-2017 which demonstrates a continued performance gap with the 90th percentile performing at 87.4% and the 10th percentile performing at 74%. The Committee agreed that while there is little improvement, an important gap remains.

The measure developer did not provide disparities data since HEDIS data are stratified by type of insurance. While not specified in this measure, this measure can also be stratified by demographic variables in order to assess other health care disparities.

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-5; M-8; L-0; I-0  lec virus
2b. Validity: H-3; M-10; L-0; I-0

Rationale:

- The measure developer used a beta-binominal model to assess the signal-to-noise ratio that showed high reliability. The Standing Committee agreed that the data elements are clearly defined and unlikely to be prone to unreliability.
- To assess the validity of the measure, the measure developer conducted construct validity testing using the Pearson correlation coefficient to examine the association between using this measure and measure 1934, which both focus on patients with schizophrenia and whether they received care for diabetes. The developer found that there is a statistically significant (0.25) and positive relationship between the two measures. The Committee questioned whether the statistically significant results are because the providers are simply doing a large amount of screening but cautioned that it does not mean they are providing higher quality of care. Ideally, one would want to see if the measure was associated with better outcomes (e.g., lower hyperglycemic events among the population).

3. Feasibility: H-8; M-5; 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)

Rationale:

- The Standing Committee agreed that this measure is feasible given that all data elements are in defined fields in electronic claims, no fees are associated with the use of this measure, and that no manual abstraction is required.

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-13; No Pass-0 4b. Usability: H-5; M-8; L-0; I-0

Rationale:

- This measure is currently used in several programs including the Medicaid Adult Core Set and various NCQA programs.
• The Standing Committee agreed that although there has been little improvement in the past six years (3 percent), the measure continues to move in the right direction.
• The Committee noted that the small amount of improvement for this measure, specifically for the Medicaid population, may require special attention and incentives.
• The Committee agreed that there are no known harms associated with this measure and that the benefits are considerable given the risks of diabetes for this population.

5. Related and Competing Measures

• There are no competing measures.
• The measure developer notes the following related measures:
  1933: Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia (SMC)
  1934: Diabetes Monitoring for People with Diabetes and Schizophrenia (SMD)
• The measure developer noted that the specifications are harmonized to the extent possible.

6. Standing Committee Recommendation for Endorsement: Y-13; N-0

7. Public and Member Comment

• Four comments were received on this measure during the post-evaluation commenting period, all of which were in support of the Committee’s decision to recommend the measure.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0

CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals

No appeals were received.
1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

Submission | Specifications

Description: The percentage of patients 18 – 64 years of age with schizophrenia and cardiovascular disease, who had an LDL-C test during the measurement year.

Numerator Statement: An LDL-C test performed during the measurement year.

Denominator Statement: Patients 18-64 years of age as of the end of the measurement year (e.g., December 31) with a diagnosis of schizophrenia and cardiovascular disease.

Exclusions: Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan, Integrated Delivery System, Population : Regional and State

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 6/19/2018

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

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

1a. Evidence: Previous Evidence Evaluation Accepted; 1b. Performance Gap: H-1; M-12; L-0; I-0

Rationale:

- In the previous submission, the measure developer provided evidence in the form of studies that demonstrated that individuals with schizophrenia have a higher prevalence of cardiovascular disease than the general population.
- For this submission, the measure developer provided updated guidelines from the American Psychiatric Association that show that appropriate monitoring of individuals with schizophrenia and cardiovascular disease may lead to proper treatment and management.
- The Standing Committee agreed these updates were directionally the same as the evidence presented in the last review and therefore there was no need to repeat the discussion and revote on evidence.
- The measure developer summarized the performance data at the health plan level using Healthcare Effectiveness Data and Information Set (HEDIS) health plan performance rates from 2015-2017 which demonstrates a continued performance gap. The Committee agreed that while there is little improvement, an important gap remains.
- The measure developer did not provide disparities data since HEDIS data are stratified by type of insurance. While not specified in this measure, this measure can also be stratified by demographic variables in order to assess other health care disparities.
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-3; M-10; L-0; I-0

2b. Validity: H-4; M-9; L-0; I-0

Rationale:
- The measure developer used a beta-binominal model to assess the signal-to-noise ratio, which showed high reliability. The Committee agreed that there is no reason that this measure cannot be consistently implemented.
- Given that cardiovascular disease is often not diagnosed in patients with schizophrenia, the Committee questioned why the denominator requires a prior diagnosis of cardiovascular disease rather than giving all patients with schizophrenia an LDL-C test annually. The measure developer responded that this is based on the evidence guidelines; the developer has a separate cardiovascular screening measure, in addition to this measure, that strictly looks at individuals who already have a diagnosis of cardiovascular disease.
- To assess the validity of the measure, the measure developer conducted construct validity testing using the Pearson correlation coefficient to examine the association between using this measure and measure 1934, which both focus on patients with schizophrenia and whether their chronic condition (diabetes or cardiovascular disease) is being monitored. They found that there is a statistically significant (0.66) and positive relationship between the two measures.

3. Feasibility: H-11; M-2; 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)

Rationale:
- The Standing Committee agreed that given that all data elements are in defined fields in electronic claims and no fees are associated with use, that this measure is feasible.

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-13; No Pass-0

4b. Usability: H-5; M-8; L-0; I-0

Rationale:
- This measure is currently used in several programs including the Physician Value-Based Payment Modifier and various NCQA programs.
- The Standing Committee agreed that the performance results are critical to improving outcomes for individuals with schizophrenia and addressing early mortality in this population and that the benefits of this measure far outweigh any possible unintended consequences.

5. Related and Competing Measures

- There are no competing measures.
- The measure developer notes the following related measures:
1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
1934: Diabetes Monitoring for People with Diabetes and Schizophrenia (SMD)
- The measure developer noted that the specifications are harmonized to the extent possible.

6. Standing Committee Recommendation for Endorsement: Y-13; N-0

7. Public and Member Comment
- Four comments were received on this measure during the post-evaluation commenting period. Three comments were in support of the Committee’s decision to recommend the measure. Another comment questioned whether the measure should be diagnostically specific, while one comment cautioned the use of the measure in regards to cardiovascular monitoring outside of the acute care setting suggesting this type of monitoring may be beyond practice scope.
  - Developer response: For this measure, members who have a diagnosis of schizophrenia or schizoaffective disorder and cardiovascular disease are identified using claims data that signifies the member received care in a variety of allowable care settings (e.g., outpatient, emergency department, acute inpatient, telehealth). Among members identified as having a diagnosis of schizophrenia and cardiovascular disease, the measure assesses the percentage who had an LDL-C test during the measurement year, which can be identified using administrative claims data or automated laboratory data. Guidelines and evidence do not specify the type of provider that can order and review the laboratory tests required for monitoring in these measures.

The two measures in question are meant to assess appropriate monitoring of individuals with schizophrenia and either cardiovascular disease or diabetes. Guidelines for the treatment of patients with schizophrenia recommend that laboratory tests to evaluate health status, including glucose and cholesterol, be performed. Evidence suggests that the prevalence of diabetes and cardiovascular disease among patients with schizophrenia is higher than among the general population. Additionally, there is a known relationship between the use of antipsychotic medications and increased cardiac and metabolic effects. Guidelines and evidence do not specify the type of provider that can order and review the laboratory tests required for monitoring in these measures.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0
CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals
No appeals were received.
1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

Submission | Specifications

Description: The percentage of patients 18 – 64 years of age with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year.

Numerator Statement: One or more HbA1c tests and one or more LDL-C tests performed during the measurement year.

Denominator Statement: Patients age 18-64 years of age as of the end of the measurement year (e.g. December 31) with a schizophrenia and diabetes diagnosis.

Exclusions: Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.

Adjustment/Stratification: No risk adjustment or risk stratification

Level of Analysis: Health Plan, Integrated Delivery System, Population: Regional and State

Setting of Care: Outpatient Services

Type of Measure: Process

Data Source: Claims

Measure Steward: National Committee for Quality Assurance

STANDING COMMITTEE MEETING 6/19/2018

1. Importance to Measure and Report: The measure meets the Importance criteria (1a. Evidence, 1b. Performance Gap)

1a. Evidence: Previous Evidence Evaluation Accepted; 1b. Performance Gap: H-9; M-4; L-0; I-0

Rationale:
- In the previous submission, the measure developer provided evidence in the form of studies that demonstrated that there is a higher prevalence of diabetes and non-treatment rates for individuals with schizophrenia and that monitoring may lead to proper management for diabetes in this population and may reduce morbidity and mortality.
- For this submission, the measure developer provided updated guidelines from the American Psychiatric Association and the American Diabetes Association that furthers the known link between metabolic side effects and antipsychotics used to treat schizophrenia.
- The Standing Committee agreed these updates were directionally the same as the evidence presented in the last review and so there was no need to repeat the discussion and revote on evidence.
- The measure developer summarized the performance data at the health plan level using Healthcare Effectiveness Data and Information Set (HEDIS) health plan performance rates from 2015-2017 which demonstrates a continued performance gap. The Committee agreed that while there is little improvement, an important gap remains.
- The measure developer did not provide disparities data since HEDIS data are stratified by type of insurance. While not specified in this measure, this measure can also be stratified by demographic variables in order to assess other health care disparities.

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-5; M-8; L-0; I-0 2b. Validity: H-2; M-11; L-0; I-0

**Rationale:**
- The measure developer used a beta-binomial model to assess the signal-to-noise ratio that showed high reliability. The Committee agreed that the data elements are clearly defined and unlikely to be prone to unreliability.
- To assess the validity of the measure, the developer conducted construct validity testing using the Pearson correlation coefficient to examine the association between using this measure and measure #1932, which both focus on patients with schizophrenia and whether they received care for diabetes. The developer found that there is a statistically significant (0.66) and positive relationship between the two measures.

3. **Feasibility:** H-12; M-1; 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)

**Rationale:**
- The Standing Committee agreed that given that all data elements are in defined fields in electronic claims and no fees are associated with use, that this measure is feasible.

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-13; No Pass-0** 4b. Usability: H-8; M-5; L-0; I-0

**Rationale:**
- This measure is currently used in several programs including the Physician Value-Based Payment Modifier and various NCQA programs.
- The Standing Committee agreed that collecting data on diabetes management in this population is critical public health priority and is essential to improving the health of people with schizophrenia and addressing early mortality. Any unintended consequences are far outweighed by the potential public health benefit.

5. **Related and Competing Measures**

- There are no competing measures.
- The measure developer notes the following related measures:
1932: Diabetes Screening for People with Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Mediations (SSD)

1933: Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia (SMC)

- The measure developer noted that the specifications are harmonized to the extent possible.

6. Standing Committee Recommendation for Endorsement: Y-13; N-0

7. Public and Member Comment

- Four comments were received on this measure during the post-evaluation commenting period. Three comments were in support of the Committee’s decision to recommend the measure and one comment involved limiting the measure’s scope to individuals with uncomplicated diabetes. Another comment questioned whether the measure should be diagnostically specific while one comment cautioned the use of the measure in regards to diabetes monitoring outside of the acute care setting or beyond the practice scope.
  - Developer response: For this measure, we do not differentiate between complicated and uncomplicated diabetes, as we did not find evidence in the literature or guidelines to support limiting the measure in this way. Evidence suggests that the prevalence of diabetes among patients with schizophrenia is higher than among the general population. Additionally, there is a known relationship between the use of antipsychotic medications and increased risk of metabolic syndrome and diabetes. People with Schizophrenia and are also less likely to receive care for diabetes than the general population. This measure aims to shed light on disparities in care and assess the proper management of diabetes among a high-risk subset of the general population.

The two measures in question [1934: Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD); 1933: Cardiovascular Monitoring for People with Cardiovascular Disease and Schizophrenia] are meant to assess appropriate monitoring of individuals with schizophrenia and either cardiovascular disease or diabetes. Guidelines for the treatment of patients with schizophrenia recommend that laboratory tests to evaluate health status, including glucose and cholesterol, be performed. Evidence suggests that the prevalence of diabetes and cardiovascular disease among patients with schizophrenia is higher than among the general population. Additionally, there is a known relationship between the use of antipsychotic medications and increased cardiac and metabolic effects. Guidelines and evidence do not specify the type of provider that can order and review the laboratory tests required for monitoring in these measures.

8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0

CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals

No appeals were received.
3389 Concurrent Use of Opioids and Benzodiazepines (COB)

Submission | Specifications

**Description**: The percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines during the measurement year.
A lower rate indicates better performance.

**Numerator Statement**: The number of individuals from the denominator with concurrent use of opioids and benzodiazepines for 30 or more cumulative days during the measurement year.

**Denominator Statement**: The denominator includes individuals 18 years and older with 2 or more prescription claims for opioids with unique dates of service, for which the sum of the days’ supply is 15 or more days. Individuals with cancer or in hospice are excluded.

**Exclusions**: Individuals with cancer or in hospice at any point during the measurement year are excluded from the denominator.

**Adjustment/Stratification**: No risk adjustment or risk stratification

**Level of Analysis**: Health Plan

**Setting of Care**: Other

**Type of Measure**: Process

**Data Source**: Claims

**Measure Steward**: PQA, Inc.

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**STANDING COMMITTEE MEETING 6/14/2018**

1. **Importance to Measure and Report**: The measure meets the Importance criteria
   (1a. Evidence, 1b. Performance Gap)
   1a. Evidence: **H-8; M-7; L-0; I-0**; 1b. Performance Gap: **H-6; M-9; L-0; I-0**
   
   **Rationale:**
   - The measure developer submitted strong evidence for the measure including a CDC guideline, three studies, and a FDA black box warning.
   - The performance gap was demonstrated with measure testing results based on 2015 Medicare Part D data indicating a significant performance gap for which 24% of patients had concurrent prescribing.
   - Disparities rates were measured via beneficiary level Low-Income Subsidy (LIS) variable for which the measure rate was 29.9% while the rate of the non-LIS population was lower at 19.9%.

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-13; L-0; I-0** 2b. Validity: **H-14; M-1; L-0; I-0**
   
   **Rationale:**
   - Testing was conducted on Medicare and Medicaid data. A beta-binomial model was used to calculate plan-specific reliability scores. The mean reliability score for Medicare is .77 and the mean reliability score for Medicaid is .94.
• The measure developer provided systematic assessment of face validity for the measure score. The measure was reviewed by several PQA expert panels as well as the entire PQA membership. Ninety-three percent of the Quality Metrics Expert Panel recommended the measure for endorsement and, of the 93 PQA member organizations who cast a vote, eighty-nine percent voted in favor of the measure.
• The Standing Committee noted one concern in regards to threats to validity, related to missing data as a result of individuals paying cash for opioids and benzodiazepines resulting in missing claims.

3. Feasibility: H-10; M-5; 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)

Rationale:
• Pilot sites testing the measure indicated that the measure was feasible and results were reported efficiently, accurately, and without difficulty.
• The required data (prescription and medical claims) are readily available in electronic format.
• Measure developer (PQA) retains the rights to measure and can rescind or alter the measure at any time.
• The Standing Committee had no concerns in regards to feasibility.

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-15; No Pass-0 4b. Usability: H-9; M-6; L-0; I-0

Rationale:
• The measure was added to the 2018 CMS Medicaid Adult Core Measure set.
• The measure developer anticipates adoption of the measure over time to meet the 25 state threshold for public reporting.

5. Related and Competing Measures

• This measure is related to:
  o NQF #2940: Use of Opioids at High Dosage in Persons Without Cancer
  o NQF #2950: Use of Opioids from Multiple Providers in Persons Without Cancer
  o NQF #2951: Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
  o Use of Opioids at High Dosage (NCQA)
  o Use of Opioids from Multiple Providers (NCQA)

• The PQA opioid measures (NQF #2940, 2950, and 2951) use the same target population (denominator), and each have different areas of focus (numerator) related to opioid prescribing. The NCQA opioid measures were developed as an adaptation to existing PQA measures; the NCQA opioid measure denominators are similar to the PQA opioid measures, but have a different area of focus than the concurrent use of opioids and benzodiazepines measure.
6. Standing Committee Recommendation for Endorsement: Y-15; N-0

7. Public and Member Comment

- Nine comments were received on this measure specific to feasibility and data collection, unintended consequences, and general support. There was one comment that expressed concern about the measure as specified as well as its relation to another newly endorsed measure NQF #3316 Safe Use of Opioids – Concurrent Prescribing.

Developer response: Thank you for the opportunity to respond to these additional comments received regarding the PQA measure #3389 Concurrent Use of Opioids and Benzodiazepines that retrospectively evaluates the performance of health plans using administrative claims data. To clarify, the measure denominator includes individuals 18 years and older with 2 or more prescription claims for opioids with unique dates of service, for which the sum of the days’ supply is 15 or more days. The numerator is the number of individuals from the denominator with concurrent use of opioids and benzodiazepines for 30 or more cumulative days during the measurement year. Individuals with cancer or in hospice at any point during the measurement year are excluded from the denominator.

The measure rationale and exclusions are based on the Centers for Disease Control and Prevention (CDC) Guideline for Prescribing Opioids for Chronic Pain – United States, 2016, that provides a category A recommendation (applies to all persons; most patients should receive the recommended course of action) that prescribers should avoid concurrent prescriptions of opioids and benzodiazepines.1 The CDC guideline states that although there are circumstances when it might be appropriate to prescribe opioids to a patient receiving benzodiazepines (e.g., severe acute pain in a patient taking long-term, stable low-dose benzodiazepine therapy), clinicians should avoid concurrent prescribing whenever possible. Additional rationale for the measure is the 2016 US Food and Drug Administration Boxed Warnings added to prescription drug labeling for prescription opioid pain and prescription opioid cough medications, and benzodiazepines, based on studies finding that combined use of opioids and benzodiazepines has resulted in serious side effects, including death.2 Since the publication of the CDC prescribing guideline, several retrospective observational studies have been published that add to the growing body of evidence to support the lack of broad therapeutic benefit combined with the increased risk for overdose associated with co-prescribing of these medications.3-5

Measure exclusions were carefully considered and vetted through PQA’s transparent, multi-stakeholder, consensus-based development process. According to the CDC guideline and subject matter expert feedback during the measure development process, few medication situations warrant concurrent use of opioids and benzodiazepines. The measure excludes patients with cancer and those in hospice due to the unique therapeutic goals, ethical considerations, increased opportunities for medical

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supervision, and balance of risks and benefits with opioid therapy. Other exclusions were not recommended for the measure, though opioid products that are indicated for medication assisted treatment for opioid use disorder are not included in the measure.

The intent of measure #3389 is to address the known consequences of concurrent prescribing and the risk of adverse events, including severe respiratory depression and death. The performance results from the measure can be used to establish benchmarks and identify opportunities to decrease co-prescribing of opioid and benzodiazepines. As a retrospective population-level measure, it is not intended to serve as a guide for individual patient care decisions. Although a lower rate indicates better performance, the rate is not expected to be zero. We acknowledge that in certain situations, providers may choose to concurrently prescribe opioid and benzodiazepine medications for individual patients due to patient individualization considerations. This performance measure is not intended to preclude such situations.

To date, implementation of measure #3389 includes the Centers for Medicare & Medicaid Services (CMS) reporting within the Medicare Patient Safety reports, addition to the 2018 Medicaid Adult Core Set, and use in Medicaid 1115 Substance Use Disorder Demonstrations, and negative unintended consequences have not been identified. We will monitor for potential unintended consequences based on feedback from measure implementers to ensure that the benefits of the performance measure in facilitating progress toward achieving high-quality healthcare outweigh evidence of unintended negative consequences.

Although measure #3389 does not focus on pain, pain management is a complex topic that is central to the issue of opioid stewardship. Efforts to prevent opioid overdose deaths should comprise a balanced and multi-faceted approach, including strategies that focus on reducing opioid prescribing, limiting use of potentially dangerous drug-drug combinations, and being mindful and vigilant about pain management considerations.

We are aware of the NQF-endorsed measure, #3316e, Safe use of opioids - concurrent prescribing, which was reviewed by the Patient Safety Standing Committee during the Fall 2017 Cycle. Specifically, #3316e evaluates, patients age 18 years and older prescribed two or more opioids or an opioid and benzodiazepine concurrently at discharge from a hospital-based encounter (inpatient or emergency department [ED], including observation stays). The PQA measure #3389 is related to #3316e conceptually because they both focus on concurrent prescribing of opioids and benzodiazepines. However, the measures do not use the same target population (denominator) and the data sources (claims vs. electronic health records), levels of analysis (health plan vs. facility) and settings (ambulatory vs. emergency department, inpatient/hospital) are distinctly different. PQA did not identify any competing measures (i.e., those that
addresses both the same measure focus and the same target population) that would necessitate harmonization of measure elements.

References


8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0
CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals
No appeals were received.
3400 Use of Pharmacotherapy for Opioid Use Disorder (OUD)

**Submission | Specifications**

**Description:** The percentage of Medicaid beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year. The measure will report any medications used in medication-assisted treatment of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

**Numerator Statement:** Beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year.

**Denominator Statement:** Number of Medicaid beneficiaries with at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year.

**Exclusions:** None.

**Adjustment/Stratification:** No risk adjustment or risk stratification

**Level of Analysis:** Population : Regional and State

**Setting of Care:** Emergency Department and Services, Inpatient/Hospital, Outpatient Services

**Type of Measure:** Process

**Data Source:** Claims

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

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**STANDING COMMITTEE MEETING 6/14/2018**

1. **Importance to Measure and Report:** The measure meets the Importance criteria (1a. Evidence, 1b. Performance Gap)

1a. Evidence: **H-2; M-8; L-2; I-1**; 1b. Performance Gap: **H-7; M-7; L-0; I-0**

**Rationale:**

- The measure developer submitted a clinical practice guideline and six systematic reviews indicating pharmacotherapy for the treatment of opioid use disorder is proven effective.
- Performance gap is demonstrated with testing results based on 2014 Medicaid Analytic extract data from 16 states. Overall performance rate for pharmacotherapy use was 57.2% and the state-level scores ranged from 13.1% - 76.5% indicating wide variation.
- The Standing Committee discussed the omission of psychosocial support in the measure and agreed that it would be beneficial to include in future versions.
- The Committee questioned how the measure accounted for individuals who are in remission and not on pharmacotherapy. The developer responded that patients in remission tend to be on pharmacotherapy already and that they had excluded the remission cohort of patients in testing but there was minimal change.
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-5; M-9; L-0; I-0
2b. Validity: H-1; M-10; L-2; I-1

Rationale:
- Reliability and validity testing was based on Medicaid Analytic extract (MAX) 2014 data that included inpatient, other services, long term care, and drug files. Sixteen states were included in the testing.
- Signal-to-noise reliability analysis for the measure was highly reliable in terms of ability to distinguish the measure’s performance in different states.
- Convergent validity was assessed by comparing performance of the measure with two other Healthcare Effectiveness Data and Information Set (HEDIS) alcohol or drug dependence measures. The state-level performances between this measure and the two HEDIS measures have a strong positive correlation – states with high or low substance use disorder rates respectfully tend to have high or low Initiation and engagement of treatment for alcohol and drug rates.
- Face validity was assessed via a multi-stakeholder technical expert panel of 19. Nine of the ten respondents agreed or strongly agreed the performance scores can be used to distinguish good from poor quality of care.
- The measure developer shared with the Committee that two states participating in the measure testing did not have methadone billing codes, so it is possible that there was under reporting.

3. Feasibility: H-6; M-7; L-1; 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 measure is coded by someone other than the person obtaining original information. This measure requires gathering data from a variety of different data sources and may be complex for certain states to gather.
- All data elements are in defined fields in electronic claims.
- There are no fees or licensing requirements to use this measure, which is in the public domain.

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-14; No Pass-0
4b. Usability: H-1; M-12; L-1; I-0

Rationale:
- Adoption of the measure has the potential to improve the quality of care for Medicaid beneficiaries who have an opioid use disorder.
- The Standing Committee discussed unintended consequences for this measure pertaining to the risks of pharmacotherapy such as overdose or dependence and recommended surveillance to detect such harms be paired with the measure.
• CMS is considering implementation plans for this measure. The measure is currently intended for voluntary use by states to monitor and improve the quality of care.

5. Related and Competing Measures
• No competing measures.
• The measure developer notes related measures stating that the specifications have been harmonized to the extent possible:
  o 3175: Continuity of Pharmacotherapy for Opioid Use Disorder
  o Evidence of medication-assisted treatment (MAT) among patients with opioid use disorder (OUD) or OD, Steward: OptumLabs

6. Standing Committee Recommendation for Endorsement: Y-13; N-1

7. Public and Member Comment
• Nine comments were received on this measure specific to feasibility and data collection, unintended consequences, and general support. One commenter expressed concern with how data collection may interfere with accurately calculating the measure and also cited drug-prescribing trends, state billing guidance, and data workflow as other interfering factors. Another commenter recommended that this measure assess the receipt of medication assisted therapy (MAT) within 30 days of a new OUD diagnosis (or within 30 days of the MAT initiation visit). As currently specified, this measure is a cross sectional analysis that is unsubstantiated by the evidence regarding the importance of MAT initiation. One comment was received noting that the measure is similar to an existing endorsed measure: #3175 Continuity of Pharmacotherapy for Opioid Use.
  o Developer response: We acknowledge the validity of this concern. Bundled payment and, more broadly, other alternative payment methodologies is a challenge that likely effects many claims-based measures, and we are not sure how common this is yet. We spoke with our technical expert panel and stakeholders from some of the states represented in the data we used to test the measure about this issue. They indicated that states are implementing ways of identifying services such as medication treatment in their alternate payment systems. The state officials we interviewed all indicated they bill outpatient treatment programs that provide methadone treatment and, with the exception of one state, are able to identify methadone use through claims. It seems likely that states who choose to implement this measure will either already have the ability to identify methadone or, like many of the stakeholders we interviewed, will implement ways of identifying the treatment. We plan as part of measure maintenance to look into how commonly states are using bundled payment for opioid use disorder, and how they identify specific services within bundles.

NQF #3400 is intended to measure access to OUD pharmacotherapy, meaning it is an indicator of whether Medicaid beneficiaries initiate pharmacotherapy for OUD. While we recognize the commenter’s desire to link a MAT initiation visit to receipt of MAT
within a specified time, currently the research evidence does not support a specified period of time after a new diagnosis within which medications should be initiated. We do not exclude patients in remission in the denominator. When we tested the measure in 16 state Medicaid programs, we found that 6.3% of beneficiaries had a diagnosis of opioid dependence in remission, in addition to another OUD diagnosis that would include them in the denominator anyway. Only 1.8% of beneficiaries (ranging by state from 1.2% to 3.4%) had opioid dependence in remission as their sole OUD diagnosis for the year. They were included in the denominator. While this measure is not intended as an OUD maintenance treatment only measure, we tested the sensitivity of the measure to restricting the denominator to maintenance only. To do this, we examined the extent to which we included patients with withdrawal management services (detoxification) in our denominator, and how measure performance changed when we excluded patients with this service. To be conservative, we eliminated all beneficiaries with any evidence of any drug detoxification in claims (10% of the original denominator). These beneficiaries could have had detoxification only or could have had detoxification and maintenance with pharmacotherapy. We found that restricting the denominator moved performance from 57.2% for all states to 58.1%, less than a one percentage point difference. This difference varied by state from 0 to 2.4 percentage points. We view this as a relatively small difference, balanced against the challenges states would have in defining withdrawal management services across settings. Therefore, in order to preserve feasibility of the measure and capture as many beneficiaries as possible, we specified the measure to include all beneficiaries with an OUD diagnosis. In addition, although the use of pharmacotherapy among Medicaid beneficiaries overall is higher than some might expect, our testing found that it ranges widely by state, from 13.1% to 76.0%, indicating room for improvement and importance of measuring. We agree that for young adults who may be seeking non-medical programs, we would not see the extent to which they are not using Medicaid as a source of funds, and thus not evident in claims. This measure is intended for use by Medicaid programs, and is not intended to measure services provided for individuals outside of Medicaid or services other than the described medications. We agree that there’s variation in the type of medication Medicaid beneficiaries are able to access for treatment. The measure is specified to report the overall use of any OUD treatment medications in addition to differentiating between the four medications. CMS intends for this measure to be voluntary for Medicaid state programs, and identifying use of different medications is intended to support states in management of OUD, not penalize them for low proportions of specific medications. We agree that this wording creates confusion. “Dispensed” is a better term than “ordered,” as this is a claims-based measure. We propose to change the wording when the measure undergoes the annual update.

Measures #3400: Use of pharmacotherapy for opioid use disorder (OUD) and #3175: Continuity of pharmacotherapy for opioid use have been identified as related by the developer. The Behavioral Health and Substance Use Committee will evaluate these measures during the post-comment call and provide guidance and recommendations.
8. Consensus Standards Approval Committee (CSAC) Vote: Y-17; N-0
CSAC Decision: Approved for endorsement on October 23, 2018.

9. Appeals
No appeals were received.
# Appendix B: Behavioral Health and Substance Use Portfolio—Use in Federal Programs

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<td>Inpatient Psychiatric Quality Reporting (Implemented 2013)</td>
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<td>Follow-up after Discharge from the Emergency Department for Mental Health or Alcohol or Other Drug Dependence</td>
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<td>Medicaid (Implemented 2018)</td>
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Appendix C: Behavioral Health and Substance Use Standing Committee and NQF Staff

STANDING COMMITTEE

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Nicolette Mehas, PharmD
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Kirsten Reed
Project Manager

Desmirra Quinnonez
Project Analyst
Appendix D: Measure Specifications

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

STEWARD
PCPI

DESCRIPTION
Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified

TYPE
Process

DATA SOURCE
Electronic Health Records Not Applicable

LEVEL
Clinician : Group/Practice, Clinician : Individual

SETTING
Emergency Department and Services, Other, Outpatient Services Behavioral Health Day Treatment

NUMERATOR STATEMENT
Patients with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified

NUMERATOR DETAILS
Time Period for Data Collection: At every visit where a new diagnosis or recurrent episode of Major Depressive Disorder is identified [initial evaluation during the episode]
Definition:
Suicide risk assessment - Must include questions about the following:
1) Suicidal ideation
2) Patient's intent of initiating a suicide attempt
AND, if either is present,
3) Patient plans for a suicide attempt
4) Whether the patient has means for completing suicide

GUIDANCE:
Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped
to the concept “Intervention, Performed: Suicide Risk Assessment” included in the numerator logic in the attached HQMF in field
DENOMINATOR STATEMENT

All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD)

DENOMINATOR DETAILS

Time Period for Data Collection: 12 consecutive months

Guidance:

This measure is an episode-of-care measure and should be reported for each instance of a new or recurrent episode of major depressive disorder (MDD); every new or recurrent episode will count separately in the Initial Population.

It is expected that a suicide risk assessment will be completed at the visit during which a new diagnosis is made or at the visit during which a recurrent episode is first identified (i.e., at the initial evaluation). For the purposes of this measure, an episode of MDD would be considered to be recurrent if a patient has not had an MDD-related encounter in the past 105 days. If there is a gap of 105 or more days between visits for MDD, that would imply a recurrent episode. The 105-day look-back period is an operational provision and not a clinical recommendation, or definition of relapse, remission, or recurrence.

The measure description outlined in the header for this measure states, ‘patients aged 18 years and older’ while the logic statement states, ‘>= 17 year(s) at: "Measurement Period"’. The logic statement, as written, captures patients who turn 18 years old during the measurement period so that these patients are included in the measure. To ensure all patients with major depressive disorder (MDD) are assessed for suicide risk, there are two clinical quality measures addressing suicide risk assessment; CMS 177 covers children and adolescents aged 6 through 17, and CMS 161 covers the adult population aged 18 years and older.

EXCLUSIONS

None

EXCLUSION DETAILS

Not Applicable

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

Consistent with CMS’ Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer and have included these variables as recommended data elements to be collected.

TYPE SCORE

Rate/proportion better quality = higher score
ALGORITHM

To calculate performance rates:
1. Find the patients who meet the initial population (i.e., the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (i.e., the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (i.e., the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator.

If the patient does not meet the numerator, this case represents a quality failure.

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0105 Antidepressant Medication Management (AMM)

STEWARD
National Committee for Quality Assurance

DESCRIPTION
The percentage of members 18 years of age and older who were treated antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported.

a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).

b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).

a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).

b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).

TYPE
Process

DATA SOURCE
Claims 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 plans via the Interactive Data Submission System (IDSS) portal.
LEVEL
Health Plan

SETTING
Outpatient Services

NUMERATOR STATEMENT
Adults 18 years of age and older who were newly treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment.

NUMERATOR DETAILS
a) Effective Acute Phase Treatment: At least 84 days (12 weeks) of treatment with antidepressant medication (Table AMM-C) during the 114-day period following the Index Prescription Start Date (IPSD) (115 total days). This allows gaps in medication treatment up to a total of 31 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

b) Effective Continuation Phase Treatment: At least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) during the 231-day period following the IPSD (232 total days). This allows gaps in medication treatment up to a total of 52 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

TABLE AMM-C: ANTIDEPRESSANT MEDICATIONS

Miscellaneous antidepressants: Bupropion, Vilazodone, Vortioxetine
Monoamine oxidase inhibitors: Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine
Phenylpiperazine antidepressants: Nefazodone, Trazodone
Psychotherapeutic combinations: Amitriptyline-chlordiazepoxide, Amitriptyline-perphenazine, Fluoxetine-olanzapine
SNRI antidepressants: Desvenlafaxine, Duloxetine, Levomilnacipran, Venlafaxine
SSRI antidepressants: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline
Tetracyclic antidepressants: Maprotiline, Mirtazapine
Tricyclic antidepressants: Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine

DENOMINATOR STATEMENT
Patients 18 years of age and older with a diagnosis of major depression and were newly treated with antidepressant medication.

DENOMINATOR DETAILS
Step 1: Determine the Index Prescription Start Date (IPSD). Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period (The 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year).

Step 2: Required exclusion: Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting.
during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Patients who meet any of the following criteria remain in the eligible population:

- An outpatient visit, ED visit, telehealth, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  - AMM Stand Alone Visits Value Set with Major Depression Value Set. with or without a telehealth modifier (Telehealth Modifier Value Set).
  - AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
- Telephone Visits Value Set with Major Depression Value Set.
- An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).
- An acute or nonacute inpatient stay discharge with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  First, identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Second, identify the admission and discharge dates for the stay. Either an admission or discharge during the required time frame meets criteria.

Step 3: Test for Negative Medication History. Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 4: Calculate continuous enrollment. Patients must be continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

TABLE AMM-C: ANTIDEPRESSANT MEDICATIONS

Miscellaneous antidepressants: Bupropion, Vilazodone, Vortioxetine
Monoamine oxidase inhibitors: Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine
Phenylpiperazine antidepressants: Nefazodone, Trazodone
Psychotherapeutic combinations: Amitriptyline-chlordiazepoxide, Amitriptyline-perphenazine, Fluoxetine-olanzapine
SNRI antidepressants: Desvenlafaxine, Duloxetine, Levomilnacipran, Venlafaxine
SSRI antidepressants: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline
Tetracyclic antidepressants: Maprotiline, Mirtazapine
Tricyclic antidepressants: Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine

*See corresponding Excel file for value sets referenced above.

EXCLUSIONS

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.

Exclude patients who filled a prescription for an antidepressant 105 days prior to the IPSD.
EXCLUSION DETAILS

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).

Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Patients who meet any of the following criteria remain in the eligible population:

- An outpatient visit, ED visit, telehealth, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  - AMM Stand Alone Visits Value Set with Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
  - AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
- Telephone Visits Value Set with Major Depression Value Set.
- An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).
- An acute or nonacute inpatient stay with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  First, identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Second, identify the admission and discharge dates for the stay. Either an admission or discharge during the required time frame meets criteria.

Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

*RSee corresponding Excel file for value sets referenced above.

RISK ADJUSTMENT

No risk adjustment or risk stratification

STRATIFICATION

NCQA asks that health plans collect the measure data for each of the three product lines each year (i.e. commercial, Medicare, Medicaid) if applicable.

TYPE SCORE

Rate/proportion better quality = higher score

ALGORITHM

Step 1: Determine the eligible population, or denominator.
Step 1a: Determine the Index Prescription Start Date (IPSD). Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period (the 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year).
Step 1b: Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.

Step 1c: Test for Negative Medication History. Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 1d: Calculate continuous enrollment. Exclude patients who are not continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

Step 2: Determine the numerators for the two reported rates.

Step 2a (Effective Acute Phase Treatment): Identify at least 84 days (12 weeks) of continuous treatment with antidepressant medication (Table AMM-C) during the 114-day period following the Index Prescription Start Date (IPSD) (115 total days). This allows gaps in medication treatment up to a total of 31 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Step 2b (Effective Continuation Phase Treatment): Identify at least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) during the 232-day period following the IPSD. Continuous treatment allows gaps in medication treatment up to a total of 52 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Step 3: Calculate the two reported rates by dividing both the numerators from steps 2a and 2b by the denominator in step 1d.

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1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

STEWARD
Centers for Medicare and Medicaid Services

DESCRIPTION
Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months).

TYPE
Process

DATA SOURCE
Claims The data source for the measure calculation required the following Medicare files depending on the level of accountability where the measure is being used:
• Denominator tables to determine individual enrollment
• Prescription drug benefit (Part D) coverage tables
• Beneficiary file
• Institutional claims (Part A)
• Non-institutional claims (Part B)—physician carrier/non-DME (durable medical equipment)
• Prescription drug benefit (Part D) claims
• Centers for Medicare and Medicaid Services (CMS) physician and physician specialty tables
• National Plan and Provider Enumeration System (NPPES) database

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

SETTING
Outpatient Services

NUMERATOR STATEMENT
Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

NUMERATOR DETAILS
The numerator is defined as individuals with a PDC of 0.8 or greater.
The PDC is calculated as follows:
PDC NUMERATOR
The PDC numerator is the sum of the days covered by the days’ supply of all prescription drug claims for all antipsychotic medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescription drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

**PDC DENOMINATOR**

The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

**DENOMINATOR STATEMENT**

Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months).

**DENOMINATOR DETAILS**

Target population meets the following conditions:

1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement period;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement period; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement period.

**IDENTIFICATION OF SCHIZOPHRENIA**

Individuals with schizophrenia or schizoaffective disorder are identified by having a diagnosis of schizophrenia within the inpatient or outpatient claims data. Individuals must have:

- At least two encounters with a diagnosis of schizophrenia or schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
- OR
- At least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period.

**CODES USED TO IDENTIFY SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER DIAGNOSIS**

Codes used to identify schizophrenia or schizoaffective disorder are included in the attached excel worksheet of codes (NQF_1879_Code Tables_2018_Final.xlsx) under the tab NQF_1879_Schizophrenia.

**Table 1: Schizophrenia or Schizoaffective Disorder Diagnosis**

<table>
<thead>
<tr>
<th>ICD-9-CM:</th>
<th>ICD-10-CM:</th>
</tr>
</thead>
</table>

**CODES USED TO IDENTIFY ENCOUNTER TYPE:**

Codes used to identify encounters are under tab NQF_1879_Encounter_types.

**Table 2.1: Outpatient Setting**
99217-99220, 99241-99245, 99341-99345, 99347-99350, 99385-99387, 99395-99397, 99401-
99404, 99411, 99412, 99429, 99510
HCPCS: G0155, G0176, G0177, G0409-G0411, G0463, H0002, H0004, H0031, H0034-H0037,
UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0529, 0770, 0771, 0779, 0900-
0905, 0907, 0911-0917, 0919, 0982, 0983
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-
90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72
Table 2.2: Emergency Department Setting
CPT: 99281-99285
UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-
90870, 90875, 90876, 99291
WITH
POS: 23
Table 2.3: Non-Acute Inpatient Setting
CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559,
0660-0663, 0669, 1000, 1001, 1003-1005
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-
90870, 90875, 90876, 99291
WITH
POS: 31, 32, 56
Table 2.4: Acute Inpatient Setting
UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159,
0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729, 0987
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-
90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
POS: 21, 51
IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR ANTIPSYCHOTIC MEDICATION:
Individuals with at least two prescription drug claims for any of the following oral antipsychotic medications (Table 3: Oral Antipsychotic Medications) or long-acting injectable antipsychotic
medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1879_ Antipsychotics of the attached excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

TABLE 3: ORAL ANTIPSYCHOTIC MEDICATIONS
The following are oral formulations only.
Typical Antipsychotic Medications:
- chlorpromazine
- fluphenazine
- haloperidol
- loxapine
- molindone
- perphenazine
- prochlorperazine
- thioridazine
- thiothixene
- trifluoperazine

Atypical Antipsychotic Medications:
- aripiprazole
- asenapine
- brexpiprazole
- cariprazine
- clozapine
- iloperidone
- lurasidone
- olanzapine
- paliperidone
- quetiapine
- quetiapine fumarate (Seroquel)
- risperidone
- ziprasidone

Antipsychotic Combinations:
- perphenazine-amitriptyline

TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS
The following are the long-acting (depot) injectable antipsychotic medications by class for the denominator. The route of administration includes all injectable and intramuscular formulations of the medications listed below.
Typical Antipsychotic Medications:
- fluphenazine decanoate (J2680)
haloperidol decanoate (J1631)
Atypical Antipsychotic Medications:
aripiprazole (J0401)
aripiprazole lauroxil (Aristada)
olanzapine pamoate (J2358)
paliperidone palmitate (J2426)
risperidone microspheres (J2794)
Note: Since the days’ supply variable is not reliable for long-acting injections in administrative data, the days’ supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
fluphenazine decanoate (J2680) – 28 days’ supply
haloperidol decanoate (J1631) – 28 days’ supply
aripiprazole (J0401) – 28 days’ supply
aripiprazole lauroxil (Aristada) - 28 days’ supply
olanzapine pamoate (J2358) – 28 days’ supply
paliperidone palmitate (J2426) – 28 days’ supply
risperidone microspheres (J2794) – 14 days’ supply

EXCLUSIONS
Individuals with any diagnosis of dementia during the measurement period.

EXCLUSION DETAILS
Individuals with any diagnosis of dementia are identified with the diagnosis codes listed below tab NQF_1879_Dementia
Table 5: Codes Used to Identify Dementia
ICD-9-CM: 290.0, 290.10, 290.11, 290.12, 290.13, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 290.8, 290.9, 291.2, 292.82, 294.10, 294.11, 294.20, 294.21, 330.1, 331.0, 331.19, 331.82
ICD-10-CM: E75.00, E75.01, E75.02, E75.09, E75.10, E75.11, E75.19, E75.4, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F10.27, F11.122, F13.27, F13.97, F18.17, F18.27, F18.97, F19.17, F19.27, F19.97, G30.0, G30.1, G30.8, G30.9, G31.09, G31.83

RISK ADJUSTMENT
No risk adjustment or risk stratification

STRATIFICATION
Depending on the operational use of the measure, measure results can be stratified by:
• State
• Physician Group*
• Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
• Race/Ethnicity
• Dual Eligibility
*See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

**TYPE SCORE**

Rate/proportion better quality = higher score

**ALGORITHM**

Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months).

CREATE DENOMINATOR:

1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.
3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).
4. Of those individuals identified in Step 3, keep individuals who had:
   - At least two encounters with a diagnosis of schizophrenia or schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   - OR
   - Individuals who had at least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period.
5. For the individuals identified in Step 4, extract Medicare Part D claims for any antipsychotic medication during the measurement period. Attach the generic name and the drug ID to the dataset.
6. Of the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any antipsychotic medication on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.
7. Exclude those individuals with a diagnosis of dementia during the measurement period.

Numerator: Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

CREATE NUMERATOR:

For the individuals in the denominator, calculate the PDC for each individual according to the following methods:
1. Determine the individual’s medication therapy period, defined as the number of days from
the index prescription date through the end of the measurement period, or death, whichever
comes first. The index date is the service date (fill date) of the first prescription drug claim for an
antipsychotic medication in the measurement period.
2. Within the medication therapy period, count the days the individual was covered by at least
one drug in the antipsychotic medication class based on the prescription drug claim service date
and days of supply.
   a. Sort and de-duplicate Medicare Part D antipsychotic medication claims by beneficiary ID,
service date, generic name, and descending days’ supply. If prescriptions for the same drug
(generic name) are dispensed on the same date of service for an individual, keep the dispensing
with the largest days’ supply.
   b. Calculate the number of days covered by antipsychotic drug therapy per individual.
      i. For prescription drug 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.
      ii. If claims for the same drug (generic name) overlap, then adjust the prescription start date to
be the day after the previous fill has ended.
      iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription
start date.
3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by
the number of days in the individual’s medication therapy period found in Step 1.
   An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is
4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC
of at least 0.8 for the antipsychotic medications. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

Physician group attribution was adapted from Generating Medicare Physician Quality
Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and
Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-
Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended
as guidance and reflects only one of many methodologies for assigning individuals to a medical
group. Please note that the physician group attribution methodology excludes patients who
died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPIs)
combinations from all Medicare Part B claims in the measurement year and the prior year. Keep
records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).
2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.
3. Create one record per NPI with all credentials and all specialties. A provider may have more
than one specialty.
4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or
DO), physician assistant (PA), or nurse practitioner (NP).
5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician,
physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare
Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)

a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.

b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.

c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.

d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.

a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.

b. Count unique NPIs per TIN.

c. Keep only those TINs having two or more providers.

d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.

9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.

a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.

b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims

10. Create individual sample.

a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.

b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
   • A = working-age individual/spouse with an employer group health plan (EGHP)
   • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
   • G = working disabled for any month of the year

c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.

d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.

e. Exclude individuals who died during the measurement year.

11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.

a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.

b. Exclude claims with no npi_prfrmg.
12. Attach medical group TIN to claims by NPI.

III. Patient Attribution

13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.

a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.

b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.

15. Attribute individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.

16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:

01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
37—Nuclear medicine
38—Geriatric medicine*
39—Nephrology
39—Pediatric medicine
40—Hand surgery
44—Infectious disease
46—Endocrinology
50—Nurse practitioner*
66—Rheumatology
70—Multi-specialty clinic or group practice*
72—Pain management
76—Peripheral vascular disease
77—Vascular surgery
78—Cardiac surgery
79—Addiction medicine
81—Critical care (intensivists)
82—Hematology
83—Hematology/oncology
84—Preventive medicine*
85—Maxillofacial surgery
86—Neuropsychiatry*
90—Medical oncology
91—Surgical oncology
92—Radiation oncology
93—Emergency medicine
94—Interventional radiology
97—Physician assistant*
98—Gynecologist/oncologist
99—Unknown physician specialty
Other—NA
*Provider specialty codes specific to this measure

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1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

STEWARD

Centers for Medicare & Medicaid Services

DESCRIPTION

Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).

TYPE

Process

DATA SOURCE

Claims For measure calculation in the Medicare product line, the following Medicare files were required:

- Denominator tables
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims

For ACO attribution, the following were required:

- Denominator tables for Parts A and B enrollment
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims

For physician group attribution, the following were required:

- Non-institutional claims (Part B)—physician carrier/non-DME
- Denominator tables to determine individual enrollment
- Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
- CMS physician and physician specialty tables
- National Plan and Provider Enumeration System (NPPES) database

LEVEL

Clinician : Group/Practice, Health Plan, Integrated Delivery System, Population : Regional and State
SETTING
Outpatient Services

NUMERATOR STATEMENT
Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

NUMERATOR DETAILS
The numerator is defined as individuals with a PDC of 0.8 or greater.
The PDC is calculated as follows:

PDC NUMERATOR
The PDC numerator is the sum of the days covered by the days’ supply of all prescription drug claims for all mood stabilizer medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

PDC DENOMINATOR
The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

DENOMINATOR STATEMENT
Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

DENOMINATOR DETAILS
Target population meets the following conditions:
1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement year;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement year; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement year.

IDENTIFICATION OF BIPOLAR I DISORDER
Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient or outpatient claims data. Individuals must have:
At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;

OR
At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.

CODES USED TO IDENTIFY BIPOLAR I DISORDER DIAGNOSIS

Codes used to identify bipolar I disorder are included in the attached Excel worksheet of codes (NQF_1880_Code Tables_2018 Final) under the tab NQF_1880_Bipolar_ICD9-10.

**TABLE 1. BIPOLAR I DISORDER DIAGNOSIS**

ICD-9-CM: 296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7


CODES USED TO IDENTIFY ENCOUNTER TYPE

Codes used to identify encounters are under tab NQF_1880_Encounter_types.

**TABLE 2.1. OUTPATIENT SETTING**


UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72

**TABLE 2.2. EMERGENCY DEPARTMENT SETTING**

CPT: 99281-99285

UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

POS: 23

**TABLE 2.3. NON-ACUTE INPATIENT SETTING**

CPT: 99304-99310, 99315, 99316, 99324-99328, 99334-99337

HCPCS: H0017-H0019, T2048

UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR MOOD STABILIZER MEDICATION

Individuals with at least two prescription drug claims for any of the following mood stabilizer medications (Table 3: Mood Stabilizer Medications) or long-acting injectable antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1880_Mood_Stabilizers of the attached Excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

MOOD STABILIZER MEDICATIONS

TABLE 3. MOOD STABILIZER MEDICATIONS

Active ingredients listed below are limited to oral, buccal, sublingual, and translingual formulations only.

Anticonvulsants:
- carbamazepine
- divalproex sodium
- lamotrigine
- valproic acid

Atypical Antipsychotics:
- aripiprazole
- asenapine
- cariprazine
- lurasidone
- olanzapine
- quetiapine
- quetiapine fumarate (Seroquel)
- risperidone
- ziprasidone

Phenothiazine/Related Antipsychotics:
- chlorpromazine
- loxapine succinate

Other Antipsychotics:
TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS
The following are the long-acting (depot) injectable antipsychotic medications. The route of administration includes all injectable and intramuscular formulations of the medications listed below.
Atypical Antipsychotic Medications:
aripiprazole (J0401)
risperidone microspheres (J2794)
Note: Since the days’ supply variable is not reliable for long-acting injections in administrative data, the days’ supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
aripiprazole (J0401) – 28 days’ supply
risperidone microspheres (J2794) – 14 days’ supply

EXCLUSIONS
Not Applicable

EXCLUSION DETAILS
Not Applicable

RISK ADJUSTMENT
No risk adjustment or risk stratification

STRATIFICATION
Depending on the operational use of the measure, measure results may be stratified by:
• State
• Accountable Care Organization (ACOs)*
• Plan
• Physician Group**
• Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
• Race/Ethnicity
• Dual Eligibility
*ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.
**See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

TYPE SCORE
Rate/proportion better quality = higher score
ALGORITHM

Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

CREATE DENOMINATOR:
1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.
3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).
4. Of those individuals identified in Step 3, keep those who had:
   At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   OR
   At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.
5. Of the individuals identified in Step 4, extract Medicare Part D claims for a mood stabilizer during the measurement period. Attach the drug ID and the generic name to the dataset.
6. For the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.

Numerator: Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

CREATE NUMERATOR:
For the individuals in the denominator, calculate the PDC for each individual according to the following methods:
1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for a mood stabilizer medication in the measurement period.
2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic
name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.

b. Calculate the number of days covered by mood stabilizer therapy per individual.
   i. For prescription drug 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.
   ii. If claims for the same drug (generic name) overlap, then adjust the latest prescription start date to be the day after the previous fill has ended.
   iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is also available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPIs. Valid NPIs have 10 numeric characters (no alpha characters).

2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)

a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.

b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.

c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.

9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.
   a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
   b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims

10. Create individual sample.
   a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
   b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
       • A = working-age individual/spouse with an employer group health plan (EGHP)
       • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
       • G = working disabled for any month of the year
   c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
   d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
   e. Exclude individuals who died during the measurement year.

11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.
   a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
   b. Exclude claims with no npi_prfrmg.

12. Attach medical group TIN to claims by NPI.

III. Patient Attribution

13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.
   a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.
b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.

15. Attribute the individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.

16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:

01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
36—Nuclear medicine
37—Pediatric medicine
38—Geriatric medicine*
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

STEWARD

National Committee for Quality Assurance
DESCRIPTION
The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

TYPE
Process

DATA SOURCE
Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system.

LEVEL
Health Plan, Integrated Delivery System, Population : Regional and State

SETTING
Other, Outpatient Services Any outpatient setting represented with Medicaid claims data

NUMERATOR STATEMENT
Among patients 18-64 years old with schizophrenia or bipolar disorder, those who were dispensed an antipsychotic medication and had a diabetes screening testing during the measurement year.

NUMERATOR DETAILS
A glucose test (Glucose Tests Value Set) or an HbA1c test (HbA1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data. See corresponding Excel document for the Glucose Tests Value Set and the HbA1c Tests Value Set.

DENOMINATOR STATEMENT
Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.

DENOMINATOR DETAILS
Follow the steps below to identify the eligible population.
Identify members with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year.
• At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria:
  - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
  - BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.
  - BH Stand Alone Acute Inpatient Value Set with Other Bipolar Disorder Value Set.
- BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.
- BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Bipolar Disorder Value Set.
- BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Other Bipolar Disorder Value Set.
  • At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
     - BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
     - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
     - ED Value Set with Schizophrenia Value Set.
     - BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
     - BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
     - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Schizophrenia Value Set.
  • At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of bipolar disorder. Any two of the following code combinations meet criteria:
     - BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.
     - BH Stand Alone Outpatient/PH/IOP Value Set with Other Bipolar Disorder Value Set.
     - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Bipolar Disorder Value Set.
     - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Other Bipolar Disorder Value Set.
     - ED Value Set with Bipolar Disorder Value Set.
     - ED Value Set with Other Bipolar Disorder Value Set.
     - BH ED Value Set with ED POS Value Set with Bipolar Disorder Value Set.
     - BH ED Value Set with ED POS Value Set with Other Bipolar Disorder Value Set.
     - BH Stand Alone Nonacute Inpatient Value Set with Bipolar Disorder Value Set.
     - BH Stand Alone Nonacute Inpatient Value Set with Other Bipolar Disorder Value Set.
     - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Bipolar Disorder Value Set.
     - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Other Bipolar Disorder Value Set.
(See corresponding Excel document for the above value sets)

EXCLUSIONS

Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
Exclude patients with diabetes during the measurement year or the year prior to the measurement year.
Exclude patients who had no antipsychotic medications dispensed during the measurement year.

EXCLUSION DETAILS
Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These members may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).
Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year). There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.
Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Diabetes Medications List).
Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years).
- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.
- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List):
Alpha-glucosidase inhibitors:
Acarbose, Miglitol
Amylin analogs:
Pramlintide
Antidiabetic combinations:
Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-linagliptin, Empagliflozin-metformin, Glimepiride-pioglitazone, Glimepiride-rosiglitazone, Glipizide-metformin, Glyburide-metformin, Linagliptin-metformin, Metformin-pioglitazone, Metformin-repaglinide, Metformin-rosiglitazone, Metformin-saxagliptin, Metformin-sitagliptin, Sitagliptin-simvastatin
Insulin:
Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane human, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled
Meglitinides:
Nateglinide, Repaglinide
Glucagon-like peptide-1 (GLP1) agonists:
Dulaglutide, Exenatide, Liraglutide, Albiglutide
Sodium glucose cotransporter 2 (SGLT2) inhibitor:
Canagliflozin, Dapagliflozin, Empagliflozin
Sulfonylureas:
Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamide
Thiazolidinediones:
Pioglitazone, Rosiglitazone
Dipeptidyl peptidase-4 (DDP-4) inhibitors:
Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

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Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.
- Claim/encounter data. An antipsychotic medication (Long-Acting Injections Value Set).
- Pharmacy data. Dispensed an antipsychotic medication (Antipsychotic Medications List; Antipsychotic Combination Medications List) on an ambulatory basis.

ANTIPSYCHOTIC MEDICATIONS:
(Antipsychotic Medications List)
Miscellaneous antipsychotic agents:
Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Clozapine, Haloperidol, Iloperidone, Loxapine, Lurasadone, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine, Quetiapine fumarate, Risperidone, Ziprasidone
Phenothiazine antipsychotics:
Chlorpromazine, Fluphenazine, Perphenazine, Prochlorperazine, Thioridazine, Trifluoperazine
Thioxanthenes:
Thiothixene
Long-acting injections:
Aripiprazole, Fluphenazine decanoate, Haloperidol decanoate, Olanzapine, Paliperidone palmitate, Risperidone
(Antipsychotic Combination Medications List)
Psychotherapeutic combinations:
Fluoxetine-olanzapine, Perphenazine-amitriptyline
See corresponding Excel document for the value sets referenced above.

RISK ADJUSTMENT

No risk adjustment or risk stratification
STRATIFICATION
None.

TYPE SCORE
Rate/proportion better quality = higher score

ALGORITHM
Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year.
Step 2. Search for an exclusion in the patient’s history: Exclude patients from the eligible population if they meet the following criteria:
- Patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
- Patients with diabetes during the measurement year or the year prior to the measurement year.
- Patients who had no antipsychotic medications dispensed during the measurement year.
Step 3. Determine the numerator: the number of patients who had a diabetes screening test during the measurement year.
Step 4. Calculate the rate.

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1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

STEWARD
National Committee for Quality Assurance

DESCRIPTION
The percentage of patients 18 – 64 years of age with schizophrenia and cardiovascular disease, who had an LDL-C test during the measurement year.

TYPE
Process

DATA SOURCE
Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system.

LEVEL
Health Plan, Integrated Delivery System, Population : Regional and State

SETTING
Outpatient Services

NUMERATOR STATEMENT
An LDL-C test performed during the measurement year.

NUMERATOR DETAILS
An LDL-C test (LDL-C Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data.
- See corresponding Excel document for the LDL-C Tests Value Set
The organization may use a calculated or direct LDL.

DENOMINATOR STATEMENT
Patients 18-64 years of age as of the end of the measurement year (e.g., December 31) with a diagnosis of schizophrenia and cardiovascular disease.

DENOMINATOR DETAILS
Follow the steps below to identify the eligible population.
Step 1: Identify patients with schizophrenia as those who met at least one of the following criteria during the measurement year:
• At least one acute inpatient encounter with any diagnosis of schizophrenia. Either of the following code combinations meets criteria:
  – BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
Step 1: Identify patients from a BH Inpatient Value Set with a Schizophrenia Value Set.

- At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
  - BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
  - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
  - ED Value Set with Schizophrenia Value Set.
  - BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
  - BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
  - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Schizophrenia Value Set.

Step 2: Identify patients from step 1 who also have cardiovascular disease. Members are identified as having cardiovascular disease in two ways: by event or by diagnosis. The organization must use both methods to identify the eligible population, but a patient need only be identified by one to be included in the measure.

Event. Any of the following during the year prior to the measurement year meet criteria:

- AMI. Discharged from an inpatient setting with an AMI (AMI Value Set). To identify discharges:
  1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  2. Identify the discharge date for the stay.
- CABG. Members who had CABG (CABG Value Set) in any setting.
- PCI. Members who had PCI (PCI Value Set) in any setting (e.g., inpatient, outpatient, ED).

Diagnosis. Identify members with IVD as those who met at least either of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.

- At least one outpatient visit (Outpatient Value Set) with a diagnosis of IVD (IVD Value Set).
- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of IVD (IVD Value Set).

(See corresponding Excel document for the above value sets)

EXCLUSIONS

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

EXCLUSION DETAILS

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).

RISK ADJUSTMENT

No risk adjustment or risk stratification
STRATIFICATION
N/A

TYPE SCORE
Rate/proportion better quality = higher score

ALGORITHM
Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year with a diagnosis of schizophrenia and cardiovascular disease
Step 2. Determine the numerator: the number of patients who had an LDL-C test during the measurement year
Step 3. Calculate the rate.

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1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

STEWARD
National Committee for Quality Assurance

DESCRIPTION
The percentage of patients 18 – 64 years of age with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year.

TYPE
Process
DATA SOURCE
Claims 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 plans via NCQA’s online data submission system.

LEVEL
Health Plan, Integrated Delivery System, Population: Regional and State

SETTING
Outpatient Services

NUMERATOR STATEMENT
One or more HbA1c tests and one or more LDL-C tests performed during the measurement year.

NUMERATOR DETAILS
An HbA1c test (HbA1c Tests Value Set) and an LDL-C test (LDL-C Tests Value Set) performed during the measurement year (on the same or different dates of service), as identified by claim/encounter or automated laboratory data. The patient must have both tests to be included in the numerator. The organization may use a calculated or direct LDL.
See corresponding Excel document for the LDL-C Tests Value Set and the HbA1c Tests Value Set.

DENOMINATOR STATEMENT
Patients age 18-64 years of age as of the end of the measurement year (e.g. December 31) with a schizophrenia and diabetes diagnosis.

DENOMINATOR DETAILS
Follow the steps below to identify the eligible population.
Step 1: Identify members with schizophrenia as those who met at least one of the following criteria during the measurement year:
- At least one acute inpatient encounter, with any diagnosis of schizophrenia. Either of the following code combinations meets criteria:
  - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.
- At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
  - BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
  - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
  - ED Value Set with Schizophrenia Value Set.
  - BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
  - BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
Step 2 Identify members from step 1 who also have diabetes. There are two ways to identify members with diabetes: by claim/encounter data and by pharmacy data. The organization must use both methods to identify the eligible population, but a member need only be identified by one to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

Claim/encounter data. Members who met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years):
- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set), on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.
- At least one acute inpatient encounter (Acute Inpatient Value Set), with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy data. Members who were dispensed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (Diabetes Medications List).
(See corresponding Excel document for the above value sets)

PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List):

Alpha-glucosidase inhibitors:
Acarbose, Miglitol

Amylin analogs:
Pramlintide

Antidiabetic combinations:
Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-linagliptin, Empagliflozin-metformin, Glimepiride-pioglitazone, Glimepiride-rosiglitazone, Glipizide-metformin, Glyburide-metformin, Metformin-metformin, Metformin-pioglitazone, Metformin-rosiglitazone, Metformin-saxagliptin, Metformin-sitagliptin, Sitagliptin-simvastatin

Insulin:
Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane human, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled

Meglitinides:
Nateglinide, Repaglinide

Glucagon-like peptide-1 (GLP1) agonists:
Dulaglutide, Exenatide, Liraglutide, Albiglutide

Sodium glucose cotransporter 2 (SGLT2) inhibitor:
Canagliflozin, Dapagliflozin, Empagliflozin

Sulfonylureas:
Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamide
Thiazolidinediones:
Pioglitazone, Rosiglitazone

Dipeptidyl peptidase-4 (DDP-4) inhibitors:
Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

EXCLUSIONS
Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
Exclude patients who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.

EXCLUSION DETAILS
Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).
Optional exclusion: Exclude patients who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.
If a member was identified as a diabetic based on claim or encounter data, as described in step 2 of S.7, the optional exclusions do not apply because the member had a diagnosis of diabetes.
See corresponding Excel document for the value sets referenced above.

RISK ADJUSTMENT
No risk adjustment or risk stratification

STRATIFICATION
None.

TYPE SCORE
Rate/proportion better quality = higher score

ALGORITHM
Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year
Step 2. Search for an optional exclusion in the patient’s history: Exclude patients from the eligible population if the eligible population if they meet the following criteria:
- Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
- Exclude patients who do not have a diagnosis of diabetes during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or
steroid-induced diabetes during the measurement year or the year prior to the measurement year.

Step 3. Determine the numerator: the number of patients who have one or more HbA1c tests and one or more LDL-C tests performed during the measurement year.

Step 4. Calculate the rate.

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3389 Concurrent Use of Opioids and Benzodiazepines (COB)

STEWARD

PQA, Inc.

DESCRIPTION

The percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines during the measurement year.

A lower rate indicates better performance.

TYPE

Process

DATA SOURCE

Claims Administrative claims: prescription claims, medical claims, Prescription Drug Hierarchical Condition Categories (RxHCCs)
LEVEL

Health Plan

SETTING

Other The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.

NUMERATOR STATEMENT

The number of individuals from the denominator with concurrent use of opioids and benzodiazepines for 30 or more cumulative days during the measurement year.

NUMERATOR DETAILS

The number of individuals from the denominator with:

- 2 or more prescription claims for any benzodiazepine with unique dates of service, AND
- Concurrent use of opioids and benzodiazepines for 30 or more cumulative days.

Complete the steps below to identify individuals with concurrent use of opioids and benzodiazepines:

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

Step 2: Of the population identified in Step 1, determine the total days of overlap (concurrent use) between the opioid and benzodiazepine prescriptions during the measurement year.

- Concurrent use is identified using the dates of service and days’ supply of an individual’s opioid and benzodiazepine prescription drug claims. The days of concurrent use is the sum of the number of days (cumulative) during the measurement year with overlapping days’ supply for an opioid and a benzodiazepine. Exclude days of overlap that occur after the end of the measurement year.

Step 3: Count the number of individuals with concurrent use of opioids and benzodiazepines for 30 or more cumulative days. This is the numerator.

Note: When identifying days’ supply for opioids (or benzodiazepines):

- Exclude any days’ supply that occur after the end of the measurement year.
- Multiple prescription claims with the same date of service: If multiple prescription claims for opioids (or benzodiazepines) are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Table COB-B: Benzodiazepines:

Alprazolam, chlordiazepoxide, clobazam, clonazepam, clorazepate, diazepam, estazolam, flurazepam, lorazepam, midazolam, oxazepam, quazepam, temazepam, triazolam

(note: excludes injectable formulations)

DENOMINATOR STATEMENT

The denominator includes individuals 18 years and older with 2 or more prescription claims for opioids with unique dates of service, for which the sum of the days’ supply is 15 or more days. Individuals with cancer or in hospice are excluded.
DENOMINATOR DETAILS

The denominator includes individuals 18 years and older by the first day of the measurement year with 2 or more prescription claims for opioids with unique dates of service, for which the sum of the days’ supply is 15 or more days. Use Table COB-A: Opioids, below, to identify the opioid medications for the measure.

Complete the steps below to determine the denominator:

Step 1: Identify individuals aged 18 years and older as of the first day of the measurement year

Step 2: Of those identified in step 1, identify individuals meeting the continuous enrollment criteria.

• To be continuously enrolled, an individual may have no more than one gap in enrollment of up to 31 days during the measurement year. When enrollment is verified monthly, the individual may not have more than a 1-month gap in coverage (i.e., an individual whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Step 3: Of those identified in step 2, identify individuals with 2 or more prescription claims for opioids on unique dates of service, for which the sum of the days’ supply is 15 or more days’ supply during the measurement year.

Step 4: Of those identified in step 3, identify individuals where the earliest prescription for an opioid (i.e. Index Prescription Start Date [IPSD]) is 30 or more days from the last day of the measurement year (January 1 through December 2)

Note: When identifying days’ supply for opioids:

• Exclude any days’ supply that occur after the end of the measurement year.

• Multiple prescription claims with the same date of service: If multiple prescription claims for opioids are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Table COB-A: Opioids:

buprenorphine, butorphanol, codeine, dihydrocodeine, fentanyl, hydrocodone, hydromorphone, levorphanol, meperidine, methadone, morphine, opium, oxycodone, oxymorphone, pentazocine, tapentadol, tramadol

(note: excludes injectable formulations; includes prescription opioid cough medications; excludes single-agent and combination buprenorphine products used to treat opioid use disorder (i.e., buprenorphine sublingual tablets, Probuphine® Implant kit subcutaneous implant, and all buprenorphine/naloxone combination products).

EXCLUSIONS

Individuals with cancer or in hospice at any point during the measurement year are excluded from the denominator.

EXCLUSION DETAILS

Hospice exclusion: Exclude any individual in hospice during the measurement year. To identify individuals in hospice:

• Use the hospice indicator from the enrollment database, where available (e.g. Medicare); or

• Use place of service code 34 where a hospice indicator is not available (e.g. Commercial, Medicaid)
Cancer exclusion: Exclude any individuals with cancer during the measurement year. To identify individuals with cancer:

- Using ICD codes, refer to those listed in the file titled, PQA ICD Code Cancer Value Set Feb 2018 and attached in S.2b. The list is based on the American Medical Association-convened Physician Consortium for Performance Improvement Cancer value set (OID: 2.16.840.1.113883.3.526.3.1010). A cancer diagnosis is defined as having at least one claim with any of the listed cancer diagnoses, including primary diagnosis or any other diagnosis fields during the measurement year.
- For Medicare Data, if ICD codes are not available, use Prescription Drug Hierarchical Condition Categories (RxHCCs) 15, 16, 17, 18, 19 for Payment Year 2016 or 2017 to identify cancer exclusions. RxHCCs are available at: https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html

RISK ADJUSTMENT
No risk adjustment or risk stratification

STRATIFICATION
The measure is stratified by the following lines of business for the health plan:

- Commercial
- Medicare
- Medicaid

Medicare Plans are further stratified by Low-Income Subsidy (LIS) status.

LIS is a subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources. Medicare beneficiaries apply for the LIS with the Social Security Administration or their State Medicaid agency.

The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify LIS status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name corresponds with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized Part D coverage.

TYPE SCORE
Rate/proportion better quality = lower score

ALGORITHM
A. Target population (denominator):
Step 1: Identify individuals aged 18 years and older as of the first day of the measurement year
Step 2: Of those identified in step 1, identify individuals meeting the continuous enrollment criteria.
- To be continuously enrolled, an individual may have no more than one gap in enrollment of up to 31 days during the measurement year. When enrollment is verified
monthly, the individual may not have more than a 1-month gap in coverage (i.e., an individual whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Step 3: Of those identified in step 2, identify individuals with 2 or more prescription claims for opioids on unique dates of service, for which the sum of the days’ supply is 15 or more days’ supply during the measurement year.

Step 4: Of those identified in step 3, identify individuals where the earliest prescription for an opioid (i.e. Index Prescription Start Date [IPSD]) is 30 or more days from the last day of the measurement year (January 1 through December 2)

Note: When identifying days’ supply for opioids:

• Exclude any days’ supply that occur after the end of the measurement year.
• Multiple prescription claims with the same date of service: If multiple prescription claims for opioids are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Step 5: Identify individuals with cancer or in hospice during the measurement year.

To identify individuals in hospice:

• Use the hospice indicator from the enrollment database, where available (e.g. Medicare); or
• Use place of service code 34 where a hospice indicator is not available (e.g. Commercial, Medicaid)

To identify individuals with cancer:

• Using ICD codes, refer to those listed in the file titled, PQA ICD Code Cancer Value Set Feb 2018 and attached in S.2b. The list is based on the American Medical Association-convened Physician Consortium for Performance Improvement Cancer value set (OID: 2.16.840.1.113883.3.526.3.1010). A cancer diagnosis is defined as having at least one claim with any of the listed cancer diagnoses, including primary diagnosis or any other diagnosis fields during the measurement year.
• For Medicare Data, if ICD codes are not available, use Prescription Drug Hierarchical Condition Categories (RxHCCs) 15, 16, 17, 18, 19 for Payment Year 2016 or 2017 to identify cancer exclusions. RxHCCs are available at: https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html

Step 6: Exclude individuals with cancer or in hospice (Step 5) from those identified in Step 4. This is the denominator.

B. Numerator Population:

Step 7: From the denominator population (from Step 6), identify individuals with 2 or more prescriptions claims on unique dates of service for any benzodiazepine during the measurement year.

Step 8: Of the population identified in Step 7, determine the total days of overlap (concurrent use) between the opioid and benzodiazepine prescriptions during the measurement year.

• Concurrent use is identified using the dates of service and days’ supply of an individual’s opioid and benzodiazepine prescription drug claims. The days of concurrent use is the sum of the number of days (cumulative) during the measurement year with overlapping days’ supply for an opioid and a benzodiazepine. Exclude days of overlap that occur after the end of the measurement year.
Step 9: Count the number of individuals with concurrent use of opioids and benzodiazepines for 30 or more cumulative days. This is the numerator.

Note: When identifying days’ supply for opioids (or benzodiazepines):
• Exclude any days’ supply that occur after the end of the measurement year.
• Multiple prescription opioid (or benzodiazepine) claims with overlap: For multiple prescription claims for opioids (or benzodiazepines) with overlapping days’ supply, count each day in the measurement year only once toward the denominator. There is no adjustment for early fills or overlapping days’ supply for opioids (or benzodiazepines).

C. Measure Rate:
Step 10: Divide the number of individuals in the numerator (Step 9) by the denominator (Step 6) and multiply by 100. This is the measure rate reported as a percentage.
• Report the rates separately by line of business (e.g. Medicare, Medicaid, Commercial). For Medicare, report rates for low-income subsidy (LIS) and non-LIS populations separately.

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3400 Use of Pharmacotherapy for Opioid Use Disorder (OUD)

STEWARD
Centers for Medicare & Medicaid Services, Centers for Medicaid & CHIP Services

DESCRIPTION
The percentage of Medicaid beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year. The measure will report any medications used in medication-assisted treatment of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

TYPE
Process

DATA SOURCE
Claims Medicaid Alpha-MAX 2014 data: eligible (EL), inpatient (IP), other services (OT), long-term care (LT) and drug (RX) files. The other services file contains facility and individual provider services data. Most notably, it may contain both residential and other stayover service claims data as claims are assigned to MAX claims file types based upon the category of service provided.

LEVEL
Population : Regional and State

SETTING
Emergency Department and Services, Inpatient/Hospital, Outpatient Services
NUMERATOR STATEMENT
Beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year.

NUMERATOR DETAILS
Beneficiaries identified as filling a prescription for or were administered or ordered an FDA-approved medication for OUD, during the 12-month measure year, through pharmacy claims (relevant NDC code) or through relevant HCPCS coding of medical service. Only formulations with an OUD indication (not pain management) are included in measure calculation.

The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

A list of value sets for the measure is attached in the Excel workbook provided for question S.2b. NDC codes listed are codes that were used in testing and are current as of June 2017.

DENOMINATOR STATEMENT
Number of Medicaid beneficiaries with at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year.

DENOMINATOR DETAILS
Medicaid beneficiaries age 18 through 64, enrolled for full 12 months of measurement year, and had at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year. ICD-9 and ICD-10 codes for OUD are provided in the attached Excel file in required format at S.2b.

EXCLUSIONS
None.

EXCLUSION DETAILS
Not applicable.

RISK ADJUSTMENT
No risk adjustment or risk stratification

STRATIFICATION
The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

The NDC pharmacy codes used to identify the FDA-approved medications for OUD are listed in an Excel file attached in S.2b.

TYPE SCORE
Rate/proportion better quality = higher score

ALGORITHM
Step 1: Identify denominator
Identify Medicaid beneficiaries age 18 through 64 years with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (primary or other diagnosis) during the measurement year and continuously enrolled during the measurement year. Age is calculated as of January 1 of the measurement year.

Step 2: Identify the numerator as beneficiaries with evidence of at least one prescription filled, or were administered or ordered an FDA-approved medication for the disorder during the measurement year.

The measure will report any medications used in MAT of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

Step 2A: Identify beneficiaries with evidence of at least one prescription for buprenorphine at any point during the measurement year.

Step 2B: Identify beneficiaries with evidence of at least one prescription for oral naltrexone at any point during the measurement year.

Step 2C: Identify beneficiaries with evidence of at least one prescription for long-acting, injectable naltrexone at any point during the measurement year.

Step 2D: Identify beneficiaries with evidence of at least one prescription for methadone at any point during the measurement year.

Note: Pharmacotherapy for opioid abuse, dependence, or remission prescriptions and procedures, might occur in several files. Similarly, a diagnosis of opioid abuse, dependence, or remission might occur in several files. For example, one claims file may contain injectables while another claims file may contain oral medications. Consequently, pharmacotherapy and opioid abuse, dependence, or remission variables are created separately in each source and then merged by beneficiary ID.

Step 3: Calculate the overall rate by dividing the number of beneficiaries with evidence of at least one prescription (Step 2) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1). Then, calculate rates separately for each of the four medications.

Step 3A: Calculate the buprenorphine prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for buprenorphine during the measurement year (Step 2A) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

Step 3B: Calculate the oral naltrexone prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for oral naltrexone during the measurement year (Step 2B) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

Step 3C: Calculate the long-acting, injectable naltrexone prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for injectable naltrexone during the measurement year (Step 2C) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

Step 3D: Calculate the methadone prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for methadone during the measurement year (Step 2D) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).
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### Appendix E1: Related and Competing Measures (tabular format)

#### Comparison of NQF #0104e and NQF #1365e

<table>
<thead>
<tr>
<th>Measure</th>
<th>0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment</th>
<th>1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Steward</strong></td>
<td>Centers for Medicare and Medicaid Services</td>
<td>PCPI</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified</td>
<td>Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>Process</td>
<td>Process</td>
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<td><strong>Data Source</strong></td>
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<td>Electronic Health Records Not Applicable</td>
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<td></td>
<td>No data collection instrument provided Attachment</td>
<td>No data collection instrument provided Attachment</td>
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<td>0104_MDD_SuicideRisk_ValueSets_2017September29.xlsx</td>
<td>EP_EC_OMS17v6_NQF1365_CAMDD_SuicideRisk_ValueSets.xlsx</td>
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<td><strong>Level</strong></td>
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<td>Clinician: Group/Practice, Clinician: Individual</td>
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<tr>
<td><strong>Setting</strong></td>
<td>Emergency Department and Services, Other, Outpatient Services Behavioral Health Day Treatment</td>
<td>Outpatient Services</td>
</tr>
<tr>
<td><strong>Numerator Statement</strong></td>
<td>Patients with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified</td>
<td>Patient visits with an assessment for suicide risk</td>
</tr>
<tr>
<td><strong>Numerator Details</strong></td>
<td><strong>Time Period for Data Collection:</strong> At every visit where a new diagnosis or recurrent episode of Major Depressive Disorder is identified (initial evaluation during the episode) <strong>Definition:</strong> Suicide risk assessment - Must include questions about the following: 1) Suicidal ideation 2) Patient's intent of initiating a suicide attempt AND, if either is present, 3) Patient plans for a suicide attempt 4) Whether the patient has means for completing suicide <strong>GUIDANCE:</strong> Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped to the concept &quot;Intervention, Performed: Suicide Risk Assessment&quot; included in the numerator logic in the attached HQMF in field S.2a. HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.</td>
<td><strong>Time Period for Data Collection:</strong> At each visit for major depressive disorder during the measurement period. <strong>HQMF eCQM developed and is attached to this submission in field S.2a.</strong> We have provided the following definitions and/or guidance for convenience; please see HQMF eCQM for complete details related to the specification. <strong>NUMERATOR DEFINITION:</strong> The specific type and magnitude of the suicide risk assessment is intended to be at the discretion of the individual clinician and should be specific to the needs of the patient. At a minimum, suicide risk assessment should evaluate: 1. Risk (eg, age, sex, stressors, comorbid conditions, hopelessness, impulsivity) and protective factors (eg, religious belief, concern not to hurt family) that may influence the desire to attempt suicide. 2. Current severity of suicidality. 3. Most severe point of suicidality in episode and lifetime. Low burden tools to track suicidal ideation and behavior such as the Columbia-Suicidal Severity Rating Scale can also be used. <strong>NUMERATOR GUIDANCE:</strong> A suicide risk assessment should be performed at every visit for major depressive disorder during the measurement period. Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped to the concept &quot;Intervention, Performed: Suicide Risk Assessment&quot; included in the numerator logic in the HQMF eCQM attached in field S.2a.</td>
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<td><strong>Denominator Statement</strong></td>
<td>All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD)</td>
<td>All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder</td>
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<tr>
<td><strong>Denominator Details</strong></td>
<td><strong>Time Period for Data Collection:</strong> 12 consecutive months <strong>Guidance:</strong> This measure is an episode-of-care measure and should be reported for each instance of a new or recurrent episode of major depressive disorder (MDD); every new or recurrent episode will count separately in the Initial Population. It is expected that a suicide risk assessment will be completed at the visit during which a new diagnosis is made or at the visit during which a recurrent episode is first identified (ie, at the initial evaluation). For the purposes of this measure, an episode of MDD would be considered to be recurrent if a patient has not had an MDD-related encounter in the past 105 days. If there is a gap of 105 or more days between visits for MDD, that would imply a recurrent episode. The 105-day look-back period is an operational provision and not a clinical recommendation, or definition of relapse, remission, or recurrence. The measure description outlined in the header for this measure states, 'patients aged 18 years and older' while the logic statement states, ‘&gt;= 17 year(s) at: “Measurement Period”’. The logic statement, as written, captures patients who turn 18 years old during the measurement period so that these patients are included in the measure. To ensure all patients with major depressive disorder (MDD) are assessed for suicide risk, there are two clinical quality measures addressing suicide risk assessment; CMS 177 covers children and adolescents aged 6 through 17, and CMS 161 covers the adult population aged 18 years and older. HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.</td>
<td><strong>Time Period for Data Collection:</strong> 12 consecutive months. <strong>HQMF eCQM developed and is attached to this submission in field S.2a.</strong> We have provided the following definitions and/or guidance for convenience; please see HQMF eCQM for complete details related to the specification. <strong>DENOMINATOR DEFINITION:</strong> None <strong>DENOMINATOR GUIDANCE:</strong> This measure is an episode-of-care measure; the level of analysis for this measure is every visit for major depressive disorder during the measurement period. For example, at every visit for MDD, the patient should have a suicide risk assessment.</td>
</tr>
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#### Exclusions

<table>
<thead>
<tr>
<th>Exclusions</th>
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<tbody>
<tr>
<td><strong>Exclusion Details</strong></td>
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Comparison of NQF #0105 and NQF #1880

<table>
<thead>
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<th>Risk Adjustment</th>
<th>No risk adjustment or risk stratification</th>
<th>No risk adjustment or risk stratification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stratification</td>
<td>Consistent with CMS’ Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer and have included these variables as recommended data elements to be collected.</td>
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</tr>
</tbody>
</table>

**Type Score**

| Rate/proportion better quality = higher score | Rate/proportion better quality = higher score |

**Algorithm**

To calculate performance rates:

1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator. If the patient does not meet the numerator, this case represents a quality failure.

**Submission Items**

5.1 Identified measures: 1365 : Child and Adolescent Major Depressive Disorder (MDD) Suicide Risk Assessment

Sa.1 Are specs completely harmonized? No
Sa.2 If not completely harmonized, identify difference, rationale, impact: The guidelines used as evidence in the NQF 1365: Child and Adolescent Major Depressive Disorder (MDD) Suicide Risk Assessment explicitly recommend suicide assessment at every visit for MDD whereas the guidelines used for evidence in this measure do not emphasize this level of assessment frequency.

Sb.1 If competing, why superior or rationale for additive value: Both of these measures (0104 and 1365) were developed by PCPI and updated and harmonized with each other on an annual basis. They are not competing because they are used in different patient populations and have different frequencies of suicide assessment based on their respective evidence.

5.1 Identified measures: 0104 : Adult Major Depressive Disorder (MDD) Suicide Risk Assessment

Sa.1 Are specs completely harmonized? No
Sa.2 If not completely harmonized, identify difference, rationale, impact: Our measure addresses a different target population, children and adolescents with MDD, from the related measures that focus on adults with MDD and patients with bipolar disorder. As a result, the recommended frequency of suicide assessment is different in our measure from the other measures.

Sb.1 If competing, why superior or rationale for additive value: Because our measure emphasizes a different target population and a different type/frequency of assessment, we feel multiple measures are justified to address suicide risk assessment differently in different high-risk populations.

**Steward**

| National Committee for Quality Assurance | National Committee for Quality Assurance |

**Description**

- The percentage of members 18 years of age and older who were treated antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported.
  - a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).
  - b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).

- The percentage of members 18 years of age and older who were treated mood stabilizer medications and had a diagnosis of bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).

**Type**

- Process

**Data Source**

- Claims 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 plans via the Interactive Data Submission System (IDSS) portal. No data collection instrument provided Attachment 0105_AMM_Value_Sets_updated_4.11.18.xlsx

- Claims For measure calculation in the Medicare product line, the following Medicare files were required:
  - Denominator tables
  - Prescription drug benefit (Part D) coverage tables
  - Beneficiary file
  - Institutional claims (Part A)
  - Non-institutional claims (Part B)—physician carrier/non-DME
  - Prescription drug benefit (Part D) claims
  - For ACO attribution, the following were required:
    - Denominator tables for Parts A and B enrollment
    - Prescription drug benefit (Part D) coverage tables
    - Beneficiary file
    - Institutional claims (Part A)
    - Non-institutional claims (Part B)—physician carrier/non-DME

**Comparison of NQF #0105 and NQF #1880**

<table>
<thead>
<tr>
<th>Steward</th>
<th>National Committee for Quality Assurance</th>
<th>National Committee for Quality Assurance</th>
</tr>
</thead>
<tbody>
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    - Beneficiary file
    - Institutional claims (Part A)
    - Non-institutional claims (Part B)—physician carrier/non-DME |

**0105 Antidepressant Medication Management (AMM)**

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
• Prescription drug benefit (Part D) claims
  • For physician group attribution, the following were required:
    • Non-institutional claims (Part B)—physician carrier/non-DME
    • Denominator tables to determine individual enrollment
    • Beneficiary file or coverage table to determine hospice benefit and
      Medicare as secondary payer status
    • CMS physician and physician specialty tables
    • National Plan and Provider Enumeration System (NPPES) database

No data collection instrument provided Attachment
NQF_1880_Code_Tables_2018_Final.xlsx

Level  
Health Plan  
Clinician: Group/Practice, Health Plan, Integrated Delivery System,  
Population: Regional and State

Setting  
Outpatient Services  
Outpatient Services

Numerator Statement  
Adults 18 years of age and older who were newly treated  
with antidepressant medication, had a diagnosis of major  
depression, and who remained on an antidepressant  
medication treatment.

Individuals with bipolar I disorder who had at least two prescription drug  
claims for mood stabilizer medications and have a PDC of at least 0.8 for  
mood stabilizer medications.

Numerator Details  
a) Effective Acute Phase Treatment: At least 84 days (12  
weeks) of treatment with antidepressant medication (Table  
AMM-C) during the 114-day period following the Index  
Prescription Start Date (IPSD) (115 total days). This allows  
gaps in medication treatment up to a total of 31 days during  
the 115-day period. Gaps can include either washout period  
gaps to change medication or treatment gaps to refill the  
same medication.

b) Effective Continuation Phase Treatment: At least 180 days  
(6 months) of continuous treatment with antidepressant  
medication (Table AMM-C) during the 231-day period  
following the IPSD (232 total days). This allows gaps in  
medication treatment up to a total of 52 days during the 232-  
day period. Gaps can include either washout period gaps to  
change medication or treatment gaps to refill the same  
medication.

TABLE AMM-C: ANTIDEPRESSANT MEDICATIONS
Family of antidepressants: Bupropion, Vilazodone, Vortioxetine
Monoamine oxidase inhibitors: Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine
Phenylpiperazine antidepressants: Nefazodone, Trazodone
Tricyclic antidepressants: Amitriptyline, Chlorpromazine, Imipramine
Tetracyclic antidepressants: Maprotiline, Mirtazapine
SNRI antidepressants: Duloxetine, Venlafaxine
SSRIs: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine
SSRIs: Nortriptyline, Paroxetine, Sertraline
Tryptophan and tryptamine derivatives: Tryptophan

d) Effective Acute Phase Treatment: At least 84 days (12  
weeks) of treatment with antidepressant medication (Table  
AMM-C) during the 114-day period following the Index  
Prescription Start Date (IPSD) (115 total days). This allows  
gaps in medication treatment up to a total of 31 days during  
the 115-day period. Gaps can include either washout period  
gaps to change medication or treatment gaps to refill the  
same medication.

b) Effective Continuation Phase Treatment: At least 180 days  
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Tricyclic antidepressants: Amitriptyline, Chlorpromazine, Imipramine
Tetracyclic antidepressants: Maprotiline, Mirtazapine
SNRI antidepressants: Duloxetine, Venlafaxine
SSRIs: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine
SSRIs: Nortriptyline, Paroxetine, Sertraline
Tryptophan and tryptamine derivatives: Tryptophan

The numerator is defined as individuals with a PDC of 0.8 or greater.

The PDC is calculated as follows:

PDC NUMERATOR

The PDC numerator is the sum of the days covered by the days’ supply of  
all prescription drug claims for mood stabilizer medications. The period  
covered by the PDC starts on the day the first prescription is filled (index  
date) and lasts through the end of the measurement period, or death,  
whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name)  
on the same date of service, keep the claim with the largest days' supply.  
If claims for the same drug (generic name) overlap, then adjust the  
prescription start date to be the day after the previous fill has ended.

PDC DENOMINATOR

The PDC denominator is the number of days from the first prescription  
drug claim date through the end of the measurement period, or death  
date, whichever comes first.

Denominator Statement  
Patients 18 years of age and older with a diagnosis of major  
depression and were newly treated with antidepressant  
medication.

Individuals at least 18 years of age as of the beginning of the  
measurement period with bipolar I disorder and at least two prescription  
drug claims for mood stabilizer medications during the measurement  
period (12 consecutive months).

Denominator Details  
Step 1: Determine the Index Prescription Start Date (IPSD).  
Identify the date of the earliest dispensing event for an  
antidepressant medication (Table AMM-C) during the Intake  
Period (The 12-month window starting on May 1 of the year  
prior to the measurement year and ending on April 30 of the  
measurement year).

Step 2: Required exclusions: Exclude patients who did not  
have a diagnosis of major depression in an inpatient,  
outpatient, ED, telehealth, intensive outpatient or partial  
hospitalization setting during the 121-day period from 60  
days prior to the IPSD, through the IPSD and the 60 days after  
the IPSD. Patients who meet any of the following criteria  
remain in the eligible population:

• An outpatient visit, ED visit, telehealth, intensive outpatient  
  encounter or partial hospitalization with any diagnosis of  
  major depression. Either of the following code combinations  
  meets criteria:
    – AMM Stand Alone Visits Value Set with Major Depression  
      Value Set, with or without a telehealth modifier (Telehealth  
      Modifier Value Set).
    – AMM Visits Value Set with AMM POS Value Set and Major  
      Depression Value Set, with or without a telehealth modifier  
      (Telehealth Modifier Value Set).
    • Telephone Visits Value Set with Major Depression Value  
      Set.
    • An ED visit (ED Value Set) with any diagnosis of major  
      depression (Major Depression Value Set).

Individuals at least 18 years of age as of the beginning of the  
measurement period with bipolar I disorder and at least two prescription  
drug claims for mood stabilizer medications during the measurement  
period (12 consecutive months).

Target population meets the following conditions:

1. Continuously enrolled in Medicare Part D with no more than a one- 
   month gap in enrollment during the measurement year;
2. Continuously enrolled in Medicare Part A and Part B with no more than  
   a one-month gap in Part A enrollment and no more than a one-month gap  
   in Part B enrollment during the measurement year; and,
3. No more than one month of HMO (Health Maintenance Organization)  
   enrollment during the measurement year.

IDENTIFICATION OF BIPOLAR I DISORDER

Individuals with bipolar I disorder are identified by having a diagnosis of  
bipolar I disorder within the inpatient or outpatient claims data.  
Individuals must have:

At least two encounters with a diagnosis of bipolar I disorder with different  
dates of service in an outpatient setting, emergency department  
setting, or non-acute inpatient setting during the measurement period;  
OR

At least one encounter with a diagnosis of bipolar I disorder in an acute  
inpatient setting during the measurement period.

CODES USED TO IDENTIFY BIPOLAR I DISORDER

Codes used to identify bipolar I disorder are included in the attached Excel  
worksheet of codes (NQF_1880_Code Tables_2018 Final) under the tab  
NQF_1880_Inpatient__DME.

TABLE 1. BIPOLAR I DISORDER DIAGNOSIS

ICD-9-CM: 296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7
105 Antidepressant Medication Management (AMM) 1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

- An acute or nonacute inpatient stay discharge with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  - First, identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  - Second, identify the admission and discharge dates for the stay. Either an admission or discharge during the required time frame meets criteria.

Step 3: Test for Negative Medication History. Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 4: Calculate continuous enrollment. Patients must be continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

<table>
<thead>
<tr>
<th>TABLE AMM-C: ANTIDEPRESSANT MEDICATIONS</th>
</tr>
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<tr>
<td>Monoamine oxidase inhibitors: Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine</td>
</tr>
<tr>
<td>Phenylpiperazine antidepressants: Nefazodone, Trazodone</td>
</tr>
<tr>
<td>Psychotherapeutic combinations: Amitriptyline-chlordiazepoxide, Amitriptyline-perphenazine, Fluoxetine-olanzapine</td>
</tr>
<tr>
<td>SNRI antidepressants: Desvenlafaxine, Duloxetine, Nortriptyline, Protriptyline, Trimipramine</td>
</tr>
<tr>
<td>SSRI antidepressants: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine</td>
</tr>
<tr>
<td>Tetracyclic antidepressants: Maprotiline, Mirtazapine</td>
</tr>
<tr>
<td>Tricyclic antidepressants: Amitriptyline, Clomipramine, Desipramine, Doxepin (&gt;6mg), Imipramine, Nortriptyline, amitriptyline, clomipramine, desipramine, doxepin (&gt;6mg), imipramine, nortriptyline, amitriptyline, clomipramine, desipramine, doxepin (&gt;6mg), imipramine, nortriptyline</td>
</tr>
</tbody>
</table>

*See corresponding Excel file for value sets referenced above.

F31.71, F31.72, F31.73, F31.74, F31.75, F31.76, F31.77, F31.78, F31.89, F31.9

CODES USED TO IDENTIFY ENCOUNTER TYPE

Codes used to identify encounters are under tab NQF_1880_Encounter_types.

| TABLE 2.1. OUTPATIENT SETTING |

| CODES USED TO IDENTIFY ENCOUNTER TYPE |

UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90851, 90863, 90867-90870, 90875, 90876, 90880, 99219-99233, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

Place of Service (POS): 03, 05, 07, 09, 11, 12, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72

TABLE 2.2. EMERGENCY DEPARTMENT SETTING

CPT: 99281-99285

UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90851, 90863, 90867-90870, 90875, 90876, 99291

WITH

POS: 23

TABLE 2.3. NON-ACUTE INPATIENT SETTING

CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337

HCPCS: H0017-H0019, T2048

UB-92 revenue: 0118, 0128, 0138, 0145, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0600-0603, 0669, 1000, 1001, 1003-1005

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90851, 90863, 90867-90870, 90875, 90876, 99291

WITH

POS: 31, 32, 56

TABLE 2.4. ACUTE INPATIENT SETTING

UB-92 revenue: 0100, 0101, 0100-0104, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0270-0274, 0279, 0987

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90851, 90863, 90867-90870, 90875, 90876, 99291

WITH

POS: 21, 51

IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR MOOD STABILIZER MEDICATION

Individuals with at least two prescription drug claims for any of the following mood stabilizer medications (Table 3: Mood Stabilizer Medications) or long-acting injectable antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1880_Mood_Stabilizers of the attached Excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

MOOD STABILIZER MEDICATIONS

TABLE 3. MOOD STABILIZER MEDICATIONS

Active ingredients listed below are limited to oral, buccal, sublingual, and translingual formulations only.

Anticonvulsants: carbamazepine, divalproex sodium, lamotrigine, valproic acid

Atypical Antipsychotics: aripiprazole, asenapine, cariprazine, lurasidone, olanzapine, quetiapine, quetiapine fumarate (Seroquel), risperidone
TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS

The following are the long-acting (depot) injectable antipsychotic medications. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

Atypical Antipsychotic Medications:
- aripiprazole (J0401)
- risperidone microspheres (J2794)

Note: Since the days' supply variable is not reliable for long-acting injections in administrative data, the days' supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
- aripiprazole (J0401) – 28 days' supply
- risperidone microspheres (J2794) – 14 days' supply

**TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS**

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- aripiprazole (J0401) – 28 days' supply
- risperidone microspheres (J2794) – 14 days' supply

**Exclusions**

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.

Exclude patients who filled a prescription for an antidepressant 105 days prior to the IPSD.

**Exclusion Details**

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).

Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Patients who meet any of the following criteria remain in the eligible population:

- An outpatient visit, ED visit, telehealth, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  - AMM Stand Alone Visits Value Set with Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
  - AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
- Telephone Visits Value Set with Major Depression Value Set.
- An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).
- An acute or nonacute inpatient stay with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  - First, identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  - Second, identify the admission and discharge dates for the stay. Either an admission or discharge during the required time frame meets criteria.

Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

*See corresponding Excel file for value sets referenced above.

**Risk Adjustment**

No risk adjustment or risk stratification

**Stratification**

NCQA asks that health plans collect the measure data for each of the three product lines each year (i.e. commercial, Medicare, Medicaid) if applicable.

Depending on the operational use of the measure, measure results may be stratified by:

- State
- Accountable Care Organization (ACOs)*
- Plan
- Physician Group**
- Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
Step 1: Determine the eligible population, or denominator.

Step 1a: Determine the Index Prescription Start Date (IPSD). Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period (the 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year).

Step 1b: Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.

Step 1c: Test for Negative Medication History. Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 1d: Calculate continuous enrollment. Exclude patients who are not continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

Step 2: Determine the numerators for the two reported rates.

Step 2a (Effective Acute Phase Treatment): Identify at least 84 days (12 weeks) of continuous treatment with antidepressant medication (Table AMM-C) during the 114-day period following the Index Prescription Start Date (IPSD) (115 total days). This allows gaps in medication treatment up to a total of 31 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Step 2b (Effective Continuation Phase Treatment): Identify at least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) during the 232-day period following the IPSD. Continuous treatment allows gaps in medication treatment up to a total of 52 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Step 3: Calculate the two reported rates by dividing both the numerators from steps 2a and 2b by the denominator in step 1d.

**Algorithm**

| Algorithm | Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D. Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months). CREATE DENOMINATOR: 1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period. 2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period. 3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only). 4. Of those individuals identified in Step 3, keep those who had: At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period; OR At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period. 5. Of the individuals identified in Step 4, extract Medicare Part D claims for a mood stabilizer during the measurement period. Attach the drug ID and the generic name to the dataset. 6. For the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period. Numerator: Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications. CREATE NUMERATOR: For the individuals in the denominator, calculate the PDC for each individual according to the following methods: 1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for a mood stabilizer medication in the measurement period. 2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply. a. Sort and de-duplicate Medicare Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply. b. Calculate the number of days covered by mood stabilizer therapy per individual. i. For prescription drug 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. ii. If claims for the same drug (generic name) overlap, then adjust the latest prescription start date to be the day after the previous fill has ended. iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date. 3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1. An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is also available at the URL: http://www2.sas.com/proceedings/forum2007/143-2007.pdf. 4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator. PHYSICIAN GROUP ATTRIBUTION: Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Rate/proportion better quality = higher score
1. Identify Physician and Medical Groups

   a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.
   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.
   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

2. Identify TINs that are not solo practices.

   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

3. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

4. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)

   a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.
   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.
   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.

   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.

9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.

   a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
   b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims

10. Create individual sample.

   a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
   b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
      • A = working-age individual/spouse with an employer group health plan (EGHP)
      • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
      • G = working disabled for any month of the year
   c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
   d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
   e. Exclude individuals who died during the measurement year.

11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.

   a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
   b. Exclude claims with no npi_prfrmg.
   c. Attach medical group TIN to claims by NPI.

III. Patient Attribution

12. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and...
<table>
<thead>
<tr>
<th>Provider Specialties and Specialty Codes</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>01—General practice*</td>
<td>02—General surgery</td>
<td></td>
</tr>
<tr>
<td>03—Allergy/immunology</td>
<td>04—Otolaryngology</td>
<td></td>
</tr>
<tr>
<td>05—Anesthesiology</td>
<td>06—Cardiology</td>
<td></td>
</tr>
<tr>
<td>07—Dermatology</td>
<td>08—Family practice*</td>
<td></td>
</tr>
<tr>
<td>09—Interventional pain management</td>
<td>10—Gastroenterology</td>
<td></td>
</tr>
<tr>
<td>11—Internal medicine*</td>
<td>12—Osteopathic manipulative therapy</td>
<td></td>
</tr>
<tr>
<td>13—Neurology</td>
<td>14—Neurosurgery</td>
<td></td>
</tr>
<tr>
<td>16—Obstetrics/gynecology*</td>
<td>18—Ophthalmology</td>
<td></td>
</tr>
<tr>
<td>20—Orthopedic surgery</td>
<td>22—Pathology</td>
<td></td>
</tr>
<tr>
<td>24—Plastic and reconstructive surgery</td>
<td>25—Physical medicine and rehabilitation</td>
<td></td>
</tr>
<tr>
<td>33—Thoracic surgery</td>
<td>34—Urology</td>
<td></td>
</tr>
<tr>
<td>36—Nuclear medicine</td>
<td>37—Pediatric medicine</td>
<td></td>
</tr>
<tr>
<td>38—Geriatric medicine*</td>
<td>39—Nephrology</td>
<td></td>
</tr>
<tr>
<td>40—Hand surgery</td>
<td>44—Infectious disease</td>
<td></td>
</tr>
<tr>
<td>46—Endocrinology</td>
<td>50—Nurse practitioner*</td>
<td></td>
</tr>
<tr>
<td>66—Rheumatology</td>
<td>70—Multi-specialty clinic or group practice*</td>
<td></td>
</tr>
<tr>
<td>72—Pain management</td>
<td>76—Peripheral vascular disease</td>
<td></td>
</tr>
<tr>
<td>77—Vascular surgery</td>
<td>78—Cardiac surgery</td>
<td></td>
</tr>
<tr>
<td>79—Addiction medicine</td>
<td>81—Critical care (intensivists)</td>
<td></td>
</tr>
<tr>
<td>82—Hematology</td>
<td>83—Hematology/oncology</td>
<td></td>
</tr>
<tr>
<td>84—Preventive medicine*</td>
<td>85—Maxillofacial surgery</td>
<td></td>
</tr>
<tr>
<td>86—Neuropsychiatry*</td>
<td>89—Medical oncology</td>
<td></td>
</tr>
<tr>
<td>91—Surgical oncology</td>
<td>92—Radiation oncology</td>
<td></td>
</tr>
<tr>
<td>93—Emergency medicine</td>
<td>94—Interventional radiology</td>
<td></td>
</tr>
<tr>
<td>97—Physician assistant*</td>
<td>98—Gynecologist/oncologist</td>
<td></td>
</tr>
<tr>
<td>99—Unknown physician specialty</td>
<td>Other—NA</td>
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</tr>
<tr>
<td>*Provider specialty codes specific to this measure</td>
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<td>Submission Items</td>
<td>O105 Antidepressant Medication Management (AMM)</td>
<td>1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Sb.1 If competing, why superior or rationale for additive value:</td>
<td>N/A</td>
<td>This measure does not address both the same measure focus and population as another NQF-endorsed measure.</td>
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<tr>
<td>Sb.2 If not completely harmonized, identify difference, rationale, impact:</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Sb.1 If competing, why superior or rationale for additive value:</td>
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<td></td>
</tr>
<tr>
<td>5.1 Identified measures:</td>
<td>0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease</td>
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<tr>
<td>0542 : Adherence to Chronic Medications</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0545 : Adherence to Statins for Individuals with Diabetes Mellitus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category</td>
<td></td>
<td></td>
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<tr>
<td>0580 : Bipolar antimanic agent</td>
<td></td>
<td></td>
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<tr>
<td>0109 : Bipolar Disorder and Major Depression: Appraisal for Manic or hypomanic behaviors</td>
<td></td>
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<tr>
<td>0110 : Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use</td>
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<tr>
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<tr>
<td>0112 : Bipolar Disorder: Level-of-function evaluation</td>
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<td></td>
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<tr>
<td>0003 : Bipolar Disorder: Assessment for diabetes</td>
<td></td>
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<tr>
<td>1879 : Adherence to Antipsychotic Medications for Individuals with Schizophrenia</td>
<td></td>
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<tr>
<td>1927 : Cardiovascular Health Screening for People With Schizophrenia or Bipolar Disorder Who Are Prescribed Antipsychotic Medications</td>
<td></td>
<td></td>
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<tr>
<td>1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5a.1 Are specs completely harmonized?</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>5a.2 If not completely harmonized, identify difference, rationale, impact:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The measure specifications are harmonized with the related measure, Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879) and the NCQA version of the same measure (Adherence to Antipsychotic Medications for Individuals with Schizophrenia), where possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in all three measures. The methodology used to identify the denominator population is also calculated the same in all three measures, with the exception of the clinical conditions which is the target of the measure. The data collection burden is identical for the measures. The only differences between Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879), and the related NCQA measure are: (1) the clinical codes used to identify the different populations in each measure (NQF #1880 – individuals with bipolar I disorder; NQF #1879 and NCQA measure – individuals with schizophrenia); (2) the medications included in each measure (NQF #1880 – mood stabilizers; NQF #1879 and the NCQA measure – antipsychotics); and, (3) an exclusion for dementia which is included in NQF #1879 and the NCQA measure but not in NQF #1880. The rationale for these difference is due to the different clinical focus of each measure. There is no impact on interpretability since the measures clearly identify the disparate clinical focus. During development the measure developers worked to harmonize this measure with other measures which were NQF-endorsed at the time of development. The section below is from the original submission of the measure for initial endorsement and refers to measures which are no longer NQF-endorsed. We are including this language to demonstrate the efforts of the measure developers to harmonize this measure with other measures. MEASURES WITH WHICH THE MEASURE IS HARMONIZED. The measure has been harmonized where feasible with NQF #0542, #0543, #0545, #0541, #1879, #1927, and #1932 MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED. The measure specifications of the measure are not harmonized with the following NQF-endorsed measures that have the same measure focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent. DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0580. One NQF-endorsed measure (NQF #0580) focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. RATIONALE. This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# #0580) is linked to a one-time prescription for mood stabilizer treatment. IMPACT ON INTERPRETABILITY AND DATA COLLECTION BURDEN. Differences have not been identified concerning the data collection burden between Measure 1880 and Measure 0580. However, interpretability for Measure 1880 (as compared to NQF #0580) is improved because Measure 1880 focuses on adherence rather than a single prescription, and Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS. Sb.1 If competing, why superior or rationale for additive value: This measure does not address both the same measure focus and population as another NQF-endorsed measure.</td>
<td>5.1 Identified measures:</td>
<td>0580 : Adherence to Chronic Medications</td>
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<tr>
<td>Steward</td>
<td>Description</td>
<td>Type</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
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</tr>
<tr>
<td>Centers for Medicare &amp; Medicaid Services, Centers for Medicaid &amp; CHIP Services</td>
<td>Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months).</td>
<td>Process</td>
</tr>
<tr>
<td>National Committee for Quality Assurance</td>
<td>Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).</td>
<td>Process</td>
</tr>
</tbody>
</table>

### Numerator Statement

- **1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
  - Denominator tables to determine individual enrollment
  - Prescription drug benefit (Part D) coverage tables
  - Beneficiary file
  - Institutional claims (Part A)
  - Non-institutional claims (Part B)—physician carrier/non-DME (durable medical equipment)
  - Prescription drug benefit (Part D) claims
  - Centers for Medicare and Medicaid Services (CMS) physician and physician specialty tables
  - National Plan and Provider Enumeration System (NPPES) database
  - No data collection instrument provided
  - Attachment NQF_1879_Code_Tables_2018_Final.xlsx

- **1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
  - Denominator tables
  - Prescription drug benefit (Part D) coverage tables
  - Beneficiary file
  - Institutional claims (Part A)
  - Non-institutional claims (Part B)—physician carrier/non-DME
  - Prescription drug benefit (Part D) claims
  - For ACO attribution, the following were required:
    - Denominator tables for Parts A and B enrollment
    - Prescription drug benefit (Part D) coverage tables
    - Beneficiary file
    - Institutional claims (Part A)
    - Non-institutional claims (Part B)—physician carrier/non-DME
    - Prescription drug benefit (Part D) claims
  - For physician group attribution, the following were required:
    - Non-institutional claims (Part B)—physician carrier/non-DME
    - Denominator tables to determine individual enrollment
    - Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
    - CMS physician and physician specialty tables
    - National Plan and Provider Enumeration System (NPPES) database
    - No data collection instrument provided
    - Attachment NQF_1880_Code_Tables_2018_Final.xlsx

- **0541 Proportion of Days-Covered (PDC): 3 Rates by Therapeutic Category**
  - Denominator tables
  - Prescription drug benefit (Part D) coverage tables
  - Beneficiary file
  - Institutional claims (Part A)
  - Non-institutional claims (Part B)—physician carrier/non-DME
  - Prescription drug benefit (Part D) claims
  - For ACO attribution, the following were required:
    - Denominator tables for Parts A and B enrollment
    - Prescription drug benefit (Part D) coverage tables
    - Beneficiary file
    - Institutional claims (Part A)
    - Non-institutional claims (Part B)—physician carrier/non-DME
    - Prescription drug benefit (Part D) claims
  - For physician group attribution, the following were required:
    - Non-institutional claims (Part B)—physician carrier/non-DME
    - Denominator tables to determine individual enrollment
    - Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
    - CMS physician and physician specialty tables
    - National Plan and Provider Enumeration System (NPPES) database
    - No data collection instrument provided
    - Attachment NQF_1879_Code_Tables_2018_Final.xlsx

**Data Source**

- **1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
  - The data source for the measure calculation required the following Medicare files depending on the level of accountability where the measure is being used:
    - Medicare claims file
    - Beneficiary file
    - Physician specialty file
    - Denominator file
  - The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Renin Angiotensin System (RAS) Antagonists, Diabetes Medications, Statins. A higher score indicates better quality.

- **1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
  - The data source for the measure calculation required the following Medicare files depending on the level of accountability where the measure is being used:
    - Medicare claims file
    - Beneficiary file
    - Physician specialty file
    - Denominator file
  - The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Renin Angiotensin System (RAS) Antagonists, Diabetes Medications, Statins. A higher score indicates better quality.

- **0541 Proportion of Days-Covered (PDC): 3 Rates by Therapeutic Category**
  - The data source for the measure calculation required the following Medicare files depending on the level of accountability where the measure is being used:
    - Medicare claims file
    - Beneficiary file
    - Physician specialty file
    - Denominator file
  - The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Renin Angiotensin System (RAS) Antagonists, Diabetes Medications, Statins. A higher score indicates better quality.

**Level**

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

**Setting**

- **Outpatient Services**

**Numerator Statement**

- **1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
  - Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

- **1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
  - Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

- **0541 Proportion of Days-Covered (PDC): 3 Rates by Therapeutic Category**
  - The number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold.

  **Step 1:** Determine the patient's treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death.

  **Step 2:** Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

  **Step 3:** Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.
The numerator is defined as individuals with a PDC of 0.8 or greater. The PDC is calculated as follows:

**PDC NUMERATOR**

The PDC numerator is the sum of the days covered by the days' supply of all prescription drug claims for all antipsychotic medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescription drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days' supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

**PDC DENOMINATOR**

The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

The numerator is defined as individuals with a PDC of 0.8 or greater. The PDC is calculated as follows:

**PDC NUMERATOR**

The PDC numerator is the sum of the days covered by the days' supply of all prescription drug claims for all mood stabilizer medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days' supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

**PDC DENOMINATOR**

The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

The number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold.

Step 1: Determine the patient's treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death.

Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of combination product to another combination product where a least one of the drugs from the target therapeutic class is common.

**RENIN ANGIOTENSIN SYSTEM (RAS) ANTAGONISTS**: aliskiren, candesartan, eprosartan, irbesartan, losartan, olmesartan, telmisartan, valsartan, azilsartan, benazepril, captopril, enalapril, fosinopril, lisinopril, moexipril, perindopril, quinapril, ramipril, trandolapril, amlopidine & benazepril, benazepril & HCTZ, captopril & HCTZ, enalapril & HCTZ, fosinopril & HCTZ, lisinopril & HCTZ, moexipril & HCTZ, perindopril & amlopidine, quinapril & HCTZ, trandolapril & verapamil HCL, candesartan & HCTZ, eprosartan & HCTZ, telmisartan & amlopidine, nebivolol & valsartan, irbesartan & HCTZ, losartan & HCTZ, amlopidine & olmesartan, azilsartan & chlorothalidone, olmesartan & HCTZ, telmisartan & HCTZ, olmesartan & amlopidine & HCTZ, valsartan & HCTZ, amlopidine & valsartan, olmesartan & HCTZ, aliskiren & amlopidine, aliskiren & amlopidine & HCTZ, aliskiren & HCTZ, DIABETES MEDICATIONS: (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-IV Inhibitors, Incretin Mimetic Agents, Meglitinides, Sodium glucose co-transporter2 (SGLT2) inhibitors and combination products that include these medications) metformin, glipizide & metformin, glyburide & metformin, chlorpropamide, gliclazide, glipizide, glyburide, tolazamide, tolbutamide, pioglitazone, rosiglitazone, rosiglitazone & metformin, rosiglitazone & glimepiride, pioglitazone & metformin, pioglitazone & glimepiride, zoglitin & pioglitazone, sitagliptin, linagliptin,
Denominator Statement

Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months).

Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year.

For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the treatment period. Exclude any patient with ESRD

For RASA rate only: Exclude any patient with one or more prescription claims for sacubitril/valsartan during the treatment period. Exclude any patient with ESRD.

Denominator Details

Target population meets the following conditions:

1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement period; and,
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement period; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement period.

IDENTIFICATION OF SCHIZOPHRENIA

Individuals with schizophrenia or schizoaffective disorder are identified by having a diagnosis of schizophrenia within the inpatient or outpatient claims data. Individuals must have:

At least two encounters with a diagnosis of schizophrenia or schizoaffective disorder during different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period; and,

At least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period.

CODES USED TO IDENTIFY SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER DIAGNOSIS

Codes used to identify schizophrenia or schizoaffective disorder are included in the attached excel worksheet of codes (NQF_1879_Schizophrenia) under the tab NQF_1879_Schizophrenia.

Table 1: Schizophrenia or Schizoaffective Disorder Diagnosis

ICD-9-CM: 295.xx


CODES USED TO IDENTIFY ENCOUNTER TYPE:

Codes used to identify encounters are under tab NQF_1879_Encounter_types.

Table 2: Outpatient Setting
Prior to the beginning of the measurement products are excluded from National Drug Codes (NDC)...

### Table 4: Long-acting injectable antipsychotic Antipsychotic Medications

<table>
<thead>
<tr>
<th>POS: 31, 32, 56</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99232, 99231-99233, 99239, 99251-99255, 99291</td>
</tr>
</tbody>
</table>

**WITH**

- Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 73, 72

**Table 2.2: Emergency Department Setting**

<table>
<thead>
<tr>
<th>CPT: 99281-99285</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB-92 revenue: 0450, 0451, 0452, 0456, 0489, 0981</td>
</tr>
</tbody>
</table>

**WITH**

- Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 73, 72

**Table 2.3: Acute Inpatient Setting**

<table>
<thead>
<tr>
<th>CPT: 99504-99310, 99315, 99316, 99318, 99324-99328, 99334-99337</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPCPs: H0017-H0019, T2048</td>
</tr>
</tbody>
</table>

**UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0254, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005 |

**OR**

| CPT: 99701, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90892 |

**WITH**

- Place of Service (POS): 31, 32, 56

**Table 2.4: Acute Inpatient Setting**

| UB-92 revenue: 0100, 0101, 0102, 0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0270-0274, 0279, 0987 |

**OR**

| CPT: 99701, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90892 |

**WITH**

- Place of Service (POS): 31, 32, 56

**Table 2.1: OUTPATIENT SETTING**

**Current Procedural Terminology (CPT):**

| UB-92 revenue: 0100, 0101, 0102, 0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0270-0274, 0279, 0987 |

**OR**

| CPT: 99701, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90892 |

**WITH**

- Place of Service (POS): 31, 32, 56

**Table 2.2: EMERGENCY DEPARTMENT SETTING**

<table>
<thead>
<tr>
<th>CPT: 99281-99285</th>
</tr>
</thead>
<tbody>
<tr>
<td>UB-92 revenue: 0450, 0451, 0452, 0456, 0495, 0981</td>
</tr>
</tbody>
</table>

**OR**

| CPT: 99701, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90892 |

**WITH**

- Place of Service (POS): 31, 32, 56

**Table 2.3: NON-ACUTE INPATIENT SETTING**

<table>
<thead>
<tr>
<th>CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337</th>
</tr>
</thead>
<tbody>
<tr>
<td>HPCPs: H0017-H0019, T2048</td>
</tr>
</tbody>
</table>

**UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0254, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005 |

**OR**

| CPT: 99701, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90892 |

**WITH**

- Place of Service (POS): 31, 32, 56

**Table 2.4: ACUTE INPATIENT SETTING**

| UB-92 revenue: 0200, 0101, 0110-0114, 0119-0124, 0129-0134, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0270-0274, 0279, 0987 |

**OR**

| CPT: 99701, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90892 |

**WITH**

- Place of Service (POS): 31, 32, 56

**Table 2.5: Identification of the attached excel workbook.**

**Exenatide, liraglutide, nateglinide, repaglinide, repaglinide & metformin, canagliflozin, alogliptin & metformin, empagliflozin & linagliptin, dulaglutide, liraglutide, lixisenatide, albiglutide, empagliflozin, dapagliflozin, dapagliflozin & metformin, empagliflozin & metformin, empagliflozin & metformin.**

**STATINS: lovastatin, rosuvastatin, fluvastatin, atorvastatin, pravastatin, pitavastatin, simvastatin, niacin & lovastatin, atorvastatin & amiodipine, niacin & simvastatin, sitagliptin & simvastatin, ezetimibe & simvastatin, ezetimibe & atorvastatin.**
### TABLE 3: ORAL ANTIPSYCHOTIC MEDICATIONS

The following are oral formulations only.

**Typical Antipsychotic Medications:**
- chlorpromazine
- fluphenazine
- haloperidol
- loxapine
- molindone
- perphenazine
- prochlorperazine
- thioridazine
- thiothixene
- trifluoperazine

**Atypical Antipsychotic Medications:**
- aripiprazole
- asenapine
- brexiprazole
- cariprazine
- clozapine
- iloperidone
- lurasidone
- olanzapine
- paliperidone
- quetiapine
- quetiapine fumarate (Seroquel)
- risperidone
- ziprasidone

**Antipsychotic Combinations:**
- perphenazine-amitriptyline

### TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS

The following are the long-acting (depot) injectable antipsychotic medications by class for the denominator. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

**Typical Antipsychotic Medications:**
- fluphenazine decanoate (J2680)
- haloperidol decanoate (J1631)

**Atypical Antipsychotic Medications:**
- aripiprazole (J0401)
- aripiprazole lauroxil (Aristada)
- olanzapine pamoate (J2358)
- paliperidone palmitate (J2426)
- risperidone microspheres (J2794)

**Note:** Since the days’ supply variable is not reliable for long-acting injections in administrative data, the days’ supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B.
- fluphenazine decanoate (J2680) – 28 days’ supply
- haloperidol decanoate (J1631) – 28 days’ supply
- aripiprazole (J0401) – 28 days’ supply
- aripiprazole lauroxil (Aristada) - 28 days’ supply
- olanzapine pamoate (J2358) – 28 days’ supply
- paliperidone palmitate (J2426) – 28 days’ supply
- risperidone microspheres (J2794) – 14 days’ supply

### Exclusions

- Individuals with any diagnosis of dementia during the measurement period.

### Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

**MOOD STABILIZER MEDICATIONS**

**TABLE 3. MOOD STABILIZER MEDICATIONS**

Active ingredients listed below are limited to oral, buccal, sublingual, and translingual formulations only.

**Anticonvulsants:**
- carbamazepine
- divalproex sodium
- lamotrigine
- valproic acid

**Atypical Antipsychotics:**
- aripiprazole
- asenapine
- cariprazine
- lurasidone
- olanzapine
- quetiapine
- quetiapine fumarate (Seroquel)
- risperidone
- ziprasidone

**Phenothiazine/Related Antipsychotics:**
- chlorpromazine
- loxapine succinate

**Other Antipsychotics:**
- olanzapine-fluoxetine
- lithium carbonate
- lithium citrate

### Exclusion criteria for the PDC category of Diabetes medications:

1. Patients who have one or more prescriptions for insulin in the treatment period.
2. Patients with ESRD.

Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes.
Exclusion Details

Individuals with any diagnosis of dementia are identified with the diagnosis codes listed below tab NGF_1879_Dementia

Table 5: Codes Used to Identify Dementia

ICD-9-CM: 290.0, 290.10, 290.11, 290.12, 290.13, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 290.8, 290.9, 291.2, 292.82, 294.10, 294.11, 294.20, 294.21, 330.1, 331.0, 331.19, 331.82

ICD-10-CM: E75.00, E75.01, E75.02, E75.09, E75.10, E75.11, E75.19, E75.4, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F10.27, F11.122, F13.27, F13.97, F18.17, F18.27, F18.97, F19.17, F19.27, F19.97, G30.0, G30.1, G30.2, G30.9, G31.09, G31.83

Exclusion details for PDC category of Diabetes medications (one or more prescriptions for insulin):

INSULINS: insulin aspart, insulin aspart Protamine & Aspart, insulin detemir, insulin glargine, insulin glulisine, insulin isophane & regular human insulin, insulin isophane (human N), insulin lispro, insulin lispro Protamine & Insulin lispro, insulin regular (human R), Insulin regular (human) inhalation powder, Insulin degludec, Insulin degludec & liraglutide, Insulin glargine & lixisenatide

ESRD ICD codes:

585.6 End stage renal disease
ESRD ICD10 codes:

I12.0 Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
I12.1 Hyper tension heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
I12.2 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
N18.5 Chronic kidney disease, stage 5
N18.6 End stage renal disease
N19 Renal failure, unspecified
Z91.15 Patient's noncompliance with renal dialysis
Z99.2 Dependence on renal dialysis

Risk Adjustment
No risk adjustment or risk stratification
No risk adjustment or risk stratification
No risk adjustment or risk stratification

Stratification

Depending on the operational use of the measure, measure results may be stratified by:

- State
- Physician Group*  
- Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
- Race/Ethnicity
- Dual Eligibility

*See Calculation Algorithm/Measure Logic 5.14 below for physician group attribution methodology used for this measure.

Depending on the operational use of the measure, measure results may be stratified by:

- State
- Accountable Care Organization (ACOs)*  
- Plan
- Physician Group**

**See Calculation Algorithm/Measure Logic 5.14 below for physician group attribution methodology used for this measure.

Stratification Type Score
Rate/proportion better quality = higher score
Rate/proportion better quality = higher score
Rate/proportion better quality = higher score

Algorithm

Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the treatment period.

For EACH PDC rate identify the Denominator:

Step 1: Identify the eligible population that is 18 years and older as of the last day of the measurement year and that are continuously enrolled in the drug plan.

Step 2: Identify those patients in Step 1 that have filled at least two prescriptions for the target class of medication (either RAS Antagonist, Diabetes medication or Statin).

Step 3: Identify those patients in Step 2 that have at least two prescriptions for insulin: insulin aspart, insulin aspart Protamine & Aspart, insulin detemir, insulin glargine, insulin glulisine, insulin isophane & regular human insulin, insulin isophane (human N), insulin lispro, insulin lispro Protamine & Insulin lispro, insulin regular (human R), Insulin regular (human) inhalation powder, Insulin degludec, Insulin degludec & liraglutide, Insulin glargine & lixisenatide

Step 4: Identify those patients in Step 3 that have filled at least two prescriptions for the medication, sacubitril/valsartan, during the treatment period.
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

The measurement period (12 consecutive months).

Create Denominator:
1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.
3. Include individuals who had no more than a one-month gap in Part B enrollment, and no more than one Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).
4. Of those individuals identified in Step 3, keep individuals who had:
   - At least two encounters with a diagnosis of schizophrenia or schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   - OR
   - Individuals who had at least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period.
5. For the individuals identified in Step 4, extract Medicare Part D claims for any antipsychotic medication during the measurement period. Attach the generic name and the drug ID to the dataset.
6. Of the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any antipsychotic medication on different dates of service (identified by having at least two Medicare Part D claims with the specific codes during the measurement period).
7. Exclude those individuals with a diagnosis of dementia during the measurement period.

Numerator: Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

Create Numerator:
For the individuals in the denominator, calculate the PDC for each individual according to the following methods:
1. Determine the individual’s medication therapy period, defined as the number of days from the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
2. Within the medication therapy period, count the days the individual was covered by at least one drug in the antipsychotic medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D antipsychotic medication claims by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.
   b. Calculate the number of days covered by antipsychotic drug therapy per individual.
3. For the Diabetes rate only:
   Step 3: Exclude any patient with one or more prescriptions for insulin in the measurement period.
   Step 4: For the RASA rate only: Exclude any patient with one or more prescription claims for the medication sacubitril/valsartan during the treatment period.
   Step 5: Include any patient with ESRD.

For the Diabetes rate only:
Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each individual.

Step 4: Count the number of patients who had a PDC greater than 80% and then divide by the total number of eligible patients.

A adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of a combination product to another combination product where at least one of the drugs is common.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

During the measurement period (12 consecutive months).

Create Denominator:
1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.
3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).
4. Of those individuals identified in Step 3, keep those who had:
   - At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   - OR
   - At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.
5. Of the individuals identified in Step 4, extract Medicare Part D claims for a mood stabilizer during the measurement period. Attach the drug ID and the generic name to the dataset.
6. For the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least two Medicare Part D claims with the specific codes during the measurement period).
7. Of the individuals identified in Step 6, for the RASA rate only:
   Step 3: Exclude any patient with one or more prescription claims for the medication sacubitril/valsartan during the treatment period.
   Step 4: Include any patient with ESRD.

For the Diabetes rate only:
Step 3: Exclude any patient with one or more prescription claims for the medication sacubitril/valsartan during the treatment period.
   Step 4: Include any patient with ESRD.

For each PDC rate calculate the Numerator:
Step 1: Determine the patient’s treatment period, defined as the index prescription date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.
Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.
Step 4: Count the number of patients who had a PDC greater than 80% and then divide by the total number of eligible patients.

Create Numerator:
For the individuals in the denominator, calculate the PDC for each individual according to the following methods:
1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D mood stabilizer medication claims by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.
   b. Calculate the number of days covered by mood stabilizer therapy per individual.
   i. For prescription drug 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.
   ii. If claims for the same drug (generic name) overlap, then adjust the latest

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For the Diabetes rate only:
Step 3: Exclude any patient with one or more prescriptions for insulin in the measurement period.
For the any patient with ESRD.
For the RASA rate only:
Exclude any patient with one or more prescription claims for the medication sacubitril/valsartan during the treatment period.
For any patient with ESRD.
For each PDC rate calculate the Numerator:
Step 1: Determine the patient’s treatment period, defined as the index prescription date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.
Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.
Step 4: Count the number of patients who had a PDC greater than 80% and then divide by the total number of eligible patients.

Create Numerator:
For the individuals in the denominator, calculate the PDC for each individual according to the following methods:
1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D mood stabilizer medication claims by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.
   b. Calculate the number of days covered by mood stabilizer therapy per individual.
   i. For prescription drug 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.
   ii. If claims for the same drug (generic name) overlap, then adjust the latest
| 1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia |
| 1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder |
| 0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category |

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPIs) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).

2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)

   a. Pull Part B records billed by TINs identified in Step 4 during the measurement year or prior year.

   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.

   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs prescription start date to be the day after the previous fill has ended.

   i. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

   ii. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

   iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the antipsychotic medications. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION: Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

- Identify Physician and Medical Groups 1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPIs) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).

- For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

- Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

- Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

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An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION: Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

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- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

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- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

- Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

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- Identify Physician and Medical Groups 1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).

- For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

- Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

- Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

- If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

- Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION: Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

- Identify Physician and Medical Groups 1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).

- For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

- Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

- Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

- If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

- If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

- Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

with percentages greater than or equal to 50%.
d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
6. Identify TINs that are not solo practices.
a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
b. Count unique NPIs per TIN.
c. Keep only those TINs having two or more providers.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

da. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
b. Count unique NPIs per TIN.
c. Keep only those TINs having two or more providers.
d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).
8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.
9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.
a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
b. The specialty with the maximum count is assigned to the medical group.

10. Create individual sample.
a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PPR_CD not equal to one of the following:
   • A = working-age individual/spouse with an employer group health plan (EGHP)
   • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
   • G = working disabled for any month of the year
c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
e. Exclude individuals who died during the measurement year.
11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.
a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
b. Exclude claims with no npi_prfrmg.
12. Attach medical group TIN to claims by NPI.

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III. Patient Attribution
13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Assign each individual to at most one medical group TIN for each measure.
a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the provider specialties or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

I0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

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<table>
<thead>
<tr>
<th>Provider Specialties and Specialty Codes</th>
<th>1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia</th>
<th>1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder</th>
<th>0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category</th>
</tr>
</thead>
</table>
| **Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution.** The provider specialty codes and the associated provider specialty are shown below: | | | 14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims. 15. Attribute the individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim. 16. Attach the medical group TIN to the denominator and numerator files by individual. 

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
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<tbody>
<tr>
<td>1879: Adherence to Antipsychotic Medications for Individuals with Schizophrenia</td>
<td>*Provider specialty codes specific to this measure</td>
</tr>
<tr>
<td>1880: Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder</td>
<td>5.1 Identified measures: 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category 5.1 Identified measures: 0542 : Adherence to Antipsychotics among members with Schizophrenia 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category 5.1 Identified measures: 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category</td>
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### Submission Items

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<tr>
<th>Measure</th>
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<tbody>
<tr>
<td>5.1 Identified measures: 0544 : Use and Adherence to Antipsychotics among members with Schizophrenia</td>
<td>5.1 Identified measures: 0542 : Adherence to Antipsychotics among members with Schizophrenia 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category 5.1 Identified measures: 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category 5.1 Identified measures: 0542 : Adherence to Antipsychotics among members with Schizophrenia 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease 0542 : Adherence to Chronic Medications 0545 : Adherence to Statins for Individuals with Diabetes Mellitus 0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category</td>
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**Notes:**

- Submission 97—Physician assistant
- Submission 98—Gynecologist/oncologist
- Submission 99—Unknown physician specialty
- Other—NA
- *Provider specialty codes specific to this measure

**Adherence to Antipsychotics among adults age 18-64:**

- The Proportion of Days Covered (PDC) is the method used to calculate adherence in Measure 1879, which is the method used to calculate measure validity and efficiency in the NQF portfolio. Key differences in several other adherence measures in Section 5a.2, Measure 1879 is harmonized with several other adherence measures in the NQF portfolio. Key differences in adherence measures are proportion of days covered (PDC), which is calculated the same in all three measures.

**Key Differences:**

- Measure 1879: Adherence to Antipsychotics among adults age 18-64.
- Measure 1879 is superior to the existing measure– antipsychotics; and, (3) an exclusion for dementia which is included in Measure 1879 and the NCQA measure but not in NQF 1880. The rationale for these differences is due to the different clinical focus of each measure. There is no impact on interpretability since the measures clearly identify the disparate clinical focus. During development the measure developers worked to harmonize this measure with other measures which were NQF-endorsed at the time of development.
### Table: Adherence Measures

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia</td>
<td>Ratio (MPR), which is used in Measure 0544. First, the PDC was found to be more conservative compared to the Medication Possession Ratio (MPR) and was preferred in clinical scenarios in which there is the potential for more than one drug to be used within a drug class concomitantly (e.g., antipsychotics). This clinical situation applies directly to Measure 1879. Martin et al. (2009) demonstrated this in a study published in the Annals of Pharmacotherapy by comparing the methodology for drugs that are commonly switched, where the MPR was 0.690, truncated MPR was 0.624, and PDC was 0.562 and found significant differences between the values for adherence (p &lt; 0.001). Martin et al (2009) also compared drugs with therapeutic duplication where the PDC was 0.669, truncated MPR was 0.774, and MPR was 1.238, and again obtained significant differences (p &lt; 0.001). These findings were partially replicated by testing results from FMQAI (now HSAG) of Measure 1879 where MPR produced a higher measure rate (as compared to PDC) as shown below. Adherence to Antipsychotic Medications for Individuals with Schizophrenia Method Measure Rate Comparison of MPR and PDC Method Measure Rate MPR 74.4% PDC 70.0% Based on initial draft measure specifications and data from a 100% sample of Medicare fee-for-service beneficiaries with Part D coverage in Florida and Rhode Island, using 2008 Medicare Parts A, B, and D data. Additional differences between Measure 1879 and TLE 0544 related to validity include the following concerns: Denominator: The measure denominator requires at least two antipsychotic medication prescriptions; whereas, the NQF TLE measure (NQF #0544) does not require any antipsychotic medication prescriptions in the measure denominator. In 0544, an MPR of “0” is assigned to those without any antipsychotic medication prescriptions, which may falsely lower measure rates, specifically in scenarios where the prescriber has made the decision not to prescribe antipsychotic medications for an individual diagnosed with schizophrenia. Exclusion related to a diagnosis of dementia: Measure 1879 excludes individuals with a diagnosis of dementia during the measurement year which is not considered in Measure 0544. Antipsychotic medications are currently labeled with a Food and Drug Administration (FDA) Black Box warning that states, “Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of seventeen placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients.” The Technical Expert Panel, which reviewed the measure, recommended excluding these individuals from the measure denominator, since continued adherence to antipsychotic medications in this subpopulation may increase mortality and not represent quality of care. (Please see Section 2b.3.2 that provides descriptive results of testing related to exclusions.) EFFICIENCY Measure 1879 requires only one year of administrative claims data, rather than two years of data which is required for TLE 0544.</td>
</tr>
<tr>
<td>1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder</td>
<td>The section below is from the original submission of the measure for initial endorsement and refers to measures which are no longer NQF-endorsed. We are including this language to demonstrate the efforts of the measure developers to harmonize this measure with other measures. MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED: The measure has been harmonized where feasible with NQF #0542, #0543, #0545, #0541, #1879, #1927, and #1932 MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED. The measure specifications of the measure are not harmonized with the following NQF-endorsed measures that have the same measurement focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent. DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0580. One NQF-endorsed measure (NQF #0580) focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. RATIONALE. This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF #0580) is linked to a one-time prescription for mood stabilizer treatment. IMPACT ON INTERPRETABILITY AND DATA COLLECTION BURDEN. Differences have not been identified concerning the data collection burden between Measure 1880 and Measure 0580. However, interpretability for Measure 1880 (as compared to NQF #0580) is improved because Measure 1880 focuses on adherence rather than a single prescription, and Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS. Sb.1 # competing, why superior or rationale for additive value: This measure does not address both the same measure focus and population as another NQF-endorsed measure.</td>
</tr>
<tr>
<td>0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category</td>
<td>Ratio (MPR) is used for the TLE measure (NQF #0541). The measure evaluates adherence to mood stabilizers for individuals with newly diagnosed bipolar disorder and major depressive disorder. The measure specifications of the measure are harmonized with the following NQF-endorsed measures that have the same measurement focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent. DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0580. One NQF-endorsed measure (NQF #0580) focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. RATIONALE. This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF #0580) is linked to a one-time prescription for mood stabilizer treatment. IMPACT ON INTERPRETABILITY AND DATA COLLECTION BURDEN. Differences have not been identified concerning the data collection burden between Measure 1880 and Measure 0580. However, interpretability for Measure 1880 (as compared to NQF #0580) is improved because Measure 1880 focuses on adherence rather than a single prescription, and Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS. Sb.1 # competing, why superior or rationale for additive value: This measure does not address both the same measure focus and population as another NQF-endorsed measure.</td>
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## Comparison of NQF #1880, NQF #0541, NQF #1879 and NQF #1932

<table>
<thead>
<tr>
<th>Description</th>
<th>Data Source</th>
<th>Process</th>
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<th>Data Source</th>
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<th>Description</th>
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<th>Process</th>
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<tr>
<td>The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Renin Angiotensin System (RAS) Antagonists, Diabetes Medications, Statins. A higher score indicates better quality.</td>
<td>The Technical Expert Panel that reviewed Measure 1879 indicated that the burden of requiring two years of administrative claims data would not meaningfully modify measure rates and would potentially result in the unnecessary exclusion of individuals for which adherence should be assessed but for which only 1 year of claims data were available. Additional rationale for this TEP recommendation was related to an increased length of the continuous enrollment criteria to specify the measure use with two years of data. FMQA's (now HSAQ) empirical analysis of a related adherence measure (NQF 0542 – Adherence to Chronic Medications) using 2007 and 2008 Medicare Part D data for beneficiaries in Florida and Rhode Island validated this concern and indicated that approximately 10% of the eligible population would be excluded from the measure if the enrollment criteria required two years of administrative claims data as opposed to one year.</td>
<td>The percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).</td>
<td>The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.</td>
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<td>Level</td>
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<td></td>
<td>Outpatient Services</td>
<td>Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.</td>
<td>The numerator is defined as individuals with a PDC of 0.8 or greater. The PDC is calculated as follows: PDC NUMERATOR = the number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold. Step 1: Determine the patient's treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death. Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.* Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1 to obtain the PDC (as a percentage) for each patient. Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outpatient Services</td>
<td>Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.</td>
<td>The numerator is defined as individuals with a PDC of 0.8 or greater. The PDC is calculated as follows: PDC NUMERATOR = the sum of the days covered by the days' supply of all prescription drug claims for all antipsychotic medications. The period covered by a glucose test (Glucose Tests Value Set) or an HbA1c test (HbA1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data. See corresponding Excel document for the Glucose Tests Value Set.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of combination product to another combination product where at least one of the drugs from the target therapeutic class is common.

### Denominator tables to determine individual enrollment
- Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
- CMS physician and physician specialty tables
- National Plan and Provider Enumeration System (NPPES) database
No data collection instrument provided Attachment NQF_1880_Code_Tables_2018_Final.xlsx

### Proportion of Days Covered (PDC) Rates by Therapeutic Category

### Adherence to Antipsychotic Medications for Individuals with Schizophrenia

### Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

### Setting
- Outpatient Services
- Outpatient Services
- Outpatient Services

### Population
- Regional and State
- Regional and State
- Regional and State

### Clinician
- Group/Practice, Health Plan
- Group/Practice, Health Plan
- Group/Practice, Health Plan

### Level
- Denominator tables to determine individual enrollment
- Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
- CMS physician and physician specialty tables
- National Plan and Provider Enumeration System (NPPES) database
No data collection instrument provided Attachment NQF_1880_Code_Tables_2018_Final.xlsx

### Numerator Details
- The numerator is defined as individuals with a PDC of 0.8 or greater. The PDC is calculated as follows: PDC NUMERATOR
- The PDC numerator is the sum of the days covered by the days' supply of all prescription drug claims for...
all mood stabilizer medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

PDC DENOMINATOR
The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death. Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of combination product to another combination product where a least one of the drugs from the target therapeutic class is common.


DIABETES MEDICATIONS: (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-IV Inhibitors, Incretin Mimetic Agents, Meglitinides, Sodium glucose co-transporter2 (SGLT2) inhibitors and combination products that include these medications) metformin, glipizide & metformin, glyburide &
<table>
<thead>
<tr>
<th>Denominator Statement</th>
<th>Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).</th>
<th>Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year. For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the treatment period. Exclude any patient with ESRD. For RASA rate only: Exclude any patient with one or more prescription claims for sacubitril/valsartan during the treatment period. Exclude any patient with ESRD.</th>
<th>Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator Details</td>
<td>Target population meets the following conditions: 1. Continuously enrolled in Medicare Part D with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement year; 2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment during the measurement year; and, 3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement year. IDENTIFICATION OF BIPOLAR I DISORDER Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient stay.</td>
<td>Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year. For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the treatment period. Exclude any patient with ESRD.</td>
<td>Follow the steps below to identify the eligible population. Identify members with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year. • At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria: - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set. - BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set. - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.</td>
</tr>
</tbody>
</table>

| Denominator Statement | Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months). | Patient who were prescribed an antipsychotic medication. | Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months). |
| Denominator Details | Target population meets the following conditions: 1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement year; 2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in enrollment during the measurement period; and, 3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement period. IDENTIFICATION OF BIPOLAR I DISORDER Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient stay. | Follow the steps below to identify the eligible population. Identify members with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year. • At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria: - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set. - BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set. - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set. |

<table>
<thead>
<tr>
<th>1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder</th>
<th>0541 Proportion of Days Covered (PDC) Rates by Therapeutic Category</th>
<th>1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia</th>
<th>1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>metformin, chlorpropamide, glimepiride, glipizide, glyburide, tolazamide, tolbutamide, pioglitazone, rosiglitazone, metformin, exenatide, lixisenatide, albiglutide, empagliflozin, dapagliflozin, canagliflozin &amp; metformin, aliskiren, , saxagliptin, linagliptin, saxagliptin, linagliptin, saxagliptin &amp; metformin, saxagliptin &amp; linagliptin, canagliflozin &amp; metformin, canagliflozin &amp; metformin STATINS: lovastatin, atorvastatin, rosuvastatin, fluvastatin, atorvastatin, pravastatin, niacin &amp; lovastatin, niacin &amp; &amp; simvastatin, ezetimibe &amp; simvastatin, ezetimibe &amp; atorvastatin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1880 Adherence to Mood
Stabilizers for Individuals with
Bipolar I Disorder

0541 Proportion of Days
Covered (PDC) 3 Rates by
Therapeutic Category

1879 Adherence to Antipsychotic
Medications for Individuals with
Schizophrenia

or outpatient claims data.
Individuals must have:
At least two encounters with
a diagnosis of bipolar I
disorder with different dates
of service in an outpatient
setting, emergency
department setting, or nonacute inpatient setting during
the measurement period;
OR
At least one encounter with a
diagnosis of bipolar I disorder
in an acute inpatient setting
during the measurement
period.
CODES USED TO IDENTIFY
BIPOLAR I DISORDER
DIAGNOSIS
Codes used to identify bipolar
I disorder are included in the
attached Excel worksheet of
codes (NQF_1880_Code
Tables_2018 Final) under the
tab NQF_1880_Bipolar_ICD910.
TABLE 1. BIPOLAR I DISORDER
DIAGNOSIS
ICD-9-CM: 296.0x, 296.1x,
296.4x, 296.5x, 296.6x, 296.7
ICD-10-CM: F30.10, F30.11,
F30.12, F30.13, F30.2, F30.3,
F30.4, F30.8, F30.9, F31.0,
F31.10, F31.11, F31.12,
F31.13, F31.2, F31.30, F31.31,
F31.32, F31.4, F31.5, F31.60,
F31.61, F31.62, F31.63,
F31.64, F31.70, F31.71,
F31.72, F31.73, F31.74,
F31.75, F31.76, F31.77,
F31.78, F31.89, F31.9
CODES USED TO IDENTIFY
ENCOUNTER TYPE
Codes used to identify
encounters are under tab
NQF_1880_Encounter_types.
TABLE 2.1. OUTPATIENT
SETTING
Current Procedural
Terminology (CPT): 9896098962, 99078, 99201-99205,
99211-99215, 99217-99220,
99241-99245, 99341-99345,
99347-99350, 99385-99387,
99395-99397, 99401-99404,
99411, 99412, 99429, 99510
HCPCS: G0155, G0176,
G0177, G0409-G0411, G0463,
H0002, H0004, H0031,
H0034-H0037, H0039, H0040,
H2000, H2001, H2010-H2020,
M0064, S0201, S9480, S9484,
S9485, T1015
UB-92 revenue: 0510, 0511,
0513, 0516-0517, 0519-0523,
0526-0529, 0770, 0771, 0779,
0900-0905, 0907, 0911-0917,
0919, 0982, 0983
OR
CPT: 90791, 90792, 9083290834, 90836-90840, 90845,
90847, 90849, 90853, 90863,
90867-90870, 90875, 90876,
90880, 99221-99223, 9923199233, 99238, 99239, 9925199255, 99291
WITH
Place of Service (POS): 03, 05,
07, 09, 11, 12, 13, 14, 15, 20,
22, 24, 33, 49, 50, 52, 53, 71,
72

trandolopril & verapamil HCL,
candesartan & HCTZ,
eprosartan & HCTZ,
telmisartan & amilodipine,
nebivolol & valsartan,
irbesartan & HCTZ, losartan &
HCTZ, amlodipine &
olmesartan, azlisartan &
chlorthalidone, olmesartan &
HCTZ, telmisartan & HCTZ,
olmesartan & amlodipine &
HCTZ, valsartan & HCTZ,
amlodipine & valsartan,
amlodipine & valsartan &
HCTZ, aliskiren & amlodipine,
aliskiren & amlodipine & HCTZ,
aliskiren & HCTZ,
DIABETES MEDICATIONS:
(Biguanides, Sulfonylureas,
Thiazolidinediones, DPP-IV
Inhibitors, Incretin Mimetic
Agents, Meglitinides, Sodium
glucose co-transporter2
(SGLT2) inhibitors and
combination products that
include these medications)
metformin, glipizide &
metformin, glyburide &
metformin, chlorpropamide,
glimepiride, glipizide,
glyburide, tolazamide,
tolbutamide, pioglitazone,
rosiglitazone, rosiglitazone &
metformin, rosiglitazone &
glimepiride, pioglitazone &
metformin, pioglitazone &
glimepiride, alogliptin &
pioglitazone, sitagliptin,
linagliptin, saxagliptin,
alogliptin, sitagliptin &
metformin, saxagliptin &
metformin SR, sitagliptin &
simvastatin, linagliptin &
metformin, alogliptin &
metformin, exenatide,
liraglutide, nateglinide,
repaglinide, repaglinide &
metformin, canagliflozin,
alogliptin & metformin,
empagliflozin & linagliptin,
dulaglutide, liraglutide,
lisxisenatide, albiglutide,
empagliflozin, dapagliflozin,
dapagliflozin & metformin,
empagliflozin & linagliptin,
canagliflozin & metformin,
empagliflozin & metformin
STATINS: lovastatin,
rosuvastatin, fluvastatin,
atorvastatin, pravastatin,
pitavastatin, simvastatin,
niacin & lovastatin,
atorvastatin & amlodipine,
niacin & simvastatin, sitagliptin
& simvastatin, ezetimibe &
simvastatin, ezetimibe &
atorvastatin

schizoaffective disorder with
different dates of service in an
outpatient setting, emergency
department setting, or non-acute
inpatient setting during the
measurement period;
OR
At least one encounter with a
diagnosis of schizophrenia or
schizoaffective disorder in an acute
inpatient setting during the
measurement period.
CODES USED TO IDENTIFY
SCHIZOPHRENIA OR
SCHIZOAFFECTIVE DISORDER
DIAGNOSIS
Codes used to identify
schizophrenia or schizoaffective
disorder are included in the
attached excel worksheet of codes
(NQF_1879_Code
Tables_2018_Final.xlsx) under the
tab NQF_1879_Schizophrenia.
Table 1: Schizophrenia or
Schizoaffective Disorder Diagnosis
ICD-9-CM: 295.xx
ICD-10-CM: F20.0, F20.1, F20.2,
F20.3, F20.5, F20.81, F20.89, F20.9,
F25.0, F25.1, F25.8, F25.9
CODES USED TO IDENTIFY
ENCOUNTER TYPE:
Codes used to identify encounters
are under tab
NQF_1879_Encounter_types.
Table 2.1: Outpatient Setting
Current Procedural Terminology
(CPT): 98960-98962, 99078, 9920199205, 99211-99215, 99217-99220,
99241-99245, 99341-99345, 9934799350, 99385-99387, 99395-99397,
99401-99404, 99411, 99412, 99429,
99510
HCPCS: G0155, G0176, G0177,
G0409-G0411, G0463, H0002,
H0004, H0031, H0034-H0037,
H0039, H0040, H2000, H2001,
H2010-H2020, M0064, S0201,
S9480, S9484, S9485, T1015
UB-92 revenue: 0510, 0511, 0513,
0516-0517, 0519-0523, 0526-0529,
0770, 0771, 0779, 0900-0905, 0907,
0911-0917, 0919, 0982, 0983
OR
CPT: 90791, 90792, 90832-90834,
90836-90840, 90845, 90847, 90849,
90853, 90863, 90867-90870, 90875,
90876, 90880, 99221-99223,
99231-99233, 99238, 99239,
99251-99255, 99291
WITH
Place of Service (POS): 03, 05, 07,
09, 11, 12, 13, 14, 15, 20, 22, 24, 33,
49, 50, 52, 53, 71, 72
Table 2.2: Emergency Department
Setting
CPT: 99281-99285
UB-92 revenue: 0450, 0451, 0452,
0456, 0459, 0981
OR
CPT: 90791, 90792, 90832-90834,
90836-90840, 90845, 90847, 90849,
90853, 90863, 90867-90870, 90875,
90876, 99291
WITH
POS: 23
Table 2.3: Non-Acute Inpatient
Setting
CPT: 99304-99310, 99315, 99316,
99318, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048

1932 Diabetes Screening for
People With Schizophrenia or
Bipolar Disorder Who Are Using
Antipsychotic Medications (SSD)
BH Acute Inpatient
Value Set with BH Acute
Inpatient POS Value Set with
Bipolar Disorder Value Set.
BH Acute Inpatient
Value Set with BH Acute
Inpatient POS Value Set with
Other Bipolar Disorder Value
Set.
•
At least two visits in an
outpatient, intensive
outpatient, partial
hospitalization, ED or nonacute
inpatient setting, on different
dates of service, with any
diagnosis of schizophrenia. Any
two of the following code
combinations meet criteria:
BH Stand Alone
Outpatient/PH/IOP Value Set
with Schizophrenia Value Set.
BH Outpatient/PH/IOP
Value Set with BH
Outpatient/PH/IOP POS Value
Set with Schizophrenia Value
Set.
ED Value Set with
Schizophrenia Value Set.
BH ED Value Set with
ED POS Value Set with
Schizophrenia Value Set.
BH Stand Alone
Nonacute Inpatient Value Set
with Schizophrenia Value Set.
BH Nonacute Inpatient
Value Set with BH Nonacute
Inpatient POS Value Set with
Schizophrenia Value Set.
•
At least two visits in an
outpatient, intensive
outpatient, partial
hospitalization, ED or nonacute
inpatient setting, on different
dates of service, with any
diagnosis of bipolar disorder.
Any two of the following code
combinations meet criteria:
BH Stand Alone
Outpatient/PH/IOP Value Set
with Bipolar Disorder Value Set.
BH Stand Alone
Outpatient/PH/IOP Value Set
with Other Bipolar Disorder
Value Set.
BH Outpatient/PH/IOP
Value Set with BH
Outpatient/PH/IOP POS Value
Set with Bipolar Disorder Value
Set.
BH Outpatient/PH/IOP
Value Set with BH
Outpatient/PH/IOP POS Value
Set with Other Bipolar Disorder
Value Set.
ED Value Set with
Bipolar Disorder Value Set.
ED Value Set with
Other Bipolar Disorder Value
Set.
BH ED Value Set with
ED POS Value Set with Bipolar
Disorder Value Set.
BH ED Value Set with
ED POS Value Set with Other
Bipolar Disorder Value Set.
BH Stand Alone
Nonacute Inpatient Value Set
with Bipolar Disorder Value Set.
BH Stand Alone
Nonacute Inpatient Value Set
with Other Bipolar Disorder
Value Set.

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### TABLE 2.2. EMERGENCY DEPARTMENT SETTING

CPT: 99281-99285

UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 909291

WITH

POs: 23

### TABLE 2.3. NON-ACUTE INPATIENT SETTING

CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337

HCPCS: H0017-H0019, T2048

UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291

WITH

POs: 31, 32, 56

### TABLE 2.4. ACUTE INPATIENT SETTING

UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729, 0987

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

POs: 21, 51

### IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR MOOD STABILIZER MEDICATION

Individuals with at least two prescription drug claims for any of the following mood stabilizer medications (Table 3: Mood Stabilizer Medications) or long-acting injectable antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1880_Mood_Stabilizers of the attached Excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

<table>
<thead>
<tr>
<th>TABLE 3: ORAL ANTIPSYCHOTIC MEDICATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>The following are oral formulations only.</td>
</tr>
<tr>
<td>Typical Antipsychotic Medications:</td>
</tr>
<tr>
<td>chlorpromazine</td>
</tr>
<tr>
<td>fluphenazine</td>
</tr>
<tr>
<td>haloperidol</td>
</tr>
<tr>
<td>loxapine</td>
</tr>
<tr>
<td>molindone</td>
</tr>
<tr>
<td>perphenazine</td>
</tr>
<tr>
<td>prochlorperazine</td>
</tr>
<tr>
<td>thioridazine</td>
</tr>
<tr>
<td>thiothixene</td>
</tr>
<tr>
<td>trifluoperazine</td>
</tr>
<tr>
<td>Ziprasid</td>
</tr>
</tbody>
</table>

Atypical Antipsychotic Medications:

aripiprazole
asenapine
bomaprazole
cariprazine
clozapine
iloperidone
lurasidone
olanzapine
paliperidone
quetiapine
quetiapine fumarate (Seroquel)
risperidone
ziprasidone

### 2012 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SCO)

BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Bipolar Disorder Value Set.

BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Other Bipolar Disorder Value Set.

(See corresponding Excel document for the above value sets)
### MOOD STABILIZER MEDICATIONS

#### TABLE 3. MOOD STABILIZER MEDICATIONS

Active ingredients listed below are limited to oral, buccal, sublingual, and translingual formulations only.

Anticonvulsants:
- carbamazepine
- divalproex sodium
- lamotrigine
- valproic acid

Atypical Antipsychotics:
- aripiprazole
- aripiprazole asenapine
- cariprazine
- lurasidone
- olanzapine
- olanzapine fumarate (Seroquel)
- quetiapine
- quetiapine succinate
- risperidone
- ziprasidone

Phenothiazine/Related Antipsychotics:
- chlorpromazine
- loxapine succinate

Other Antipsychotics:
- olanzapine-fluoxetine

#### Lithium Salts:
- lithium carbonate
- lithium citrate

### TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS

The following are the long-acting (depot) injectable antipsychotic medications by class for the denominator. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

**Atypical Antipsychotic Medications:**
- aripiprazole (J0401)
- aripiprazole lauroxil (Aristada)
- olanzapine pamoate (J2358)
- paliperidone palmitate (J2426)
- risperidone microspheres (J2794)

**Note:** Since the days' supply variable is not reliable for long-acting injections in administrative data, the days' supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
- fluphenazine decanoate (J2680) – 28 days' supply
- haloperidol decanoate (J1631) – 28 days' supply
- olanzapine pamoate (J2358) – 28 days' supply
- paliperidone palmitate (J2426) – 28 days' supply
- risperidone microspheres (J2794) – 14 days' supply

### Exclusions

<table>
<thead>
<tr>
<th>Exclusions</th>
<th>Not Applicable</th>
</tr>
</thead>
</table>

### Exclusion criteria for the PDC category of Diabetes medications:
1. Patients who have one or more prescriptions for insulin in the treatment period.
2. Patients with ESRD.
3. Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes

### Exclusion criteria for the PDC category of RASA:

### Individuals with any diagnosis of dementia during the measurement period.

### Exclusions

Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients with diabetes during the measurement year or the year prior to the measurement year.

Exclude patients who had no antipsychotic medications dispensed during the measurement year.
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| 1. Patients with ESRD
   Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes
   2. Patients with one or more prescription claims for the medication, sacubitril/valsartan, during the treatment period. | Exclusion Details Not Applicable | Exclusion details for PDC category of Diabetes medications (one or more prescriptions for insulin): INSULINS: insulin aspart, insulin aspart Protamine & Aspart, insulin detemir, insulin glargine, insulin glulisine, insulin isophane & regular human insulin, insulin isophane (human N), insulin lispro, insulin lispro Protamine & Insulin lispro, insulin regular (human R), insulin regular (human) inhalation powder, Insulin degludec & liraglutide, Insulin glargine & lixisenatide
ESRD ICD codes: S85.6 End stage renal disease
ESRD ICD10 codes: I12.0 Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
I13.11 Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
I13.2 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
N18.5 Chronic kidney disease, stage 5
N18.6 End stage renal disease
N19 Renal failure, unspecified
291.15 Patient’s noncompliance with renal dialysis
299.2 Dependence on renal dialysis | Individuals with any diagnosis of dementia are identified with the diagnosis codes listed below tab NQF_1879_Dementia
Table 5: Codes Used to Identify Dementia
ICD-9-CM: 290.0, 290.10, 290.11, 290.12, 290.13, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 290.8, 290.9, 291.2, 292.82, 294.10, 294.11, 294.20, 294.21, 330.1, 331.0, 331.19, 331.82
ICD-10-CM: E75.00, E75.01, E75.02, E75.09, E75.10, E75.11, E75.19, E75.4, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F10.27, F11.122, F11.27, F13.27, F13.97, F18.17, F18.27, F18.97, F19.17, F19.27, F19.97, G30.0, G30.1, G30.8, G30.9, G31.09, G31.83 | Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These members may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).
Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year).
There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.
Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year in an ambulatory basis (Diabetes Medications List).
Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years).
   - At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).
   - PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List): Alpha-glucosidase inhibitors: Acarbose, Miglitol
   - Amylin analogs: Pramlintide
   - Antidiabetic combinations:
Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-linagliptin, Empagliflozin-metformin, Gilinepiride-pioglitazone, Gilinepiride-rosiglitazone, Glipizide-metformin, Glyburide-metformin, Linagliptin-metformin, Linagliptin-pioglitazone, Metformin-metformin, Metformin-repaglinide, Metformin-rosiglitazone, Metformin-saxagliptin, Metformin-sitagliptin, Sitagliptin-simvastatin

Insulin:
Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled

Meglitinides:
Nateglinide, Repaglinide

Glucagon-like peptide-1 (GLP1) agonists:
Dulaglutide, Exenatide, Lisproglutide, Albiglutide

Sodium glucose cotransporter 2 (SGLT2) inhibitor:
Canagliflozin, Dapagliflozin, Empagliflozin

Sulfonylureas:
Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamidine

Thiazolidinediones:
Pioglitazone, Rosiglitazone

Dipeptidyl peptidase-4 (DDP-4) inhibitors:
Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.

- Claim/encounter data.
- Pharmacy data.

- Dispensed an antipsychotic medication (Antipsychotic Medications List) on an ambulatory basis.

ANTIPSYCHOTIC MEDICATIONS:
(Antipsychotic Medications List)

Miscellaneous antipsychotic agents:
Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Clozapine, Haloperidol, Iloperidone, Loxapine, Lurasidone, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine,
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**Target Population:** Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

**Denominator:** Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

**CREATE DENOMINATOR:**

1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period.

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Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC greater than 80% and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of a combination product to another combination product where at least one of the drugs is common.

their death date if they died during the measurement period.

3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).

4. Of those individuals identified in Step 3, keep those who had: At least two encounters with a diagnosis of bipolar I disorder during the measurement period.

5. Of the individuals identified in Step 4, extract Medicare Part D claims for any antipsychotic medication and have a PDC of at least 0.8 for antipsychotic medications.

6. Of the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least one Medicare Part D claim with the specific codes) during the measurement period.

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| service date and days of supply.  
a. Sort and de-duplicate Medicare Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days' supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days' supply.  
b. Calculate the number of days covered by mood stabilizer therapy per individual.  
i. For prescription drug 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.  
ii. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.  
iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.  
3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual's medication therapy period found in Step 1.  
An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is also available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.  
4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.  
PHYSICIAN GROUP ATTRIBUTION:  
Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.  
1. Identify Physician and Medical Groups  
1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPIs) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).  
2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.  
3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.  
4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP). | same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days' supply.  
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<tr>
<td>1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPIs. Valid NPIs have 10 numeric characters (no alpha characters).</td>
<td>b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.</td>
<td>5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)</td>
<td>a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.</td>
</tr>
<tr>
<td>2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.</td>
<td>c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.</td>
<td>Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.</td>
</tr>
<tr>
<td>3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>6. Identify TINs that are not solo practices.</td>
<td>7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).</td>
</tr>
<tr>
<td>4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).</td>
<td>a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.</td>
<td>Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.</td>
<td>Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.</td>
</tr>
<tr>
<td>5. Identify medical group TINs: Medical group TINs are defined as TINS that are medical groups and are not solo practices.</td>
<td>b. Count unique NPIs per TIN.</td>
<td>b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.</td>
<td>Clarity, accuracy, and reliability of individual record keeping and/or prior year.</td>
</tr>
<tr>
<td>a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.</td>
<td>c. Keep only those TINs having two or more providers.</td>
<td>c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
</tr>
<tr>
<td>b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>6. Identify TINs that are not solo practices.</td>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
</tr>
<tr>
<td>c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.</td>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
</tr>
<tr>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>b. Count unique NPIs per TIN.</td>
<td>b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.</td>
<td>c. Keep only those TINs having two or more providers.</td>
</tr>
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<td>6. Identify TINs that are not solo practices.</td>
<td>c. Keep only those TINs having two or more providers.</td>
<td>c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
</tr>
<tr>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
<td>b. Count unique NPIs per TIN.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.</td>
</tr>
<tr>
<td>b. Count unique NPIs per TIN.</td>
<td>b. Count unique NPIs per TIN.</td>
<td>b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.</td>
<td>b. The specialty with the maximum count is assigned to the medical group.</td>
</tr>
<tr>
<td>c. Keep only those TINs having two or more providers.</td>
<td>c. Keep only those TINs having two or more providers.</td>
<td>c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.</td>
<td>b. The specialty with the maximum count is assigned to the medical group.</td>
</tr>
<tr>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
</tr>
<tr>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
<td>e. Identify Individual Sample and Claims</td>
<td>e. Identify Individual Sample and Claims</td>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
</tr>
<tr>
<td>b. Count unique NPIs per TIN.</td>
<td>10. Create individual sample.</td>
<td>b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:</td>
<td>b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.</td>
</tr>
<tr>
<td>c. Keep only those TINs having two or more providers.</td>
<td>a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.</td>
<td>a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.</td>
<td>c. Keep only those TINs having two or more providers.</td>
</tr>
<tr>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
<td>d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, or 87654321.</td>
</tr>
<tr>
<td>Source 1</td>
<td>Source 2</td>
<td>Source 3</td>
<td></td>
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<tr>
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<td></td>
</tr>
<tr>
<td><strong>B. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group-TINs.</strong></td>
<td>**9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants. a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty. **</td>
<td><strong>8. Create file of TINs and NPIs</strong></td>
<td></td>
</tr>
<tr>
<td>**9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants. a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty. **</td>
<td><strong>b. The specialty with the maximum count is assigned to the medical group.</strong></td>
<td><strong>9. Create file of TINs and NPIs</strong></td>
<td></td>
</tr>
<tr>
<td><strong>II. Identify Individual Sample and Claims</strong></td>
<td><strong>10. Create individual sample. a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year. b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PVR_CD not equal to one of the following: ▪ A = working-age individual/spouse with an employer group health plan (EGHP) ▪ B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP ▪ G = working disabled for any month of the year ▪ D = dual eligible (Medicare/Medicaid); assign the specialty determined in Step 9.</strong></td>
<td><strong>12. Attach medical group TIN to claims by NPI.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>II. Identify Individual Sample and Claims</strong></td>
<td><strong>c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.</strong></td>
<td><strong>III. Patient Attribution</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>b. If the provider specialty indicates primary care or psychiatry (see list of provider specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>a. Office visit claims have CPT codes 99201-99205, 99211-99215, and 99241-99245. b. Exclude claims with no npi_prfrmg.</strong></td>
<td><strong>12. Attach medical group TIN to claims by NPI.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>e. Exclude individuals who died during the measurement year.</strong></td>
<td><strong>13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>f. Exclude individuals who enter the Medicare hospice at any point during the measurement year.</strong></td>
<td><strong>14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&amp;M claims.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>15. Attribute individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.</strong></td>
<td><strong>15. Attribute individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>16. Attach the medical group TIN to the denominator and numerator files by individual. Provider Specialties and Specialty Codes</strong></td>
<td><strong>16. Attach the medical group TIN to the denominator and numerator files by individual. Provider Specialties and Specialty Codes</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><strong>Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:</strong></td>
<td><strong>Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:</strong></td>
<td></td>
</tr>
<tr>
<td><strong>a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties and specialty codes below), attribute each individual to at most one medical group TIN for each measure.</strong></td>
<td><em><em>01—General practice</em> 02—General surgery 03—Allergy/immunology 04—Otolaryngology 05—Anesthesiology 06—Cardiology 07—Dermatology 08—Family practice</em> 09—Interventional pain management**</td>
<td><em><em>01—General practice</em> 02—General surgery 03—Allergy/immunology 04—Otolaryngology 05—Anesthesiology 06—Cardiology 07—Dermatology 08—Family practice</em> 09—Interventional pain management**</td>
<td></td>
</tr>
</tbody>
</table>
measure specific specialties, then check additional specialty fields.

b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.

15. Attribute the individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.

16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:

01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
37—Nuclear medicine
38—Geriatric medicine*
39—Nephrology
39—Pediatric medicine
40—Hand surgery
44—Infectious disease
46—Endocrinology
50—Nurse practitioner*
66—Rheumatology
70—Multi-specialty clinic or group practice*
72—Pain management
76—Peripheral vascular disease
77—Vascular surgery
78—Cardiac surgery
79—Addiction medicine
81—Critical care (intensivists)
82—Hematology
83—Hematology/oncology
84—Preventive medicine*
85—Maxillofacial surgery
86—Neuropsychiatry*
90—Medical oncology
91—Surgical oncology
92—Radiation oncology
93—Emergency medicine
94—Interventional radiology
97—Physician assistant*
98—Gynecologist/oncologist
99—Unknown physician specialty
Other—NA

*Provider specialty codes specific to this measure
<table>
<thead>
<tr>
<th>submission items</th>
<th>1880 adherence to mood stabilizers for individuals with bipolar I disorder</th>
<th>0541 proportion of days covered (PDC) 3 rates by therapeutic category</th>
<th>1879 adherence to antipsychotic medications for individuals with schizophrenia</th>
<th>1932 diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medications (SSD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>77—Vascular surgery</td>
<td>78—Cardiac surgery</td>
<td>79—Addiction medicine</td>
<td>81—Critical care (intensivists)</td>
<td>82—Hematology</td>
</tr>
<tr>
<td>5.1 Identified measures: 0543 : adherence to statin therapy for individuals with cardiovascular disease</td>
<td>0542 : adherence to chronic medications</td>
<td>0545 : adherence to statins for individuals with diabetes mellitus</td>
<td>0541 : proportion of days covered (PDC): 3 rates by therapeutic category</td>
<td>0580 : bipolar antimanic agent</td>
</tr>
<tr>
<td>1927 : cardiovascular health screening for people with schizophrenia or bipolar disorder who are prescribed antipsychotic medications</td>
<td>1932 : diabetes screening for people with schizophrenia or bipolar disorder who are using antipsychotic medications (SSD)</td>
<td>5a.1 Are specs completely harmonized? Yes</td>
<td>5a.2 If not completely harmonized, identify difference, rationale, impact:</td>
<td>The measure specifications are harmonized with the related measure, adherence to antipsychotic medications for individuals with schizophrenia (NQF #1879) and the NCQA version of the same measure (adherence to antipsychotic medications for individuals with schizophrenia), where</td>
</tr>
<tr>
<td>Measure Code</td>
<td>Measure Title</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1880</td>
<td>Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0541</td>
<td>Proportion of Days Covered (PDC)</td>
<td>Rates by Therapeutic Category</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1879</td>
<td>Adherence to Antipsychotic Medications for Individuals with Schizophrenia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1932</td>
<td>Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in all three measures. The methodology used to identify the denominator population is also calculated the same in all three measures, with the exception of the clinical conditions which is the target of the measure. The data collection burden is identical for the measures. The only differences between Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879), and the related NCQA measure are: (1) the clinical codes used to identify the different populations in each measure (NQF #1880 – individuals with bipolar I disorder; NQF #1879 and NCQA measure– individuals with schizophrenia); (2) the medications included in each measure (NQF #1880 - mood stabilizers; NQF #1879 and the NCQA measure– antipsychotics); and, (3) an exclusion for dementia which is included in NQF #1879 and the NCQA measure but not in NQF #1880. The rationale for these differences is due to the different clinical focus of each measure. There is no impact on interpretability since the measures clearly identify the disparate clinical focus. During development the measure developers worked to harmonize this measure with other measures which were NQF-endorsed at the time of development. The section below is from the original submission of the measure for initial endorsement and refers to measures which are no longer NQF-endorsed. We are including this language to demonstrate the efforts of the measure developers to harmonize this measure with other measures. MEASURES WITH WHICH THE MEASURE IS HARMONIZED: The measure has been harmonized where feasible with NQF #0542, #0543, #0545, #0541, #1879, #1927, and #1932 MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED: The measure specifications of the measure are not harmonized with the following NQF-endorsed measures that have the same measure focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent. DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0541. One original submission of the measures for initial endorsement and compares this measure (#1879) Adherence to Antipsychotic Medications for Individuals with Schizophrenia to a previously NQF-endorsed measure (#0544 Use and Adherence to Antipsychotics among Members with Schizophrenia). Measure 1879 (Adherence to Antipsychotic Medications for Individuals with Schizophrenia) has both the same measure focus and essentially the same target population as Measure 0544 (Use and Adherence to Antipsychotics among Members with Schizophrenia), which is no longer endorsed after the measure’s time-limited endorsement (TLE) status expired. Measure 1879 is superior to the existing Measure 0544 because it represents a more valid and efficient approach to measuring medication adherence to antipsychotic medications. In addition, as discussed above in Section 5a.2, Measure 1879 is harmonized with several other adherence measures in the NQF portfolio. Key differences in measure validity and efficiency are addressed in the sections below. VALIDITY: The Proportion of Days Covered (PDC), which is the method used to calculate adherence in Measure 1879, has several advantages over the Medication Possession Ratio (MPR), which is used in Measure 0544. First, the PDC was found to be more conservative compared to the Medication Possession Ratio (MPR) and was preferred in clinical scenarios in which the potential for more than one drug to be used within a drug class concomitantly (e.g., antipsychotics). This clinical situation applies directly to Measure 1879. Martin et al. (2009) demonstrated this in a study published in the Annals of Pharmacotherapy by comparing the methodology for drugs that are commonly switched, where the MPR was 0.690, truncated MPR was 0.624, and PDC was 0.562 and found significant differences between the values for adherence (p < 0.001). Martin et al. (2009) also compared drugs with therapeutic duplication where the PDC was 0.669, truncated MPR was 0.774, and MPR was 1.238, and again obtained significant differences (p < 0.001). These findings were partially replicated by testing results from FMGAI (now HSAG) of Measure 1879 where MPR produced a higher measure rate (as compared to PDC) as shown below. Adherence to Antipsychotic Medications for Individuals with Schizophrenia Method Measure Rate Comparison of MPR and PDC Method Measure Rate MPR 74.4% PDC 70.0% Based on initial draft measure specifications and data from a 100% sample of Medicare fee-for-service beneficiaries.
### 1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
</table>
| Measure 1880 | Focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. **Rationale.** This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.

### 0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
</table>
| Measure 0541 | Focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. **Rationale.** This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.

### 1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
</table>
| Measure 1879 | Focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. **Rationale.** This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.

### 1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
</tr>
</thead>
</table>
| Measure 1932 | Focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. **Rationale.** This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.

---

**Potential Rationales for Measurement Selection:**

- **Measure 1880:** Adopts the NQF methodology of choosing the better measure, as Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS.

- **Measure 0541:** Adopts the NQF methodology of choosing the better measure, as Measure 0541 focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. **Rationale.** This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.

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<table>
<thead>
<tr>
<th>Steward</th>
<th>Description</th>
<th>Type</th>
<th>Data Source</th>
<th>Level</th>
<th>Setting</th>
<th>Numerator Statement</th>
<th>Numerator Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Committee for Quality Assurance</td>
<td>Comparison of NQF #1932, NQF #1933 and NQF #1934</td>
<td>Process</td>
<td>Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system. No data collection instrument provided. Attachment 1932_SSD_Value_Sets.xlsx</td>
<td>Health Plan, Integrated Delivery System, Population : Regional and State</td>
<td>Other, Outpatient Services Any outpatient setting represented with Medicaid claims data</td>
<td>Among patients 18-64 years old with schizophrenia or bipolar disorder, those who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.</td>
<td>A glucose test (Glucose Tests Value Set) or an HbA1c test (Hba1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data. See corresponding Excel document for the Glucose Tests Value Set and the Hba1c Tests Value Set.</td>
</tr>
<tr>
<td>National Committee for Quality Assurance</td>
<td></td>
<td>Process</td>
<td>Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system. No data collection instrument provided. Attachment 1933_SMC_Value_Sets.xlsx</td>
<td>Health Plan, Integrated Delivery System, Population : Regional and State</td>
<td>Outpatient Services</td>
<td>An LDL-C test performed during the measurement year.</td>
<td>An LDL-C test (LDL-C Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data. - See corresponding Excel document for the LDL-C Tests Value Set. The organization may use a calculated or direct LDL.</td>
</tr>
<tr>
<td>National Committee for Quality Assurance</td>
<td></td>
<td>Process</td>
<td>Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system. No data collection instrument provided. Attachment 1934_SMD_Value_Sets.xlsx</td>
<td>Health Plan, Integrated Delivery System, Population : Regional and State</td>
<td>One or more Hba1c tests and one or more LDL-C tests performed during the measurement year.</td>
<td>Patients age 18-64 years of age as of the end of the measurement year (e.g., December 31) with a diagnosis of schizophrenia and diabetes.</td>
<td>Follow the steps below to identify the eligible population. Identify members with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year: • At least one acute inpatient encounter with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria: - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set. - BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set. - BH Stand Alone Acute Inpatient Value Set with Other Bipolar Disorder Value Set. - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set. Follow the steps below to identify the eligible population. Step 1: Identify patients with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year.</td>
</tr>
</tbody>
</table>
### 1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

<table>
<thead>
<tr>
<th>BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Bipolar Disorder Value Set.</th>
<th>BH Stand Alone Inpatient Value (Inpatient Value Set) with Schizophrenia Value Set.</th>
<th>BH Nonacute Inpatient Value Set with Bipolar Disorder Value Set.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BH Acute Inpatient Value Set with Bipolar Disorder Value Set.</td>
<td>BH Outpatient/PH/IOP Value Set with Schizophrenia Value Set.</td>
<td>At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:</td>
</tr>
<tr>
<td>• At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of bipolar disorder. Any two of the following code combinations meet criteria:</td>
<td>• At least one acute inpatient stay (Inpatient Value Set).</td>
<td>To identify discharges:</td>
</tr>
<tr>
<td>• BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.</td>
<td>• 1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).</td>
<td>1. Identify the discharge date for the stay.</td>
</tr>
<tr>
<td>BH Stand Alone Outpatient/PH/IOP Value Set with Other Bipolar Disorder Value Set.</td>
<td>• 2. Identify the discharge date for the stay.</td>
<td>• CABG. Members who had CABG (CABG Value Set) in any setting.</td>
</tr>
<tr>
<td>• BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Bipolar Disorder Value Set.</td>
<td>• PCI. Members who had PCI (PCI Value Set) in any setting (e.g., inpatient, outpatient, ED).</td>
<td>Diagnosis. Identify members with IVD as those who met at least either of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.</td>
</tr>
<tr>
<td>• BH Outpatient/PH/IOP Value Set with Other Bipolar Disorder Value Set.</td>
<td>• At least one outpatient visit (Outpatient Value Set) with a diagnosis of IVD (IVD Value Set).</td>
<td>• At least one outpatient visit (Outpatient Value Set) with a diagnosis of IVD (IVD Value Set).</td>
</tr>
<tr>
<td>• BH Stand Alone Nonacute Inpatient Value Set with Bipolar Disorder Value Set.</td>
<td>• At least one outpatient visit (Outpatient Value Set) with a diagnosis of IVD (IVD Value Set).</td>
<td>(See corresponding Excel document for the above value sets)</td>
</tr>
<tr>
<td>• BH Nonacute Inpatient Value Set with Bipolar Disorder Value Set.</td>
<td>• At least one outpatient encounter (Acute Inpatient Value Set) with a diagnosis of IVD (IVD Value Set).</td>
<td></td>
</tr>
<tr>
<td>• BH Stand Alone Nonacute Inpatient Value Set with Other Bipolar Disorder Value Set.</td>
<td>• The organization must use both methods to identify the eligible population, but a member need only be identified by one to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.</td>
<td></td>
</tr>
<tr>
<td>• BH Nonacute Inpatient Value Set with Other Bipolar Disorder Value Set.</td>
<td>Claim/encounter data. Members who met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years):</td>
<td><strong>PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List):</strong></td>
</tr>
<tr>
<td>• At least one acute inpatient encounter (Acute Inpatient Value Set), with a diagnosis of diabetes (Diabetes Value Set).</td>
<td>• At least one acute inpatient encounter (Acute Inpatient Value Set), with a diagnosis of diabetes (Diabetes Value Set).</td>
<td>Alpha-glucosidase inhibitors:</td>
</tr>
<tr>
<td><strong>Sulfonylureas:</strong></td>
<td>Pharmacy data. Members who were dispensed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (Diabetes Medications List).</td>
<td>Acarbose, Miglitol</td>
</tr>
<tr>
<td>Canagliflozin, Dapagliflozin, Empagliflozin, Linagliptin, Alogliptin-pioglitazone, Metformin-rosiglitazone, Metformin-repaglinide, Sitagliptin-smvastatin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glimepiride-metformin, Glyburide-metformin, Glipizide-metformin, Empagliflozin-metformin, Metformin-pioglitazone, Metformin-Repaglinide, Metformin-saxagliptin, Metioprolol-cefaclor, Alogliptin Metformin-pioglitazone,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albiglutide, Dulaglutide, Exenatide, Liraglutide,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Liraglutide, Albiglutide</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium glucose cotransporter 2 (SGLT2) inhibitor:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canagliflozin, Dapagliflozin, Empagliflozin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium Glucose Cotransporter 2 (SGLT2) Inhibitor:</td>
<td><strong>Insulin:</strong></td>
<td></td>
</tr>
<tr>
<td>Lispro protamine, Insulin regular human,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin lispro, Insulin lispro-insulin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin aspart, Insulin aspart-insulin aspart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin degludec, Insulin detemir, Insulin aspart-insulin aspart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>simvastatin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metformin-rosiglitazone, Metformin-repaglinide,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metformin-rosiglitazone, Metformin-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>saxagliptin, Metformin-saxagliptin, Sitagliptin-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin aspart, Insulin aspart-insulin aspart</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protamine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin lispro-insulin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin lispro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin lispro-insulin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insulin lispro-insulin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)</td>
<td>1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)</td>
<td>1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Exclusions</td>
<td>Exclusions</td>
<td>Exclusions</td>
</tr>
<tr>
<td>Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. Exclude patients with diabetes during the measurement year or the year prior to the measurement year. Exclude patients who had no antipsychotic medications dispensed during the measurement year.</td>
<td>Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.</td>
<td>Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.</td>
</tr>
<tr>
<td>Exclusion Details</td>
<td>Exclusion Details</td>
<td>Exclusion Details</td>
</tr>
<tr>
<td>Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These members may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set). Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year). There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year. Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Diabetes Medications List). Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years). - At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters. - At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set). PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List): Alpha-glucosidase inhibitors: Acarbose, Miglitol Amylin analogs: Pramlintide Antidiabetic combinations: Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-liangliptin, Empagliflozin-metformin, Glimepiride-pioglitazone, Glimepiride-rosiglitazone, Glipizide-metformin, Glyburide-metformin, Linagliptin-metformin, Metformin-pioglitazone, Metformin-rosiglitazone, Metformin-saxagliptin,</td>
<td>Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.</td>
<td>Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.</td>
</tr>
<tr>
<td>Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamide Thiazolidinediones: Pioglitazone, Rosiglitazone Dipeptidyl peptidase-4 (DDP-4) inhibitors: Alogliptin, Linagliptin, Saxagliptin, Sitagliptin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Risk Adjustment</td>
<td>No risk adjustment or risk stratification</td>
<td>No risk adjustment or risk stratification</td>
</tr>
<tr>
<td>-----------------</td>
<td>-----------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Stratification</td>
<td>None.</td>
<td>N/A</td>
</tr>
<tr>
<td>Type Score</td>
<td>Rate/proportion better quality = higher score</td>
<td>Rate/proportion better quality = higher score</td>
</tr>
<tr>
<td>Algorithm</td>
<td>Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year. Step 2. Search for an exclusion in the patient’s history: Exclude patients from the</td>
<td>Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year with a diagnosis of schizophrenia and cardiovascular disease. Step 2. Search for an optional exclusion in the patient’s history: Exclude patients from the</td>
</tr>
</tbody>
</table>

**1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)**

- Metformin-sitagliptin, Sitagliptin-simvastatin
- Insulin: Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane-human, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled
- Meglitinides: Nateglinide, Repaglinide
- Glucagon-like peptide-1 (GLP1) agonists: Dulaglutide, Exenatide, Liraglutide, Albiglutide
- Sodium glucose cotransporter 2 (SGLT2) inhibitor: Canagliflozin, Dapagliflozin, Empagliflozin
- Sulfonylureas: Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamide
- Thiazolidinediones: Pioglitazone, Rosiglitazone
- Dipeptidyl peptidase-4 (DPP-4) inhibitors: Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

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Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.

- Claim/encounter data. An antipsychotic medication (Long-Acting Injections Value Set).
- Pharmacy data. Dispensed an antipsychotic medication (Antipsychotic Medications List; Antipsychotic Combination Medications List) on an ambulatory basis.

**ANTIPSYCHOTIC MEDICATIONS:**

- (Antipsychotic Medications List)
  - Miscellaneous antipsychotic agents: Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Clozapine, Haloperidol, Iloperidone, Loxapine, Luridione, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine, Quetiapine fumarate, Risperidone, Ziprasidone
  - Phenothiazine antipsychotics: Chlorpromazine, Fluphenazine, Perphenazine, Prochlorperazine, Thioridazine, Trifluoperazine
  - Thioxanthenes: Thiothixene
  - Long-acting injections: Aripiprazole, Fluphenazine decanoate, Haloperidol decanoate, Olanzapine, Paliperidone palmitate, Risperidone (Antipsychotic Combination Medications List)

**Psychotherapeutic combinations:** Fluoxetine-olanzapine, Perphenazine-amitriptyline

See corresponding Excel document for the value sets referenced above.
Comparison of NQF #3389 and NQF #2940, NQF #2950, and NQF #2951

<table>
<thead>
<tr>
<th>#389 Concurrent Use of Opioids and Benzodiazepines (COB)</th>
<th>2940 Use of Opioids at High Dosage in Persons Without Cancer</th>
<th>2950 Use of Opioids from Multiple Providers in Persons Without Cancer</th>
<th>2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Steward</td>
<td>Pharmacy Quality Alliance</td>
<td>Pharmacy Quality Alliance</td>
<td>Pharmacy Quality Alliance</td>
</tr>
<tr>
<td>Description</td>
<td>The percentage of individuals 18 years and older with</td>
<td>The proportion (XX out of 1,000) of individuals without cancer</td>
<td>The proportion (XX out of 1,000) of individuals without cancer</td>
</tr>
<tr>
<td></td>
<td>concurrent use of prescription opioids and benzodiazepines</td>
<td>receiving prescriptions for opioids with a daily dosage greater</td>
<td>receiving prescriptions for opioids with a daily dosage</td>
</tr>
<tr>
<td></td>
<td>during the measurement year. A lower rate indicates better</td>
<td>than 120mg morphine equivalent dose (MED) for 90 consecutive</td>
<td>greater than 120mg morphine equivalent dose (MED) for 90</td>
</tr>
<tr>
<td></td>
<td>performance.</td>
<td>days or longer.</td>
<td>consecutive days or longer, and who received opioid</td>
</tr>
<tr>
<td>Data Source</td>
<td>Claims Administrative claims: prescription claims, medical</td>
<td>Claims Health Plan Medical and Pharmacy Claims. Health Plan</td>
<td>claims: prescription drug health plan, but it contains</td>
</tr>
<tr>
<td></td>
<td>claims, Prescription Drug Hierarchical Condition Categories</td>
<td>member enrollment information. No data collection instrument</td>
<td>claims data from multiple care settings, including</td>
</tr>
<tr>
<td></td>
<td>(RxHCCs)</td>
<td>provided Attachment Cancer_Exclusion_RxHCC_JCD-9_and_10_Codes.</td>
<td>ambulatory, skilled nursing facility, pharmacy etc.</td>
</tr>
<tr>
<td></td>
<td>No data collection instrument provided Attachment PQA_JCD_</td>
<td>No data collection instrument provided Attachment</td>
<td>Other, Outpatient Services The level of analysis for this</td>
</tr>
<tr>
<td></td>
<td>Code_Cancer_Care Value_Set_Feb_2018.xlsx</td>
<td>Cancer_Exclusion_RxHCC_JCD-9_and_10_Codes-635969250747551020.xlsx</td>
<td>measure is the prescription drug health plan, but it</td>
</tr>
<tr>
<td>Level</td>
<td>Health Plan</td>
<td>Health Plan, Other, Population : Regional and State</td>
<td>contains claims data from multiple care settings, including</td>
</tr>
<tr>
<td></td>
<td>Health Plan, Other, Population : Regional and State</td>
<td>Health Plan, Other, Population : Regional and State</td>
<td>ambulatory, skilled nursing facility, pharmacy etc.</td>
</tr>
<tr>
<td>Setting</td>
<td>Other The level of analysis for this measure is the</td>
<td>Other, Outpatient Services The level of analysis for this</td>
<td>Other, Outpatient Services The level of analysis for this</td>
</tr>
<tr>
<td></td>
<td>prescription drug health plan, but it contains claims data</td>
<td>measure is the prescription drug health plan, but it contains</td>
<td>measure is the prescription drug health plan, but it</td>
</tr>
<tr>
<td></td>
<td>from multiple care settings, including ambulatory, skilled</td>
<td>contains claims data from multiple care settings, including</td>
<td>contains claims data from multiple care settings, including</td>
</tr>
<tr>
<td></td>
<td>nursing facility, pharmacy etc.</td>
<td>ambulatory, skilled nursing facility, pharmacy etc.</td>
<td>ambulatory, skilled nursing facility, pharmacy etc.</td>
</tr>
<tr>
<td>Numerator Statement</td>
<td>The number of individuals from the denominator with</td>
<td>Any member in the denominator who received opioid prescription</td>
<td>Any member in the denominator with opioid prescription</td>
</tr>
<tr>
<td></td>
<td>concurrent use of opioids and benzodiazepines for 30 or</td>
<td>claims where the MED is greater than 120mg for 90 consecutive</td>
<td>claims where the MED is greater than 120mg for 90 consecutive</td>
</tr>
<tr>
<td></td>
<td>more cumulative days during the measurement year.</td>
<td>days or longer* *MED calculation is included in 5.6 Numerator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Details</td>
<td>Details</td>
</tr>
</tbody>
</table>
### 3389 Concurrent Use of Opioids and Benzodiazepines (COB)

**Details**
- The number of individuals with concurrent use of opioids and benzodiazepines from the denominator with:
  - 2 or more prescription claims for any benzodiazepine with unique dates of service, AND
  - Concurrent use of opioids and benzodiazepines for 30 or more cumulative days.

**Step 1:** From the denominator population, identify individuals with 2 or more prescriptions claims on unique dates of service for any benzodiazepine (Table COB-B, below) during the measurement year.

**Step 2:** Of the population identified in Step 1, determine the total days of overlap (concurrent use) between the opioid and benzodiazepine prescriptions during the measurement year.
- Concurrent use is identified using the dates of service and days’ supply of an individual’s opioid and benzodiazepine prescription drug claims. The days of concurrent use is the sum of the number of days (cumulative) during the measurement year with overlapping days’ supply for an opioid and a benzodiazepine. Exclude days of overlap that occur after the end of the measurement year.

**Step 3:** Count the number of individuals with concurrent use of opioids and benzodiazepines for 30 or more cumulative days. This is the numerator.

**Note:** When identifying days’ supply for opioids (or benzodiazepines):
- Exclude any days’ supply that occur after the end of the measurement year.
- Multiple prescription claims with the same date of service: if multiple prescription claims for opioids (or benzodiazepines) are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Table COB-B: Benzodiazepines:
- Alprazolam, clorazecdipoxide, cllobazam, clonazepam, clorazepate, diazepam, etazolam, fluazepam, lorazeepam, midazolam, oxazepam, quazepam, temazepam, triazolam (note: excludes injectable formulations)

### 2940 Use of Opioids at High Dosage in Persons Without Cancer

Any member in the denominator with opioid prescription claims greater than 120mg MED for 90 consecutive days or longer* (See Table Opioids-A: Opioid Medications).

**Step 1:** Identify members with prescription opioids that exceeded the MED threshold:
- To identify members with prescription opioids that exceeded the MED threshold, each claim is to be converted into the MED using the appropriate conversion factor associated with the opioid product of that prescription claim (see Appendix A). The MED for each day’s claims are then summed to determine the total MED for that day.

For each member in the denominator:
1. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
   - MED Daily Dose per claim = (# of opioid dosage units per day) X (MED conversion factor)
   - Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.

For each member in the denominator:
1. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
   - MED Daily Dose per claim = (# of opioid dosage units per day) X (MED conversion factor)
   - Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.

2. Identify the days where the MED threshold is exceeded.

4. For members, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.

Table Opioid-A: Opioid Medications (MED conversion factor):
- Buprenorphine patch (12.6)
- Buprenorphine tab or film (10)
- Butorphanol (7) codeine (0.15)
- Dihydrocodeine (0.25) fentanyl buccal or SL tablets, or lozenge/troche (0.13)
- Fentanyl nasal spray (0.16) fentanyl patch (7.2) hydromorphone (1) meperidine (0.1) morphine (1) opium (1) oxycodone (1.5) oxymorphone (3) pentazocine (0.37) tapentadol (0.4) tramadol (0.1)

*Note: Injections and Opioid cough and cold products and combination products containing buprenorphine and naloxone (e.g., BunavailTM, Suboxone®, Zubsolv®) are excluded from the MED calculations. intrasy (fentanyl transdermal patch) is also excluded as it is only for inpatient use; it is also only available through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS)

### 2950 Use of Opioids from Multiple Providers in Persons Without Cancer

For each member in the denominator:
1. Calculate the number of unique pharmacy providers associated with an opioid prescription claim.

2. Calculate the number of unique prescribers associated with an opioid prescription claim.

3. Any member with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.

### 2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

Any member in the denominator with opioid prescription claims greater than 120mg MED for 90 consecutive days or longer* AND who received opioid prescriptions from 4 or more prescribers AND 4 or more pharmacies (see Table Opioids-A: Opioid Medications)

*Identifying members with prescription opioids that exceeded the MED threshold:
- To identify members with prescription opioids that exceeded the MED threshold, each claim is to be converted into the MED using the appropriate conversion factor associated with the opioid product of that prescription claim (see Appendix A). The MED for each day’s claims are then summed to determine the total MED for that day.

For each member in the denominator:
1. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
   - MED Daily Dose per claim = (# of opioid dosage units per day) X (MED conversion factor)
   - SUM the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.

2. Identify the days where the MED threshold is exceeded.

4. For members, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.

Table Opioid-A: Opioid Medications (MED conversion factor):
- Buprenorphine patch (12.6)
- Buprenorphine tab or film (10)
- Butorphanol (7) codeine (0.15)
- Dihydrocodeine (0.25) fentanyl buccal or SL tablets, or lozenge/troche (0.13)
- Fentanyl nasal spray (0.16) fentanyl patch (7.2) hydromorphone (1) meperidine (0.1) morphine (1) opium (1) oxycodone (1.5) oxymorphone (3) pentazocine (0.37) tapentadol (0.4) tramadol (0.1)

*Note: Injections and Opioid cough and cold products and combination products containing buprenorphine and naloxone (e.g., BunavailTM, Suboxone®, Zubsolv®) are excluded from the MED calculations. intrasy (fentanyl transdermal patch) is also excluded as it is only for inpatient use; it is also only available through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS)
<table>
<thead>
<tr>
<th>Denominator Statement</th>
<th>3389 Concurrent Use of Opioids and Benzodiazepines (COB)</th>
<th>2940 Use of Opioids at High Dosage in Persons Without Cancer</th>
<th>2950 Use of Opioids from Multiple Providers in Persons Without Cancer</th>
<th>2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator Details</td>
<td>The denominator includes individuals 18 years and older with 2 or more prescription claims for opioids with unique dates of service, for which the sum of the days' supply is 15 or more days. Individuals with cancer or in hospice are excluded.</td>
<td>Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.</td>
<td>Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.</td>
<td>Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.</td>
</tr>
</tbody>
</table>

Table Opioid-A: Opioid Medications

- buprenorphine patch (12.6)
- buprenorphine tab or film (10)
- butorphanol (7) codeine (0.15) dihydrocodeine (0.25) fentanyl buccal or St Tablets, or lozenge/roche (0.13) fentanyl film or oral spray (0.18) fentanyl nasal spray (0.16) fentanyl patch (7.2)
- hydrocodone (1) hydromorphone (4)
- levorphanol (11) meperidine (0.1) methadone (3) morphine (1) opium (1) oxycodone (1.5) oxymorphone (3) pentazocine (0.37) tapentadol (0.4) tramadol (0.1)

*Note: Injectables and Opioid cough and cold products and combination products containing buprenorphine and naloxone (e.g., BupavallTM, Suboxone®, Zubsolv®) are excluded from the MED calculations. Jonys® (fentanyl transdermal patch) is also excluded as it is only for inpatient use; It is also only available through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS)
| Step 4: Of those identified in step 3, identify individuals where the earliest prescription for an opioid (i.e. Index Prescription Start Date [IPSD]) is 30 or more days from the last day of the measurement year (January 1 through December 2) |
| Note: When identifying days’ supply for opioids: |
| • Exclude any days’ supply that occur after the end of the measurement year. |
| • Multiple prescription claims with the same date of service: If multiple prescription claims for opioids are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply. |
| Table COB-A: Opioids: buprenorphine, butorphanol, codeine, dihydromorphine, fentanyl, hydrocodone, hydromorphone, levorphanol, meperidine, methadone, morphine, oxycodone, oxymorphone, pentazocine, tapentadol, tramadol (note: excludes injectable formulations; includes prescription opioid cough medications; excludes single-agent and combination buprenorphine products used to treat opioid use disorder [i.e., buprenorphine sublingual tablets; Probuphine® Implant kit subcutaneous implant, and all buprenorphine/naloxone combination products]). |
| Exclusions: Individuals with cancer or in hospice at any point during the measurement year are excluded from the denominator. |
| Exclusion Details: Hospice exclusion: Exclude any individual in hospice during the measurement year. To identify individuals in hospice: |
| • Use the hospice indicator from the enrollment database, where available (e.g. Medicare); or |
| • Use place of service code 34 where a hospice indicator is not available (e.g. Commercial, Medicaid) |
| Cancer exclusion: Exclude any individuals with cancer during the measurement year. To identify individuals with cancer: |
| • Using ICD codes, refer to those listed in the file titled, PQA ICD Code Cancer Value Set Feb 2018 and attached in S2.b. The list is based on the American Medical Association-convened ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b |
| Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database. |
| Hospice exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice. |
| Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19 |
| ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b |
| Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database. |
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| ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b |
| Hospice exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice. |
| Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19 |
| ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b |
Physician Consortium for Performance Improvement Cancer value set (OID: 2.16.840.1.113883.3.526.3.10.10). A cancer diagnosis is defined as having at least one claim with any of the listed cancer diagnoses, including primary diagnosis or any other diagnosis fields during the measurement year.

- For Medicare Data, if ICD codes are not available, use Prescription Drug Hierarchical Condition Categories (RxHCCs) 15, 16, 17, 18, 19 for Payment Year 2016 or 2017 to identify cancer exclusions. RxHCCs are available at: https://www.cms.gov/Medicare/HealthPlans/MedicareAdvSpecRats/Stats/Risk-Adjusters.html

### Risk Adjustment

<table>
<thead>
<tr>
<th>Risk Adjustment</th>
<th>No risk adjustment or risk stratification</th>
<th>No risk adjustment or risk stratification</th>
<th>No risk adjustment or risk stratification</th>
<th>No risk adjustment or risk stratification</th>
</tr>
</thead>
</table>

### Stratification

The measure is stratified by the following lines of business for the health plan:

- Commercial
- Medicare
- Medicaid

Medicare Plans are further stratified by Low-Income Subsidy (LIS) status. LIS is a subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources. Medicare beneficiaries apply for the LIS with the Social Security Administration or their State Medicaid agency.

- Medicaid

The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify LIS status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name corresponds with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized Part D coverage.

### Type Score

<table>
<thead>
<tr>
<th>Type Score</th>
<th>Rate/proportion better quality = lower score</th>
<th>Rate/proportion better quality = lower score</th>
<th>Rate/proportion better quality = lower score</th>
<th>Rate/proportion better quality = lower score</th>
</tr>
</thead>
</table>

### Algorithm

A. Target population (denominator):

Step 1: Identify individuals aged 18 years and older as of the first day of the measurement year

Step 2: Of those identified in step 1, identify individuals

Step One: Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

Step One: Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

Step One: Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
meeting the continuous enrollment criteria.
• To be continuously enrolled, an individual may have no more than one gap in enrollment of up to 31 days during the measurement year. When enrollment is verified monthly, the individual may not have more than a 1-month gap in coverage (i.e., an individual whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Step 2: Of those identified in step 2, identify individuals with 2 or more prescription claims for opioids on unique dates of service, for which the sum of the days’ supply is 15 or more days’ supply during the measurement year.

Step 4: Of those identified in step 3, identify individuals where the earliest prescription for an opioid (i.e. Index Prescription Start Date [IPSD]) is 30 or more days from the last day of the measurement year (January 1 through December 2).

Note: When identifying days’ supply for opioids:
• Exclude any days’ supply that occur after the end of the measurement year.

Multiple prescription claims with the same date of service: If multiple prescription claims for opioids are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Step 5: Identify individuals with cancer or in hospice during the measurement year. To identify individuals in hospice:
• Use the hospice indicator from the enrollment database, where available (e.g. Medicare); or
• Use place of service code 34 where a hospice indicator is not available (e.g. Commercial, Medicaid)

To identify individuals with cancer:
• Using ICD codes, refer to those listed in the file titled, PQI ICD Code Cancer Value Set Feb 2018 and attached in S.2b. The list is based on the American Medical Association-convened Physician Consortium for Performance Improvement Cancer value set (OID: 2.16.840.1.113883.3.526.3.1010). A cancer diagnosis is defined as having at least one claim with any of the listed cancer diagnoses, including primary diagnosis or any other diagnosis fields during the measurement year.
• For Medicare Data, if ICD codes are not available, use Prescription Drug Hierarchical Condition

Step Two:
Calculate the numerator by:
For each member in the denominator:
  a. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
    • # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
    • MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)
  b. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.
  c. Identify the days where the MED threshold is exceeded.

Step Three:
Divide the number of members that met the criteria in numerator (Step Two c.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members.
<table>
<thead>
<tr>
<th>3389 Concurrent Use of Opioids and Benzodiazepines (COB)</th>
<th>2940 Use of Opioids at High Dosage in Persons Without Cancer</th>
<th>2950 Use of Opioids from Multiple Providers in Persons Without Cancer</th>
<th>2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Categories (RxHCCs) 15, 16, 17, 18, 19 for Payment Year 2016 or 2017 to identify cancer exclusions. RxHCCs are available at: <a href="https://www.cms.gov/Medicare/Health-Plans/MedicareAdvSpecRateStats/Risk-Adjustors.html">https://www.cms.gov/Medicare/Health-Plans/MedicareAdvSpecRateStats/Risk-Adjustors.html</a> Step 6: Exclude individuals with cancer or in hospice (Step 5) from those identified in Step 4. This is the denominator. B. Numerator Population: Step 7: From the denominator population (from Step 6), identify individuals with 2 or more prescriptions claims on unique dates of service for any benzodiazepine during the measurement year. Step 8: Of the population identified in Step 7, determine the total days of overlap (concurrent use) between the opioid and benzodiazepine prescriptions during the measurement year. Concurrent use is identified using the dates of service and days’ supply of an individual’s opioid and benzodiazepine prescription drug claims. The days of concurrent use is the sum of the number of days (cumulative) during the measurement year with overlapping days’ supply for an opioid and a benzodiazepine. Exclude days of overlap that occur after the end of the measurement year. Step 9: Count the number of individuals with concurrent use of opioids and benzodiazepines for 30 or more cumulative days. This is the numerator. Note: When identifying days’ supply for opioids (or benzodiazepines): Exclude any days’ supply that occur after the end of the measurement year. Multiple prescription opioid (or benzodiazepine) claims with overlap: For multiple prescription claims for opioids (or benzodiazepines) with overlapping days’ supply, count each day in the measurement year only once toward the denominator. There is no adjustment for early fills or overlapping days’ supply for opioids (or benzodiazepines). C. Measure Rate: Step 10: Divide the number of individuals in the numerator (Step 9) by the denominator (Step 6) and multiply by 100. This is the measure rate reported as a percentage. Report the rates separately by line of business (e.g. Medicare, Medicaid, Commercial). For Medicare, report rates for low-income</td>
<td></td>
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</tr>
</tbody>
</table>
### Concurrent Use of Opioids and Benzodiazepines (COB)

- 2940 Use of Opioids at High Dosage in Persons Without Cancer
- 2950 Use of Opioids from Multiple Providers in Persons Without Cancer
- 2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

#### Submission items

- 5.1 Identified measures: 2940: Use of Opioids at High Dosage in Persons Without Cancer
- 2950: Use of Opioids from Multiple Providers in Persons Without Cancer
- 2951: Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

**Subsidy (LIS) and non-LIS populations separately.**

- Sa.1 Are specs completely harmonized? Yes
- Sa.2 If not completely harmonized, identify difference, rationale, impact:
  - Sb.1 If competing, why superior or rationale for additive value: N/A

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### Comparison of NQF #3400 and NQF# 3175

<table>
<thead>
<tr>
<th>Measure</th>
<th>Description</th>
<th>Type</th>
<th>Data Source</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400 Use of pharmacotherapy for opioid use disorder (OUD)</td>
<td>The percentage of Medicaid beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year. The measure will report any medications used in medication-assisted treatment of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.</td>
<td>Process</td>
<td>Claims Medicaid Alpha-MAX 2014 data: eligible (EI), inpatient (IP), other services (OT), long-term care (LT) and drug (RX) files. The other services file contains facility and individual provider services data. Most notably, it may contain both residential and other stayover service claims data as claims are assigned to MAX claims file types based upon the category of service provided. No data collection instrument provided Attachment NQF_Value_Sets_SUD-4_FINAL_SUD_team.01.24.18.xlsx</td>
<td>Emergency Department and Services, Inpatient/Hospital, Outpatient Services</td>
</tr>
<tr>
<td>3175 Continuity of Pharmacotherapy for Opioid Use Disorder</td>
<td>Percentage of adults 18-64 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment</td>
<td>Process</td>
<td>Claims, Electronic Health Data For measure calculation, the following files from the Truven MarketScan® Commercial Database were used: • Enrollment data • Drug claims • Medical claims</td>
<td>Outpatient Services</td>
</tr>
</tbody>
</table>

We used data from these files (including data from Standard Quarterly Updates) for calendar years 2010-2015. This database has long been a commonly used data source to study patterns of commercially insured patients. The database contains fully adjudicated, patient-level claims. All records in these files were used as input to identify individuals that met the measure’s eligibility criteria. We present detailed results in the MIF for 2013-2014, as we have the most data for this time period, but we include measure scores for each of the two year periods within 2010-2015. The final analytic file for 2013-2014 contained a total of 43,812 episodes. No data collection instrument provided Attachment NQF_3175_OUD_Code_Lists_1-12-17_To_NQF.xlsx

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<table>
<thead>
<tr>
<th>Level</th>
<th>Population</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional and State</td>
<td>Health Plan, Population : Regional and State</td>
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</tr>
<tr>
<td>Emergency Department and Services, Inpatient/Hospital, Outpatient Services</td>
<td>Outpatient Services</td>
<td></td>
</tr>
</tbody>
</table>
### Numerator Statement

Beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year.

### Numerator Details

Beneficiaries identified as filling a prescription for or were administered or ordered an FDA-approved medication for OUD, during the 12-month measure year, through pharmacy claims (relevant NDC code) or through relevant HCPCS coding of medical service. Only formulations with an OUD indication (not pain management) are included in measure calculation.

The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone. A list of value sets for the measure is attached in the Excel workbook provided for question S.2b. NDC codes listed are codes that were used in testing and are current as of June 2017.

<table>
<thead>
<tr>
<th>3400 Use of pharmacotherapy for opioid use disorder (OUD)</th>
<th>3175 Continuity of Pharmacotherapy for Opioid Use Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerator</strong></td>
<td><strong>Numerator</strong></td>
</tr>
<tr>
<td>Benefits to ages 18 to 64 with an OUD who filled a</td>
<td>Individuals in the denominator who have at least 180 days</td>
</tr>
<tr>
<td>prescription for or were administered or ordered an</td>
<td>of continuous pharmacotherapy with a medication prescribed</td>
</tr>
<tr>
<td>FDA-approved medication for the disorder during the</td>
<td>for OUD without a gap of more than seven days</td>
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<tr>
<td>measure year, through pharmacy claims (relevant NDC</td>
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<tr>
<td>code) or through relevant HCPCS coding of medical</td>
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<td>service. Only formulations with an OUD indication (not</td>
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<td>stratified by four medications/mode of</td>
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<td>administration: buprenorphine; oral naltrexone; long-</td>
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<td>acting, injectable naltrexone; and methadone. A list of</td>
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<td>value sets for the measure is attached in the Excel</td>
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<td>workbook provided for question S.2b. NDC codes listed</td>
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<tr>
<td>are codes that were used in testing and are current as</td>
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<tr>
<td>of June 2017.</td>
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</tbody>
</table>

### 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


### Algorithm

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Identify denominators. Medicaid beneficiaries age 18 through 64, enrolled for full 12 months of measurement year, and have at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year.</td>
</tr>
<tr>
<td>2A.</td>
<td>Identify beneficiaries with evidence of at least one prescription for buprenorphine at any point during the measurement year.</td>
</tr>
<tr>
<td>2B.</td>
<td>Identify beneficiaries with evidence of at least one prescription for naltrexone at any point during the measurement year.</td>
</tr>
<tr>
<td>2C.</td>
<td>Identify beneficiaries with evidence of at least one prescription for methadone at any point during the measurement year.</td>
</tr>
<tr>
<td>2D.</td>
<td>Identify beneficiaries with evidence of at least one prescription for naltrexone at any point during the measurement year.</td>
</tr>
</tbody>
</table>

### Exclusions

- None.

### Denominator

- **Statement:** Medicaid beneficiaries age 18 through 64 years, enrolled for full 12 months of measurement year, and have at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year. ICD-9 and ICD-10 codes for OUD are provided in the attached Excel file in required format at S.2b.

### Denominator Details

- **Stratification:** The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone. The NDC pharmacy codes used to identify the FDA-approved medications for OUD are listed in an Excel file attached at S.2b.

### Type Score

- **Rate/proportion better quality = higher score**

### Measure Scores

- The measure score is calculated for rolling two-year periods from 2010 to 2015. The steps described below are repeated for five rolling two-year periods: 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015. We present detailed results in the MRI for 2013-2014, as we have the most data for this time period, but we include measure scores for each of the two-year periods within 2010-2015.

### CREATE DENOMINATOR:

- Individual 18-64 years of age who had a diagnosis of OUD and at least one claim for a NDC code included in the National Drug Codes (NDCs) for the injectable 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 "NQI 3175 OUD Code Lists" which is attached to this form under Item S.2b.

### ICD-9 Diagnosis Codes and ICD-10 Diagnosis Codes

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

### ICD-9 and ICD-10 Codes

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

### Centers

- No risk adjustment or risk stratification

### State

- **No risk adjustment or risk stratification**

### Gender

- **none**

### Age

- **none**

### Program

- **none**

### Plan

- **none**

### Risk Adjustment

- **none**

### Denominator

- **None.**

### Exclusion Details

- **Not applicable.**

### Risk Adjustment

- **None.**

### Stratifiction

- **The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone. The NDC pharmacy codes used to identify the FDA-approved medications for OUD are listed in an Excel file attached at S.2b.**

### Measure Results

- **Age – Divided into four categories: 18-34, 35-44, 45-54, 55-64 years**
- **Gender:** Male, Female
- **State**
- **Health plan**

### Measure Score

- **The measure score is calculated for rolling two-year periods from 2010 to 2015. The steps described below are repeated for five rolling two-year periods: 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015. We present detailed results in the MRI for 2013-2014, as we have the most data for this time period, but we include measure scores for each of the two-year periods within 2010-2015.**

### CREATE DENOMINATOR:

- **Individual 18-64 years of age who had a diagnosis of OUD and at least one claim for a NDC code included in the National Drug Codes (NDCs) for the injectable 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 "NQI 3175 OUD Code Lists" which is attached to this form under Item S.2b.**

### NQF 3175 OUD Code Lists

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

### OUD Medications

- OUD medications were identified using National Drug Codes (NDCs) and HCPCS codes for the injectable 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 "NQI 3175 OUD Code Lists" which is attached to this form under Item S.2b.

### Methadone and Buprenorphine

- Methadone and buprenorphine can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

### Methadone

- Methadone can 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.

### Buprenorphine

- Buprenorphine and Naloxone, oral buprenorphine, naltrexone (oral), and Buprenorphine and Naloxone can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

### Naltrexone

- Naltrexone (oral), Naltrexone (extended-release injectable), and Naltrexone can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

### Methadone

- Methadone administration can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

### Pharmacotherapy

- Pharmacotherapy in licensed treatment centers. Buprenorphine and Naloxone can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

### NDCs

- 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 "NQI 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 and Naloxone can be dispensed through a pharmacy or in an office/treatment center and is therefore identified based on either NDC or HCPCS codes.

### HCPCS Codes

- The HCPCS codes for the following:
  - Buprenorphine or Buprenorphine/naloxone, oral
  - Methadone administration
  - Naltrexone (oral)
  - Methadone
  - Methadone administration
  - Buprenorphine or Buprenorphine/naloxone, oral
  - Methadone administration
  - Methadone
  - Methadone administration
  - Buprenorphine or Buprenorphine/naloxone, oral
  - Methadone administration
  - Methadone
  - Methadone administration
  - Buprenorphine or Buprenorphine/naloxone, oral
  - Methadone administration
  - Methadone
  - Methadone administration
<table>
<thead>
<tr>
<th>Submission Items</th>
<th>3400 Use of pharmacotherapy for opioid use disorder (OUD)</th>
<th>3175 Continuity of Pharmacotherapy for Opioid Use Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>5a.1 Identified measures: 3175 : Continuity of Pharmacotherapy for Opioid Use Disorder</td>
<td>• Buprenorphine or Buprenorphine/naloxone, oral</td>
<td></td>
</tr>
<tr>
<td>5a.1 Are specs completely harmonized? Yes</td>
<td>• Methadone administration</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Naltrexone (extended-release injectable)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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 &quot;NDCs&quot; and &quot;HCPCS Codes&quot;, respectively, in the Excel file called &quot;NQF 3175 OUD Code Lists,&quot; which is attached to this form under Item S.2b.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2b. Naltrexone injections contribute 30 days' supply unless another claim is found sooner, in which case the Naltrexone injection covers only the days up to the next claim.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2d. Claims for Naltrexone injections 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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>Proposed Measure</td>
<td>NQF 0004</td>
<td>NQF 1664</td>
</tr>
<tr>
<td>------------------</td>
<td>----------</td>
<td>----------</td>
</tr>
<tr>
<td>Diagnosis of OUD</td>
<td>Diagnosis of alcohol or other drug dependence</td>
<td>Diagnosis of AUD or another substance use disorder</td>
</tr>
<tr>
<td>Patients aged 13 years of age and older</td>
<td>Patients 18-64 years of age</td>
<td>Patients 18 years of age and older</td>
</tr>
<tr>
<td>Patients 18 years of age and older</td>
<td>Patients 18-64 years of age</td>
<td>Patients 18-64 years of age</td>
</tr>
</tbody>
</table>

**Rationale and impact of focusing on only OUD:** There are different medications for treatment of OUD and AUD, and there are no FDA-approved medications for treatment of other substance use disorders. In addition, the conceptual issues related to continuity of pharmacotherapy differ between OUD and AUD, so developing separate measures for the two disorders is required. The impact of this is a more narrowly focused measure that provides information specific to individuals with OUD.

**Age Range**
- Proposed measure: Patients 18-64 years of age
- NQF 0004: Patients aged 13 years of age and older
- NQF 1664: Patients 18 years of age and older

**Data Source**
- Proposed measure: Electronic claims data
- NQF 0004: Administrative claims, electronic clinical data
- NQF 1664: Electronic clinical data, paper medical records

**Process of Care Included in Numerator Definition**
- Proposed measure: Continuity of pharmacotherapy for OUD
- NQF 0004: Inpatient admission, outpatient visit, intensive outpatient encounter, or partial hospitalization for adults with a new episode of AUD, OUD, or other substance use disorders
- NQF 1664: Medication for treatment of alcohol or drug use disorder or a referral for addictions treatment

**Rationale and impact of the process of care included in the numerator definition:** Successful pharmacotherapy of OUD requires continuity over at least a 180-day period. Therefore, providing feedback to providers about continuity of OUD pharmacotherapy.
<table>
<thead>
<tr>
<th>3400 Use of pharmacotherapy for opioid use disorder (OUD)</th>
<th>3175 Continuity of Pharmacotherapy for Opioid Use Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>has the potential to improve continuity rates by increasing provider awareness, and motivating health plans and insurers to develop educational material and programs about pharmacotherapy for OUD for both providers and patients.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix E2: Related and Competing Measures (narrative format)

Comparison of NQF #0104e and NQF #1365e

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

**Steward**

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment  
Centers for Medicare and Medicaid Services

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment  
PCPI

**Description**

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment  
Percentage of patients aged 18 years and older with a diagnosis of major depressive disorder (MDD) with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment  
Percentage of patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder with an assessment for suicide risk

**Type**

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment  
Process

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment  
Process

**Data Source**

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment  
Electronic Health Records Not Applicable  
No data collection instrument provided  
Attachment 0104_MDD_SuicideRisk_ValueSets_2017September29.xlsx

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment  
Electronic Health Records Not Applicable  
No data collection instrument provided  
Attachment EP_EC_CMS177v6_NQF1365_CAMDD_SuicideRisk_ValueSets.xlsx

**Level**

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment  
Clinician : Group/Practice, Clinician : Individual
**1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment**

Clinician : Group/Practice, Clinician : Individual

**Setting**

**0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment**

Emergency Department and Services, Other, Outpatient Services Behavioral Health Day Treatment

**1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment**

Outpatient Services

**Numerator Statement**

**0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment**

Patients with a suicide risk assessment completed during the visit in which a new diagnosis or recurrent episode was identified

**1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment**

Patient visits with an assessment for suicide risk

**Numerator Details**

**0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment**

Time Period for Data Collection: At every visit where a new diagnosis or recurrent episode of Major Depressive Disorder is identified [initial evaluation during the episode]

Definition:

Suicide risk assessment - Must include questions about the following:

1) Suicidal ideation
2) Patient's intent of initiating a suicide attempt
AND, if either is present,
3) Patient plans for a suicide attempt
4) Whether the patient has means for completing suicide

GUIDANCE:

Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped to the concept “Intervention, Performed: Suicide Risk Assessment” included in the numerator logic in the attached HQMF in field S.2a.

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

**1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment**

Time Period for Data Collection: At each visit for major depressive disorder during the measurement period.

HQMF eCQM developed and is attached to this submission in field S.2a.

We have provided the following definitions and/or guidance for convenience; please see HQMF eCQM for complete details related to the specification.
NUMERATOR DEFINITION:
The specific type and magnitude of the suicide risk assessment is intended to be at the discretion of the individual clinician and should be specific to the needs of the patient. At a minimum, suicide risk assessment should evaluate:

1. Risk (e.g., age, sex, stressors, comorbid conditions, hopelessness, impulsivity) and protective factors (e.g., religious belief, concern not to hurt family) that may influence the desire to attempt suicide.
2. Current severity of suicidality.
3. Most severe point of suicidality in episode and lifetime.

Low burden tools to track suicidal ideation and behavior such as the Columbia-Suicidal Severity Rating Scale can also be used.

NUMERATOR GUIDANCE:
A suicide risk assessment should be performed at every visit for major depressive disorder during the measurement period.

Use of a standardized tool or instrument to assess suicide risk will meet numerator performance. Standardized tools can be mapped to the concept "Intervention, Performed: Suicide Risk Assessment" included in the numerator logic in the HQMF eCQM attached in field S.2a.

Denominator Statement

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
All patients aged 18 years and older with a diagnosis of major depressive disorder (MDD)

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment
All patient visits for those patients aged 6 through 17 years with a diagnosis of major depressive disorder

Denominator Details

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
Time Period for Data Collection: 12 consecutive months

Guidance:
This measure is an episode-of-care measure and should be reported for each instance of a new or recurrent episode of major depressive disorder (MDD); every new or recurrent episode will count separately in the Initial Population.

It is expected that a suicide risk assessment will be completed at the visit during which a new diagnosis is made or at the visit during which a recurrent episode is first identified (i.e., at the initial evaluation). For the purposes of this measure, an episode of MDD would be considered to be recurrent if a patient has not had an MDD-related encounter in the past 105 days. If there is a gap of 105 or more days between visits for MDD, that would imply a recurrent episode. The 105-day look-back period is an operational provision and not a clinical recommendation, or definition of relapse, remission, or recurrence.

The measure description outlined in the header for this measure states, 'patients aged 18 years and older' while the logic statement states, '>= 17 year(s) at: "Measurement Period"'. The logic statement, as written, captures patients who turn 18 years old during the measurement period so that these patients are included in the measure. To ensure all
patients with major depressive disorder (MDD) are assessed for suicide risk, there are two clinical quality measures addressing suicide risk assessment; CMS 177 covers children and adolescents aged 6 through 17, and CMS 161 covers the adult population aged 18 years and older.

HQMF eCQM developed and is attached to this submission in fields S.2a and S.2b.

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

Time Period for Data Collection: 12 consecutive months.
HQMF eCQM developed and is attached to this submission in field S.2a.
We have provided the following definitions and/or guidance for convenience; please see HQMF eCQM for complete details related to the specification.

DENOMINATOR DEFINITION:
None

DENOMINATOR GUIDANCE:
This measure is an episode-of-care measure; the level of analysis for this measure is every visit for major depressive disorder during the measurement period. For example, at every visit for MDD, the patient should have a suicide risk assessment.

Exclusions

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
None

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment
None

Exclusion Details

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
Not Applicable

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment
N/A

Risk Adjustment

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
No risk adjustment or risk stratification

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment
No risk adjustment or risk stratification

Stratification

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
Consistent with CMS’ Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer and have included these variables as recommended data elements to be collected.
1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

Consistent with CMS’ Measures Management System Blueprint and recent national recommendations put forth by the IOM and NQF to standardize the collection of race and ethnicity data, we encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and payer and have included these variables as recommended data elements to be collected.

Type Score

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment
Rate/proportion better quality = higher score

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment
Rate/proportion better quality = higher score

Algorithm

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

To calculate performance rates:
1. Find the patients who meet the initial population (ie, the general group of patients that a set of performance measures is designed to address).
2. From the patients within the initial population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial population and denominator are identical.
3. From the patients within the denominator, find the patients who meet the numerator criteria (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator
If the patient does not meet the numerator, this case represents a quality failure.

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

To calculate performance rates:
1) Find the patients who meet the initial patient population (ie, the general group of patients that a set of performance measures is designed to address).
2) From the patients within the initial patient population criteria, find the patients who qualify for the denominator (ie, the specific group of patients for inclusion in a specific performance measure based on defined criteria). Note: in some cases the initial patient population and denominator are identical.
3) From the patients within the denominator, find the patients who meet the Numerator (ie, the group of patients in the denominator for whom a process or outcome of care occurs). Validate that the number of patients in the numerator is less than or equal to the number of patients in the denominator
If the patient does not meet the numerator, this case represents a quality failure.
Submission items

0104e Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

5.1 Identified measures: 1365: Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: The guidelines used as evidence in the NQF 1365: Child and Adolescent Major Depressive Disorder (MDD) Suicide Risk Assessment explicitly recommend suicide assessment at every visit for MDD whereas the guidelines used for evidence in this measure do not emphasize this level of assessment frequency.

5b.1 If competing, why superior or rationale for additive value: Both of these measures (0104 and 1365) were developed by PCPI and updated and harmonized with each other on an annual basis. They are not competing because they are used in different patient populations and have different frequencies of suicide assessment based on their respective evidence.

1365e Child and Adolescent Major Depressive Disorder (MDD): Suicide Risk Assessment

5.1 Identified measures: 0104: Adult Major Depressive Disorder (MDD): Suicide Risk Assessment

0111: Bipolar Disorder: Appraisal for risk of suicide

5a.1 Are specs completely harmonized? No

5a.2 If not completely harmonized, identify difference, rationale, impact: Our measure addresses a different target population, children and adolescents with MDD, from the related measures that focus on adults with MDD and patients with bipolar disorder. As a result, the recommended frequency of suicide assessment is different in our measure from the other measures.

5b.1 If competing, why superior or rationale for additive value: Because our measure emphasizes a different target population and a different type/frequency of assessment, we feel multiple measures are justified to address suicide risk assessment differently in different high-risk populations.

Comparison of NQF #0105 and NQF #1880

0105 Antidepressant Medication Management (AMM)
1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Steward

0105 Antidepressant Medication Management (AMM)
National Committee for Quality Assurance

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
National Committee for Quality Assurance
Description

0105 Antidepressant Medication Management (AMM)

The percentage of members 18 years of age and older who were treated antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment. Two rates are reported.

a) Effective Acute Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 84 days (12 weeks).

b) Effective Continuation Phase Treatment. The percentage of patients who remained on an antidepressant medication for at least 180 days (6 months).

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).

Type

0105 Antidepressant Medication Management (AMM)

Process

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Process

Data Source

0105 Antidepressant Medication Management (AMM)

Claims 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 plans via the Interactive Data Submission System (IDSS) portal.

No data collection instrument provided Attachment 0105_AMM_Value_Sets_updated_4.11.18.xlsx

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Claims For measure calculation in the Medicare product line, the following Medicare files were required:

- Denominator tables
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims
For ACO attribution, the following were required:
• Denominator tables for Parts A and B enrollment
• Prescription drug benefit (Part D) coverage tables
• Beneficiary file
• Institutional claims (Part A)
• Non-institutional claims (Part B)—physician carrier/non-DME
• Prescription drug benefit (Part D) claims
For physician group attribution, the following were required:
• Non-institutional claims (Part B)—physician carrier/non-DME
• Denominator tables to determine individual enrollment
• Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
• CMS physician and physician specialty tables
• National Plan and Provider Enumeration System (NPPES) database

No data collection instrument provided Attachment NQF_1880_Code_Tables_2018_Final.xlsx

Level

0105 Antidepressant Medication Management (AMM)
  Health Plan

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
  Clinician : Group/Practice, Health Plan, Integrated Delivery System, Population : Regional and State

Setting

0105 Antidepressant Medication Management (AMM)
  Outpatient Services

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
  Outpatient Services

Numerator Statement

0105 Antidepressant Medication Management (AMM)
  Adults 18 years of age and older who were newly treated with antidepressant medication, had a diagnosis of major depression, and who remained on an antidepressant medication treatment.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
  Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.
Numerator Details

0105 Antidepressant Medication Management (AMM)

a) Effective Acute Phase Treatment: At least 84 days (12 weeks) of treatment with antidepressant medication (Table AMM-C) during the 114-day period following the Index Prescription Start Date (IPSD) (115 total days). This allows gaps in medication treatment up to a total of 31 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

b) Effective Continuation Phase Treatment: At least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) during the 231-day period following the IPSD (232 total days). This allows gaps in medication treatment up to a total of 52 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

TABLE AMM-C: ANTIDEPRESSANT MEDICATIONS

Miscellaneous antidepressants: Bupropion, Vilazodone, Vortioxetine

Monoamine oxidase inhibitors: Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine

Phenylpiperazine antidepressants: Nefazodone, Trazodone

Psychotherapeutic combinations: Amitriptyline-chlordiazepoxide, Amitriptyline-perphenazine, Fluoxetine-olanzapine

SNRI antidepressants: Desvenlafaxine, Duloxetine, Levomilnacipran, Venlafaxine

SSRI antidepressants: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline

Tetracyclic antidepressants: Maprotiline, Mirtazapine

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

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

The numerator is defined as individuals with a PDC of 0.8 or greater.

The PDC is calculated as follows:

PDC NUMERATOR

The PDC numerator is the sum of the days covered by the days’ supply of all prescription drug claims for all mood stabilizer medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

PDC DENOMINATOR

The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.
Denominator Statement

0105 Antidepressant Medication Management (AMM)
Patients 18 years of age and older with a diagnosis of major depression and were newly treated with antidepressant medication.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

Denominator Details

0105 Antidepressant Medication Management (AMM)
Step 1: Determine the Index Prescription Start Date (IPSD). Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the Intake Period (The 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year).
Step 2: Required exclusion: Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Patients who meet any of the following criteria remain in the eligible population:
• An outpatient visit, ED visit, telehealth, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  – AMM Stand Alone Visits Value Set with Major Depression Value Set. with or without a telehealth modifier (Telehealth Modifier Value Set).
  – AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
• Telephone Visits Value Set with Major Depression Value Set.
• An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).
• An acute or nonacute inpatient stay discharge with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  First, identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Second, identify the admission and discharge dates for the stay. Either an admission or discharge during the required time frame meets criteria.
Step 3: Test for Negative Medication History. Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.
Step 4: Calculate continuous enrollment. Patients must be continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

TABLE AMM-C: ANTIDEPRESSANT MEDICATIONS
Miscellaneous antidepressants: Bupropion, Vilazodone, Vortioxetine
Monoamine oxidase inhibitors: Isocarboxazid, Phenelzine, Selegiline, Tranylcypromine
Phenylpiperazine antidepressants: Nefazodone, Trazodone
Psychotherapeutic combinations: Amitriptyline-chlordiazepoxide, Amitriptyline-perphenazine, Fluoxetine-olanzapine
SNRI antidepressants: Desvenlafaxine, Duloxetine, Levomilnacipran, Venlafaxine
SSRI antidepressants: Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline
Tetracyclic antidepressants: Maprotiline, Mirtzapine
Tricyclic antidepressants: Amitriptyline, Amoxapine, Clomipramine, Desipramine, Doxepin (>6mg), Imipramine, Nortriptyline, Protriptyline, Trimipramine
*See corresponding Excel file for value sets referenced above.

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**

Target population meets the following conditions:
1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement year;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement year; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement year.

**IDENTIFICATION OF BIPOLAR I DISORDER**

Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient or outpatient claims data. Individuals must have:
- At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
- OR
- At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.

**CODES USED TO IDENTIFY BIPOLAR I DISORDER DIAGNOSIS**

Codes used to identify bipolar I disorder are included in the attached Excel worksheet of codes (NQF_1880_Code Tables_2018 Final) under the tab NQF_1880_Bipolar_ICD9-10.

**TABLE 1. BIPOLAR I DISORDER DIAGNOSIS**

ICD-9-CM: 296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7

**CODES USED TO IDENTIFY ENCOUNTER TYPE**

Codes used to identify encounters are under tab NQF_1880_Encounter_types.

**TABLE 2.1. OUTPATIENT SETTING**

UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72

TABLE 2.2. EMERGENCY DEPARTMENT SETTING
CPT: 99281-99285
UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 23

TABLE 2.3. NON-ACUTE INPATIENT SETTING
CPT: 99304-99310, 99315, 99316, 99317, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 31, 32, 56

TABLE 2.4. ACUTE INPATIENT SETTING
UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729, 0987
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
POS: 21, 51

IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR MOOD STABILIZER MEDICATION
Individuals with at least two prescription drug claims for any of the following mood stabilizer medications (Table 3: Mood Stabilizer Medications) or long-acting injectable
antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1880_Mood_Stabilizers of the attached Excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

MOOD STABILIZER MEDICATIONS

TABLE 3. MOOD STABILIZER MEDICATIONS

Active ingredients listed below are limited to oral, buccal, sublingual, and translingual formulations only.

Anticonvulsants:
carbamazepine
divalproex sodium
lamotrigine
valproic acid

Atypical Antipsychotics:
aripiprazole
asenapine
cariprazine
lurasidone
olanzapine
quetiapine
quetiapine fumarate (Seroquel)
risperidone
ziprasidone

Phenothiazine/Related Antipsychotics:
chlorpromazine
loxapine succinate

Other Antipsychotics:
olanzapine-fluoxetine

Lithium Salts:
lithium carbonate
lithium citrate

TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS

The following are the long-acting (depot) injectable antipsychotic medications. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

Atypical Antipsychotic Medications:
aripiprazole (J0401)
risperidone microspheres (J2794)
Note: Since the days’ supply variable is not reliable for long-acting injections in administrative data, the days’ supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
aripiprazole (J0401) – 28 days’ supply
risperidone microspheres (J2794) – 14 days’ supply

Exclusions
0105 Antidepressant Medication Management (AMM)
Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.
Exclude patients who filled a prescription for an antidepressant 105 days prior to the IPSD.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Not Applicable

Exclusion Details
0105 Antidepressant Medication Management (AMM)
Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).
Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD. Patients who meet any of the following criteria remain in the eligible population:
• An outpatient visit, ED visit, telehealth, intensive outpatient encounter or partial hospitalization with any diagnosis of major depression. Either of the following code combinations meets criteria:
  – AMM Stand Alone Visits Value Set with Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
  – AMM Visits Value Set with AMM POS Value Set and Major Depression Value Set, with or without a telehealth modifier (Telehealth Modifier Value Set).
• Telephone Visits Value Set with Major Depression Value Set.
• An ED visit (ED Value Set) with any diagnosis of major depression (Major Depression Value Set).
• An acute or nonacute inpatient stay with any diagnosis of major depression (Major Depression Value Set). To identify acute and nonacute inpatient discharges:
  First, identify all acute and nonacute inpatient stays (Inpatient Stay Value Set). Second, identify the admission and discharge dates for the stay. Either an admission or discharge during the required time frame meets criteria.
----
Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

*See corresponding Excel file for value sets referenced above.

**Risk Adjustment**

0105 Antidepressant Medication Management (AMM)
No risk adjustment or risk stratification

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
No risk adjustment or risk stratification

**Stratification**

0105 Antidepressant Medication Management (AMM)
NCQA asks that health plans collect the measure data for each of the three product lines each year (i.e. commercial, Medicare, Medicaid) if applicable.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Depending on the operational use of the measure, measure results may be stratified by:
• State
• Accountable Care Organization (ACOs)*
• Plan
• Physician Group**
• Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
• Race/Ethnicity
• Dual Eligibility

*ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.

**See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

**Type Score**

0105 Antidepressant Medication Management (AMM)
Rate/proportion better quality = higher score

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Rate/proportion better quality = higher score

**Algorithm**

0105 Antidepressant Medication Management (AMM)
Step 1: Determine the eligible population, or denominator.
Step 1a: Determine the Index Prescription Start Date (IPSD). Identify the date of the earliest dispensing event for an antidepressant medication (Table AMM-C) during the
Intake Period (the 12-month window starting on May 1 of the year prior to the measurement year and ending on April 30 of the measurement year).

Step 1b: Exclude patients who did not have a diagnosis of major depression in an inpatient, outpatient, ED, telehealth, intensive outpatient or partial hospitalization setting during the 121-day period from 60 days prior to the IPSD, through the IPSD and the 60 days after the IPSD.

Step 1c: Test for Negative Medication History. Exclude patients who filled a prescription for an antidepressant medication 105 days prior to the IPSD.

Step 1d: Calculate continuous enrollment. Exclude patients who are not continuously enrolled for 105 days prior to the IPSD to 231 days after the IPSD.

Step 2: Determine the numerators for the two reported rates.

Step 2a (Effective Acute Phase Treatment): Identify at least 84 days (12 weeks) of continuous treatment with antidepressant medication (Table AMM-C) during the 114-day period following the Index Prescription Start Date (IPSD) (115 total days). This allows gaps in medication treatment up to a total of 31 days during the 115-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Step 2b (Effective Continuation Phase Treatment): Identify at least 180 days (6 months) of continuous treatment with antidepressant medication (Table AMM-C) during the 232-day period following the IPSD. Continuous treatment allows gaps in medication treatment up to a total of 52 days during the 232-day period. Gaps can include either washout period gaps to change medication or treatment gaps to refill the same medication.

Step 3: Calculate the two reported rates by dividing both the numerators from steps 2a and 2b by the denominator in step 1d.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

CREATE DENOMINATOR:

1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.

2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.

3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).

4. Of those individuals identified in Step 3, keep those who had:
At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;

OR

At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.

5. Of the individuals identified in Step 4, extract Medicare Part D claims for a mood stabilizer during the measurement period. Attach the drug ID and the generic name to the dataset.

6. For the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.

Numerator: Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

CREATE NUMERATOR:

For the individuals in the denominator, calculate the PDC for each individual according to the following methods:

1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for a mood stabilizer medication in the measurement period.

2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.

   a. Sort and de-duplicate Medicare Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.

   b. Calculate the number of days covered by mood stabilizer therapy per individual.

      i. For prescription drug 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.

      ii. If claims for the same drug (generic name) overlap, then adjust the latest prescription start date to be the day after the previous fill has ended.

      iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is also available at the URL: [http://www2.sas.com/proceedings/forum2007/043-2007.pdf](http://www2.sas.com/proceedings/forum2007/043-2007.pdf).
4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPIs. Valid NPIs have 10 numeric characters (no alpha characters).

2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)
   a. Pull Part B records billed by TINs identified in Step 4 during the measurement year and prior year.
   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.
   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.
9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.

   a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
   b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims

10. Create individual sample.

   a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
   b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
      • A = working-age individual/spouse with an employer group health plan (EGHP)
      • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
      • G = working disabled for any month of the year
   c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
   d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
   e. Exclude individuals who died during the measurement year.

11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.

   a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
   b. Exclude claims with no npi_prfrmg.

12. Attach medical group TIN to claims by NPI.

III. Patient Attribution

13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.

   a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.

   b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.

15. Attribute the individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.

16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:
01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
36—Nuclear medicine
37—Pediatric medicine
38—Geriatric medicine*
39—Nephrology
40—Hand surgery
44—Infectious disease
46—Endocrinology
50—Nurse practitioner*
66—Rheumatology
70—Multi-specialty clinic or group practice*
72—Pain management
76—Peripheral vascular disease
77—Vascular surgery
78—Cardiac surgery
79—Addiction medicine
81—Critical care (intensivists)
82—Hematology
83—Hematology/oncology
84—Preventive medicine*
85—Maxillofacial surgery
86—Neuropsychiatry*
90—Medical oncology
91—Surgical oncology
92—Radiation oncology
93—Emergency medicine
94—Interventional radiology
97—Physician assistant*
98—Gynecologist/oncologist
99—Unknown physician specialty
Other—NA

*Provider specialty codes specific to this measure

Submission items

**0105 Antidepressant Medication Management (AMM)**

5.1 Identified measures:
5a.1 Are specs completely harmonized? No
5a.2 If not completely harmonized, identify difference, rationale, impact: N/A
5b.1 If competing, why superior or rationale for additive value: N/A

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**

5.1 Identified measures: 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease
0542 : Adherence to Chronic Medications
0545 : Adherence to Statins for Individuals with Diabetes Mellitus
0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
0580 : Bipolar antimanic agent
0109 : Bipolar Disorder and Major Depression: Assessment for Manic or hypomanic behaviors
0110 : Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use
0111 : Bipolar Disorder: Appraisal for risk of suicide
0112 : Bipolar Disorder: Level-of-function evaluation
0003 : Bipolar Disorder: Assessment for diabetes
1879 : Adherence to Antipsychotic Medications for Individuals with Schizophrenia
1927 : Cardiovascular Health Screening for People With Schizophrenia or Bipolar Disorder Who Are Prescribed Antipsychotic Medications

1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized with the related measure, Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879) and the NCQA version of the same measure (Adherence to Antipsychotic Medications for Individuals with Schizophrenia), where possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in all three measures. The methodology used to identify the denominator population is also calculated the same in all three measures, with the exception of the clinical conditions which is the target of the measure. The data collection burden is identical for the measures. The only differences between Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879), and the related NCQA measure are: (1) the clinical codes used to identify the different populations in each measure (NQF #1880 – individuals with bipolar I disorder; NQF #1879 and NCQA measure – individuals with schizophrenia); (2) the medications includes in each measure (NQF #1880- mood stabilizers; NQF #1879 and the NCQA measure – antipsychotics); and, (3) an exclusion for dementia which is included in NQF #1879 and the NCQA measure but not in NQF #1880. The rationale for these difference is due to the different clinical focus of each measure. There is no impact on interpretability since the measures clearly identify the disparate clinical focus. During development the measure developers worked to harmonize this measure with other measures which were NQF-endorsed at the time of development. The section below is from the original submission of the measure for initial endorsement and refers to measures which are no longer NQF-endorsed. We are including this language to demonstrate the efforts of the measure developers to harmonize this measure with other measures.

MEASURES WITH WHICH THE MEASURE IS HARMONIZED. The measure has been harmonized where feasible with NQF #0542, #0543, #0545, #0541, #1879, #1927, and #1932.

MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED. The measure specifications of the measure are not harmonized with the following NQF-endorsed measures that have the same measure focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent.

DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0580. One NQF-endorsed measure (NQF #0580) focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. RATIONALE. This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.
IMPACT ON INTERPRETABILITY AND DATA COLLECTION BURDEN. Differences have not been identified concerning the data collection burden between Measure 1880 and Measure 0580. However, interpretability for Measure 1880 (as compared to NQF #0580) is improved because Measure 1880 focuses on adherence rather than a single prescription, and Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS.

5b.1 If competing, why superior or rationale for additive value: This measure does not address both the same measure focus and population as another NQF-endorsed measure.

Comparison of NQF #1879, NQF #1880, NQF #0541

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

Steward

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Centers for Medicare & Medicaid Services, Centers for Medicaid & CHIP Services

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
National Committee for Quality Assurance

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
Pharmacy Quality Alliance

Description

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months).

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Renin Angiotensin System (RAS) Antagonists, Diabetes Medications, Statins.

A higher score indicates better quality.

Type

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Process
1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Process

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

Process

Data Source

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Claims The data source for the measure calculation required the following Medicare files depending on the level of accountability where the measure is being used:

• Denominator tables to determine individual enrollment
• Prescription drug benefit (Part D) coverage tables
• Beneficiary file
• Institutional claims (Part A)
• Non-institutional claims (Part B)—physician carrier/non-DME (durable medical equipment)
• Prescription drug benefit (Part D) claims
• Centers for Medicare and Medicaid Services (CMS) physician and physician specialty tables
• National Plan and Provider Enumeration System (NPPES) database

No data collection instrument provided Attachment
NQF_1879_Code_Tables_2018_Final.xlsx

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Claims For measure calculation in the Medicare product line, the following Medicare files were required:

• Denominator tables
• Prescription drug benefit (Part D) coverage tables
• Beneficiary file
• Institutional claims (Part A)
• Non-institutional claims (Part B)—physician carrier/non-DME
• Prescription drug benefit (Part D) claims

For ACO attribution, the following were required:

• Denominator tables for Parts A and B enrollment
• Prescription drug benefit (Part D) coverage tables
• Beneficiary file
• Institutional claims (Part A)
• Non-institutional claims (Part B)—physician carrier/non-DME
• Prescription drug benefit (Part D) claims

For physician group attribution, the following were required:

• Non-institutional claims (Part B)—physician carrier/non-DME
• Denominator tables to determine individual enrollment
• Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
• CMS physician and physician specialty tables
• National Plan and Provider Enumeration System (NPPES) database

No data collection instrument provided
Attachment
NQF_1880_Code_Tables_2018_Final.xlsx

**0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category**
Claims Health plan prescription claims data and enrollment data (e.g. Medicare Part D)
No data collection instrument provided No data dictionary

**Level**

**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
Clinician : Group/Practice, Health Plan, Population : Regional and State

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
Clinician : Group/Practice, Health Plan, Integrated Delivery System, Population : Regional and State

**0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category**
Clinician : Group/Practice, Health Plan

**Setting**

**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
Outpatient Services

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
Outpatient Services

**0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category**
Outpatient Services

**Numerator Statement**

**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

**0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category**
The number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold.
Step 1: Determine the patient's treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death.

Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of combination product to another combination product where at least one of the drugs from the target therapeutic class is common.

Numerator Details

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
The numerator is defined as individuals with a PDC of 0.8 or greater.
The PDC is calculated as follows:
PDC NUMERATOR
The PDC numerator is the sum of the days covered by the days’ supply of all prescription drug claims for all antipsychotic medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescription drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.
PDC DENOMINATOR
The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
The numerator is defined as individuals with a PDC of 0.8 or greater.
The PDC is calculated as follows:
PDC NUMERATOR
The PDC numerator is the sum of the days covered by the days’ supply of all prescription drug claims for all mood stabilizer medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim...
with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

PDC DENOMINATOR

The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

The number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold.

Step 1: Determine the patient’s treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death.

Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of combination product to another combination product where a least one of the drugs from the target therapeutic class is common.

RENN ANGIOTENSIN SYSTEM (RAS) ANTAGONISTS: aliskiren, candesartan, eprosartan, irbesartan, losartan, olmesartan, telmisartan, valsartan, azilsartan, benazepril, captopril, enalapril, fosinopril, lisinopril, moexipril, perindopril, quinapril, ramipril, trandolopril, amlodipine & benazepril, benazepril & HCTZ, captopril & HCTZ, enalapril & HCTZ, fosinopril & HCTZ, lisinopril & HCTZ, moexipril & HCTZ, perindopril & amlodipine, quinapril & HCTZ, trandolopril & verapamil HCL, candesartan & HCTZ, eprosartan & HCTZ, telmisartan & amlodipine, nevibolol & valsartan, irbesartan & HCTZ, losartan & HCTZ, amiodipine & olmesartan, azilsartan & chlorothalidone, olmesartan & HCTZ, telmisartan & HCTZ, olmesartan & amlodipine & HCTZ, valsartan & HCTZ, amlodipine & valsartan, amiodipine & valsartan & HCTZ, aliskiren & amlodipine, aliskiren & amiodipine & HCTZ, aliskiren & HCTZ, DIABETES MEDICATIONS: (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-IV Inhibitors, Incretin Mimetic Agents, Meglitinides, Sodium glucose co-transporter2 (SGLT2) inhibitors and combination products that include these medications)

metformin, glipizide & metformin, glyburide & metformin, chlorpropamide, glimepiride, glipizide, glyburide, tolazamide, tolbutamide, pioglitazone, rosiglitazone, rosiglitazone & metformin, rosiglitazone & glimepiride, pioglitazone & metformin, pioglitazone & glimepiride, alogliptin & pioglitazone, sitagliptin, linagliptin, saxagliptin, alogliptin, sitagliptin & metformin, saxagliptin & metformin SR, sitagliptin & simvastatin, linagliptin & metformin, alogliptin & metformin, exenatide, liraglutide, nateglinide, repaglinide, repaglinide & metformin, canagliflozin, alogliptin & metformin, empagliflozin & linagliptin, dulaglutide, liraglutide, lisisxenatide, albiglutide, empagliflozin, dapagliflozin, dapagliflozin
& metformin, empagliflozin & linagliptin, canagliflozin & metformin, empagliflozin & metformin
STATINS: lovastatin, rosuvastatin, fluvastatin, atorvastatin, pravastatin, pitavastatin, simvastatin, niacin & lovastatin, atorvastatin & amlodipine, niacin & simvastatin, sitagliptin & simvastatin, ezetimibe & simvastatin, ezetimibe & atorvastatin

Denominator Statement

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months).

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year.
For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the treatment period. Exclude any patient with ESRD
For RASA rate only: Exclude any patient with one or more prescription claims for sacubitril/valsartan during the treatment period. Exclude any patient with ESRD

Denominator Details

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Target population meets the following conditions:
1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement period;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement period; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement period.
IDENTIFICATION OF SCHIZOPHRENIA
Individuals with schizophrenia or schizoaffective disorder are identified by having a diagnosis of schizophrenia within the inpatient or outpatient claims data. Individuals must have:
At least two encounters with a diagnosis of schizophrenia or schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
OR
At least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period.
CODES USED TO IDENTIFY SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER DIAGNOSIS
Codes used to identify schizophrenia or schizoaffective disorder are included in the attached excel worksheet of codes (NQF_1879_Code Tables_2018_Final.xlsx) under the tab NQF_1879_Schizophrenia.

Table 1: Schizophrenia or Schizoaffective Disorder Diagnosis
ICD-9-CM: 295.xx

CODES USED TO IDENTIFY ENCOUNTER TYPE:
Codes used to identify encounters are under tab NQF_1879_Encounter_types.

Table 2.1: Outpatient Setting
UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72

Table 2.2: Emergency Department Setting
CPT: 99281-99285
UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 23

Table 2.3: Non-Acute Inpatient Setting
CPT: 99304-99310, 99315, 99316, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
Table 2.4: Acute Inpatient Setting
UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729, 0987
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
POS: 21, 51
IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR ANTIPSYCHOTIC MEDICATION:
Individuals with at least two prescription drug claims for any of the following oral antipsychotic medications (Table 3: Oral Antipsychotic Medications) or long-acting injectable antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1879__Antipsychotics of the attached excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

TABLE 3: ORAL ANTIPSYCHOTIC MEDICATIONS
The following are oral formulations only.
Typical Antipsychotic Medications:
chlorpromazine
fluphenazine
haloperidol
loxapine
molindone
perphenazine
prochlorperazine
thioridazine
thiothixene
trifluoperazine
Atypical Antipsychotic Medications:
aripiprazole
asenapine
brexpiprazole
cariprazine
clozapine
iloperidone
lurasidone
olanzapine
paliperidone
quetiapine
quetiapine fumarate (Seroquel)
risperidone
ziprasidone

Antipsychotic Combinations:
perphenazine-amitriptyline

TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS
The following are the long-acting (depot) injectable antipsychotic medications by class for
the denominator. The route of administration includes all injectable and intramuscular
formulations of the medications listed below.

Typical Antipsychotic Medications:
fluphenazine decanoate (J2680)
haloperidol decanoate (J1631)

Atypical Antipsychotic Medications:
aripiprazole (J0401)
aripiprazole lauroxil (Aristada)
olanzapine pamoate (J2358)
paliperidone palmitate (J2426)
risperidone microspheres (J2794)

Note: Since the days’ supply variable is not reliable for long-acting injections in
administrative data, the days’ supply is imputed as listed below for the long-acting (depot)
injectable antipsychotic medications billed under Medicare Part D and Part B:

- fluphenazine decanoate (J2680) – 28 days’ supply
- haloperidol decanoate (J1631) – 28 days’ supply
- aripiprazole (J0401) – 28 days’ supply
- aripiprazole lauroxil (Aristada) - 28 days’ supply
- olanzapine pamoate (J2358) – 28 days’ supply
- paliperidone palmitate (J2426) – 28 days’ supply
- risperidone microspheres (J2794) – 14 days’ supply

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Target population meets the following conditions:
1. Continuously enrolled in Medicare Part D with no more than a one-month gap in
enrollment during the measurement year;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month
gap in Part A enrollment and no more than a one-month gap in Part B enrollment during
the measurement year; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during
the measurement year.
IDENTIFICATION OF BIPOLAR I DISORDER

Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient or outpatient claims data. Individuals must have:

At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;

OR

At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.

CODES USED TO IDENTIFY BIPOLAR I DISORDER DIAGNOSIS

Codes used to identify bipolar I disorder are included in the attached Excel worksheet of codes (NQF_1880_Code Tables_2018 Final) under the tab NQF_1880_Bipolar_ICD9-10.

TABLE 1. BIPOLAR I DISORDER DIAGNOSIS

<table>
<thead>
<tr>
<th>ICD-9-CM:</th>
<th>296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7</th>
</tr>
</thead>
</table>

CODES USED TO IDENTIFY ENCOUNTER TYPE

Codes used to identify encounters are under tab NQF_1880_Encounter_types.

TABLE 2.1. OUTPATIENT SETTING


UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72

TABLE 2.2. EMERGENCY DEPARTMENT SETTING

CPT: 99281-99285

UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291

WITH

NATIONAL QUALITY FORUM 190
TABLE 2.3. NON-ACUTE INPATIENT SETTING
CPT: 99304-99310, 99315, 99316, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552,
0559, 0660-0663, 0669, 1000, 1001, 1003-1005
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863,
90867-90870, 90875, 90876, 99291
WITH
POS: 31, 32, 56

TABLE 2.4. ACUTE INPATIENT SETTING
UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154,
0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729,
0987
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863,
90867-90870, 90875, 90876, 99291, 99221-99223, 99231-99233, 99238, 99239, 99251-99255,
99291
WITH
POS: 21, 51

IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR MOOD STABILIZER MEDICATION
Individuals with at least two prescription drug claims for any of the following mood
stabilizer medications (Table 3: Mood Stabilizer Medications) or long-acting injectable
antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications).
The National Drug Center (NDC) identifier for medications included in the measure
denominator are listed in tab NQF_1880_Mood_Stabilizers of the attached Excel
workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an
inactive date more than six years prior to the beginning of the measurement period or
look-back period.

MOOD STABILIZER MEDICATIONS
TABLE 3. MOOD STABILIZER MEDICATIONS
Active ingredients listed below are limited to oral, buccal, sublingual, and translingual
formulations only.
Anticonvulsants:
carbamazepine
divalproex sodium
lamotrigine
valproic acid
Atypical Antipsychotics:
aripiprazole
asenapine
cariprazine
lurasidone
olanzapine
quetiapine
quetiapine fumarate (Seroquel)
risperidone
ziprasidone
Phenothiazine/Related Antipsychotics:
chlorpromazine
loxapine succinate
Other Antipsychotics:
olanzapine-fluoxetine
Lithium Salts:
lithium carbonate
lithium citrate

TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS
The following are the long-acting (depot) injectable antipsychotic medications. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

Atypical Antipsychotic Medications:
aripiprazole (J0401)
risperidone microspheres (J2794)

Note: Since the days’ supply variable is not reliable for long-acting injections in administrative data, the days’ supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
aripiprazole (J0401) – 28 days’ supply
risperidone microspheres (J2794) – 14 days’ supply

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year.
(For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the measurement period - See S.10)

DIABETES MEDICATIONS: (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-IV Inhibitors, Incretin Mimetic Agents, Meglitinides, Sodium glucose co-transporter2 (SGLT2) inhibitors and combination products that include these medications)
metformin, glipizide & metformin, glyburide & metformin, chlorpropamide, glimepiride, glipizide, glyburide, tolazamide, tolbutamide, pioglitazone, rosiglitazone, rosiglitazone & metformin, rosiglitazone & glimepiride, pioglitazone & metformin, pioglitazone & glimepiride, alogliptin & pioglitazone, sitagliptin, saxagliptin, alogliptin, sitagliptin & metformin, saxagliptin & metformin SR, sitagliptin & simvastatin, linagliptin & metformin, alogliptin & metformin, exenatide, liraglutide, nateglinide, repaglinide, repaglinide & metformin, canagliflozin, alogliptin & metformin, empagliflozin & linagliptin, dulaglutide, liraglutide, lixisenatide, albiglutide, empagliflozin, dapagliflozin, dapagliflozin & metformin, empagliflozin & linagliptin, canagliflozin & metformin, empagliflozin & metformin

STATINS: lovastatin, rosuvastatin, fluvastatin, atorvastatin, pravastatin, pitavastatin, simvastatin, niacin & lovastatin, atorvastatin & amlodipine, niacin & simvastatin, sitagliptin & simvastatin, ezetimibe & simvastatin, ezetimibe & atorvastatin

Exclusions

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Individuals with any diagnosis of dementia during the measurement period.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Not Applicable

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
Exclusion criteria for the PDC category of Diabetes medications:
1. Patients who have one or more prescriptions for insulin in the treatment period.
2. Patients with ESRD.
Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes
Exclusion criteria for the PDC category of RASA:
1. Patients with ESRD
Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes
2. Patients with one or more prescription claims for the medication, sacubitril/valsartan, during the treatment period.

Exclusion Details

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Individuals with any diagnosis of dementia are identified with the diagnosis codes listed below tab NQF_1879_Dementia
Table 5: Codes Used to Identify Dementia
ICD-9-CM: 290.0, 290.10, 290.11, 290.12, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 290.8, 290.9, 291.2, 292.82, 294.10, 294.11, 294.20, 294.21, 330.1, 331.0, 331.19, 331.82
ICD-10-CM: E75.00, E75.01, E75.02, E75.09, E75.10, E75.11, E75.19, E75.4, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F10.27, F11.122, F13.27, F13.97, F18.17, F18.27, F18.97, F19.17, F19.27, F19.97, G30.0, G30.1, G30.8, G30.9, G31.09, G31.83

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Not Applicable

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
Exclusion details for PDC category of Diabetes medications (one or more prescriptions for insulin):
INSULINS: insulin aspart, insulin aspart Protamine & Aspart, insulin detemir, insulin glargine, insulin glulisine, insulin isophane & regular human insulin, insulin isophane (human N), insulin lispro, insulin lispro Protamine & Insulin lispro, insulin regular (human R), Insulin regular (human) inhalation powder, Insulin degludec, Insulin degludec & liraglutide, Insulin glargine & lixisenatide
ESRD ICD codes:
ESRD ICD9 codes:
585.6 End stage renal disease
ESRD ICD10 codes:
I12.0 Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
I13.11 Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
I13.2 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
N18.5 Chronic kidney disease, stage 5
N18.6 End stage renal disease
N19 Renal failure, unspecified
Z91.15 Patient's noncompliance with renal dialysis
Z99.2 Dependence on renal dialysis

Risk Adjustment

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
No risk adjustment or risk stratification

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
No risk adjustment or risk stratification

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
No risk adjustment or risk stratification
Stratification

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Depending on the operational use of the measure, measure results can be stratified by:
- State
- Physician Group*
- Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
- Race/Ethnicity
- Dual Eligibility
*See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Depending on the operational use of the measure, measure results may be stratified by:
- State
- Accountable Care Organization (ACOs)*
- Plan
- Physician Group**
- Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
- Race/Ethnicity
- Dual Eligibility
*ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.
**See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
None

Type Score

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Rate/proportion better quality = higher score

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Rate/proportion better quality = higher score

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
Rate/proportion better quality = higher score

Algorithm

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.
Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug
claims for antipsychotic medications during the measurement period (12 consecutive months).

CREATE DENOMINATOR:

1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.

2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.

3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).

4. Of those individuals identified in Step 3, keep individuals who had:
   At least two encounters with a diagnosis of schizophrenia of schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   OR
   Individuals who had at least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period;

5. For the individuals identified in Step 4, extract Medicare Part D claims for any antipsychotic medication during the measurement period. Attach the generic name and the drug ID to the dataset.

6. Of the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any antipsychotic medication on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.

7. Exclude those individuals with a diagnosis of dementia during the measurement period.

Numerator: Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

CREATE NUMERATOR:

For the individuals in the denominator, calculate the PDC for each individual according to the following methods:

1. Determine the individual’s medication therapy period, defined as the number of days from the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for an antipsychotic medication in the measurement period.

2. Within the medication therapy period, count the days the individual was covered by at least one drug in the antipsychotic medication class based on the prescription drug claim service date and days of supply.

   a. Sort and de-duplicate Medicare Part D antipsychotic medication claims by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug
(generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.
b. Calculate the number of days covered by antipsychotic drug therapy per individual.
i. For prescription drug 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.
ii. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.
iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.
3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the antipsychotic medications. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPIs) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).

2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)

a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.

b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.

c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.

9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.
   a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
   b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims

10. Create individual sample.
   a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
   b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
      • A = working-age individual/spouse with an employer group health plan (EGHP)
      • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
      • G = working disabled for any month of the year
   c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
   d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
   e. Exclude individuals who died during the measurement year.

11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.
   a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
   b. Exclude claims with no npi_prfrmg.

12. Attach medical group TIN to claims by NPI.

III. Patient Attribution

13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.
a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.

b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.

15. Attribute individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.

16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:

01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.

Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

CREATE DENOMINATOR:
1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.

3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).

4. Of those individuals identified in Step 3, keep those who had:
   At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   OR
   At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.

5. Of the individuals identified in Step 4, extract Medicare Part D claims for a mood stabilizer during the measurement period. Attach the drug ID and the generic name to the dataset.

6. For the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.

Numerator: Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

CREATE NUMERATOR:
For the individuals in the denominator, calculate the PDC for each individual according to the following methods:

1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for a mood stabilizer medication in the measurement period.

2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.
   b. Calculate the number of days covered by mood stabilizer therapy per individual.
      i. For prescription drug 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.
ii. If claims for the same drug (generic name) overlap, then adjust the latest prescription start date to be the day after the previous fill has ended.

iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1. An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is also available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPIs. Valid NPIs have 10 numeric characters (no alpha characters).

2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)
   a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.
   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.
   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
b. Count unique NPIs per TIN.
c. Keep only those TINs having two or more providers.
d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all
nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are
not solo practices).
8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the
medical group TINs.
9. Determine the specialty of the medical group (TIN) to be used in determining the
specialty of nurse practitioners and physician assistants. The plurality of physician
providers in the medical group determines the specialty of care for nurse practitioners and
physician assistants.
a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims
10. Create individual sample.
a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement
year.
b. Verify the individual did not have any months with Medicare as secondary payer.
Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
• A = working-age individual/spouse with an employer group health plan (EGHP)
• B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
• G = working disabled for any month of the year

c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
d. Exclude individuals who enter the Medicare hospice at any point during the
measurement year.
e. Exclude individuals who died during the measurement year.
11. For individuals identified in Step 10, pull office visit claims that occurred during the
measurement year and in the six months prior to the measurement year.
a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
b. Exclude claims with no npi_prfrmg.
12. Attach medical group TIN to claims by NPI.

III. Patient Attribution
13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary
care or psychiatry (see list of provider specialties and specialty codes below). Attribute
each individual to at most one medical group TIN for each measure.
a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim
does not match any of the measure-specific specialties, then check additional specialty
fields.
b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or
code 97), then assign the medical group specialty determined in Step 9.
14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.
15. Attribute the individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.
16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:

01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
36—Nuclear medicine
37—Pediatric medicine
38—Geriatric medicine*
39—Nephrology
40—Hand surgery
44—Infectious disease
46—Endocrinology
50—Nurse practitioner*
66—Rheumatology
70—Multi-specialty clinic or group practice*
72—Pain management
76—Peripheral vascular disease
77—Vascular surgery
78—Cardiac surgery
79—Addiction medicine
81—Critical care (intensivists)
82—Hematology
83—Hematology/oncology
84—Preventive medicine*
85—Maxillofacial surgery
86—Neuropsychiatry*
90—Medical oncology
91—Surgical oncology
92—Radiation oncology
93—Emergency medicine
94—Interventional radiology
97—Physician assistant*
98—Gynecologist/oncologist
99—Unknown physician specialty
Other—NA
*Provider specialty codes specific to this measure

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

For EACH PDC rate identify the Denominator:
Step 1: Identify the eligible population that is 18 years and older as of the last day of the measurement year and that are continuously enrolled in the drug plan.
Step 2: Identify those patients in Step 1 that have filled at least two prescriptions for the target class of medication (either RAS Antagonist, Diabetes medication or Statin)
For the Diabetes rate only: Step 3: Exclude any patient with one or more prescriptions for insulin in the measurement period. Exclude any patient with ESRD.
For the RASA rate only: Exclude any patient with one or more prescription claims for the medication sacubitril/valsartan during the treatment period. Exclude any patient with ESRD.
For EACH PDC rate calculate the Numerator:
Step 1: Determine the patient’s treatment period, defined as the index prescription date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC greater than 80% and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of a combination product to another combination product where at least one of the drugs is common.

Submission items

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

5.1 Identified measures: 0544 : Use and Adherence to Antipsychotics among members with Schizophrenia
0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease
0542 : Adherence to Chronic Medications
0545 : Adherence to Statins for Individuals with Diabetes Mellitus
0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
0569 : ADHERENCE TO STATINS

1880 : Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized with the related measure, Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), where possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in both measures. The methodology used to identify the denominator population is also calculated the same in both measures with the exception of the clinical conditions which is the target of the measure. The medications included in both measures are specific to the clinical condition targeted in the measure.

5b.1 If competing, why superior or rationale for additive value: The Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NCQA) measure is used for HEDIS reporting and is harmonized with the NQF #1879 in condition, target population, methodology, and medications. The HEDIS measure is only used in Medicaid health plans and therefore is restricted to adults age 18-64.

During development the measure developers identified another competing measure which eventually lost NQF endorsement. The section below is from the original submission of the measures for initial endorsement and compares this measure (#1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia) to a previously NQF-endorsed measure (#0544 Use and Adherence to Antipsychotics among Members with Schizophrenia).
Measure 1879 (Adherence to Antipsychotic Medications for Individuals with Schizophrenia) has both the same measure focus and essentially the same target population as Measure 0544 (Use and Adherence to Antipsychotics among Members with Schizophrenia), which is no longer endorsed after the measure’s time-limited endorsement (TLE) status expired. Measure 1879 is superior to the existing Measure 0544 because it represents a more valid and efficient approach to measuring medication adherence to antipsychotic medications. In addition, as discussed above in Section 5a.2, Measure 1879 is harmonized with several other adherence measures in the NQF portfolio. Key differences in measure validity and efficiency are addressed in the sections below.

VALIDITY

The Proportion of Days Covered (PDC), which is the method used to calculate adherence in Measure 1879, has several advantages over the Medication Possession Ratio (MPR), which is used in Measure 0544. First, the PDC was found to be more conservative compared to the Medication Possession Ratio (MPR) and was preferred in clinical scenarios in which there is the potential for more than one drug to be used within a drug class concomitantly (e.g., antipsychotics). This clinical situation applies directly to Measure 1879. Martin et al. (2009) demonstrated this in a study published in the Annals of Pharmacotherapy by comparing the methodology for drugs that are commonly switched, where the MPR was 0.690, truncated MPR was 0.624, and PDC was 0.562 and found significant differences between the values for adherence \( p < 0.001 \). Martin et al (2009) also compared drugs with therapeutic duplication where the PDC was 0.669, truncated MPR was 0.774, and MPR was 1.238, and again obtained significant differences \( p < 0.001 \). These findings were partially replicated by testing results from FMQAI (now HSAG) of Measure 1879 where MPR produced a higher measure rate (as compared to PDC) as shown below.

<table>
<thead>
<tr>
<th>Method</th>
<th>Measure Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comparison of MPR and PDC</td>
<td></td>
</tr>
<tr>
<td>MPR</td>
<td>74.4%</td>
</tr>
<tr>
<td>PDC</td>
<td>70.0%</td>
</tr>
</tbody>
</table>

Based on initial draft measure specifications and data from a 100% sample of Medicare fee-for-service beneficiaries with Part D coverage in Florida and Rhode Island, using 2008 Medicare Parts A, B, and D data.

Additional differences between Measure 1879 and TLE 0544 related to validity include the following concerns:

Denominator: The measure denominator requires at least two antipsychotic medication prescriptions; whereas, the NQF TLE measure (NQF# 0544) does not require any antipsychotic medication prescriptions in the measure denominator. In 0544, an MPR of “0” is assigned to those without any antipsychotic medication prescriptions, which may falsely lower measure rates, specifically in scenarios where the prescriber has made the decision not to prescribe antipsychotic medications for an individual diagnosed with schizophrenia.

Exclusion related to a diagnosis of dementia: Measure 1879 excludes individuals with a diagnosis of dementia during the measurement year which is not considered in Measure...
0544. Antipsychotic medications are currently labeled with a Food and Drug Administration (FDA) Black Box warning that states, “Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of seventeen placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients.” The Technical Expert Panel, which reviewed the measure, recommended excluding these individuals from the measure denominator, since continued adherence to antipsychotic medications in this subpopulation may increase mortality and not represent quality of care. (Please see Section 2b3.2 that provides descriptive results of testing related to exclusions.)

EFFICIENCY

Measure 1879 requires only one year of administrative claims data, rather than two years of data which is required for TLE 0544. The Technical Expert Panel that reviewed Measure 1879 indicated that the burden of requiring two years of administrative claims data would not meaningfully modify measure rates and would potentially result in the unnecessary exclusion of individuals for which adherence should be assessed but for which only 1 year of claims data were available. Additional rationale for this TEP recommendation was related to an increased length of the continuous enrollment criteria to specify the measure use with two years of data. FMQAI’s (now HSAG) empirical analysis of a related adherence measure (NQF 0542 – Adherence to Chronic Medications) using 2007 and 2008 Medicare Part D data for beneficiaries in Florida and Rhode Island validated this concern and indicated that approximately 10% of the eligible population would be excluded from the measure if the enrollment criteria required two years of administrative claims data as opposed to one year.

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

5.1 Identified measures: 0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease
0542 : Adherence to Chronic Medications
0545 : Adherence to Statins for Individuals with Diabetes Mellitus
0541 : Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
0580 : Bipolar antimanic agent
0109 : Bipolar Disorder and Major Depression: Assessment for Manic or hypomanic behaviors
0110 : Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use
0111 : Bipolar Disorder: Appraisal for risk of suicide
0112 : Bipolar Disorder: Level-of-function evaluation
0003 : Bipolar Disorder: Assessment for diabetes
1879 : Adherence to Antipsychotic Medications for Individuals with Schizophrenia
1927 : Cardiovascular Health Screening for People With Schizophrenia or Bipolar Disorder Who Are Prescribed Antipsychotic Medications
1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized with the related measure, Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879) and the NCQA version of the same measure (Adherence to Antipsychotic Medications for Individuals with Schizophrenia), where possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in all three measures. The methodology used to identify the denominator population is also calculated the same in all three measures, with the exception of the clinical conditions which is the target of the measure. The data collection burden is identical for the measures. The only differences between Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879), and the related NCQA measure are: (1) the clinical codes used to identify the different populations in each measure (NQF #1880 – individuals with bipolar I disorder; NQF #1879 and NCQA measure– individuals with schizophrenia); (2) the medications includes in each measure (NQF #1880- mood stabilizers; NQF #1879 and the NCQA measure– antipsychotics); and, (3) an exclusion for dementia which is included in NQF #1879 and the NCQA measure but not in NQF #1880. The rationale for these difference is due to the different clinical focus of each measure. There is no impact on interpretability since the measures clearly identify the disparate clinical focus. During development the measure developers worked to harmonize this measure with other measures which were NQF-endorsed at the time of development. The section below is from the original submission of the measure for initial endorsement and refers to measures which are no longer NQF-endorsed. We are including this language to demonstrate the efforts of the measure developers to harmonize this measure with other measures. MEASURES WITH WHICH THE MEASURE IS HARMONIZED. The measure has been harmonized where feasible with NQF #0542, #0543, #0545, #0541, #1879, #1927, and #1932 MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED. The measure specifications of the measure are not harmonized with the following NQF-endorsed measures that have the same measure focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent. DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0580. One NQF-endorsed measure (NQF #0580) focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year. RATIONALE. This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment. IMPACT ON INTERPRETABILITY AND DATA COLLECTION BURDEN. Differences have not been identified concerning the data collection burden between Measure 1880 and Measure 0580. However, interpretability for Measure 1880 (as compared to NQF #0580) is improved because Measure 1880 focuses on adherence rather than a single prescription,
and Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS.  
5b.1 If competing, why superior or rationale for additive value: This measure does not address both the same measure focus and population as another NQF-endorsed measure.

0541 Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category

5.1 Identified measures:
5a.1 Are specs completely harmonized?
5a.2 If not completely harmonized, identify difference, rationale, impact:
5b.1 If competing, why superior or rationale for additive value:

Comparison of NQF #1880, NQF #0541, NQF #1879 and NQF #1932

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Steward

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
National Committee for Quality Assurance

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
Pharmacy Quality Alliance

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Centers for Medicare & Medicaid Services, Centers for Medicaid & CHIP Services

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
National Committee for Quality Assurance

Description

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Percentage of individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and had a Proportion of Days Covered (PDC) of at least 0.8 for mood stabilizer medications during the measurement period (12 consecutive months).

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
The percentage of patients 18 years and older who met the proportion of days covered (PDC) threshold of 80% during the measurement year. A performance rate is calculated separately for the following medication categories: Renin Angiotensin System (RAS) Antagonists, Diabetes Medications, Statins. A higher score indicates better quality.
Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Percentage of individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the measurement period (12 consecutive months).

Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

Type

Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Process

Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

Process

Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Process

Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Process

Data Source

Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Claims For measure calculation in the Medicare product line, the following Medicare files were required:

- Denominator tables
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims

For ACO attribution, the following were required:

- Denominator tables for Parts A and B enrollment
- Prescription drug benefit (Part D) coverage tables
- Beneficiary file
- Institutional claims (Part A)
- Non-institutional claims (Part B)—physician carrier/non-DME
- Prescription drug benefit (Part D) claims

For physician group attribution, the following were required:
• Non-institutional claims (Part B)—physician carrier/non-DME
• Denominator tables to determine individual enrollment
• Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payor status
• CMS physician and physician specialty tables
• National Plan and Provider Enumeration System (NPPES) database
No data collection instrument provided Attachment NQF_1880_Code_Tables_2018_Final.xlsx

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
Claims Health plan prescription claims data and enrollment data (e.g. Medicare Part D)
No data collection instrument provided No data dictionary

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Claims The data source for the measure calculation required the following Medicare files depending on the level of accountability where the measure is being used:
• Denominator tables to determine individual enrollment
• Prescription drug benefit (Part D) coverage tables
• Beneficiary file
• Institutional claims (Part A)
• Non-institutional claims (Part B)—physician carrier/non-DME (durable medical equipment)
• Prescription drug benefit (Part D) claims
• Centers for Medicare and Medicaid Services (CMS) physician and physician specialty tables
• National Plan and Provider Enumeration System (NPPES) database
No data collection instrument provided Attachment NQF_1879_Code_Tables_2018_Final.xlsx

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system.
No data collection instrument provided Attachment 1932_SSD_Value_Sets.xlsx

Level

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Clinician : Group/Practice, Health Plan, Integrated Delivery System, Population : Regional and State

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
Clinician : Group/Practice, Health Plan
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Clinician : Group/Practice, Health Plan, Population : Regional and State

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Health Plan, Integrated Delivery System, Population : Regional and State

Setting

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Outpatient Services

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
Outpatient Services

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Outpatient Services

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Other, Outpatient Services Any outpatient setting represented with Medicaid claims data

Numerator Statement

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
The number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold.

Step 1: Determine the patient's treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death.

Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of combination product to another combination product where a least one of the drugs from the target therapeutic class is common.
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Among patients 18-64 years old with schizophrenia or bipolar disorder, those who were dispensed an antipsychotic medication and had a diabetes screening testing during the measurement year.

Numerator Details

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
The numerator is defined as individuals with a PDC of 0.8 or greater.

The PDC is calculated as follows:

PDC NUMERATOR
The PDC numerator is the sum of the days covered by the days' supply of all prescription drug claims for all mood stabilizer medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days' supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

PDC DENOMINATOR
The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.

0541 Proportion of Days Covered (PDC) Rates by Therapeutic Category
The number of patients who met the PDC threshold during the measurement year for each therapeutic category separately. Follow the steps below for each patient to determine whether the patient meets the PDC threshold.

Step 1: Determine the patient’s treatment period, defined as the index prescription date (date of the first fill of the target medication) to the end of the calendar year, disenrollment, or death.

Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days of supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*

Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.

Step 4: Count the number of patients who had a PDC 80% or greater and then divide by the total number of eligible patients.

*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of
combination product to another combination product where at least one of the drugs from the target therapeutic class is common.


**DIABETES MEDICATIONS:** (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-IV Inhibitors, Incretin Mimetic Agents, Meglitinides, Sodium glucose co-transporter2 (SGLT2) inhibitors and combination products that include these medications)

metformin, glipizide & metformin, glyburide & metformin, chlorpropamide, glimepiride, glipizide, glyburide, tolazamide, tolbutamide, pioglitazone, rosiglitazone, rosiglitazone & metformin, rosiglitazone & glimepiride, pioglitazone & metformin, pioglitazone & glimepiride, alogliptin & pioglitazone, sitagliptin, linagliptin, saxagliptin, alogliptin, sitagliptin & Metformin, saxagliptin & Metformin SR, sitagliptin & Simvastatin, linagliptin & Metformin, albiglutide, repaglinide, repaglinide & Metformin, canagliflozin, alogliptin & Metformin, empagliflozin & linagliptin, dulaglutide, liraglutide, lixisenatide, albiglutide, empagliflozin, dapagliflozin, empagliflozin & Metformin, empagliflozin & linagliptin, canagliflozin & Metformin, empagliflozin & Metformin

**STATINS:** lovastatin, rosuvastatin, fluvastatin, atorvastatin, pravastatin, pitavastatin, simvastatin, niacin & lovastatin, atorvastatin & amlodipine, niacin & simvastatin, sitagliptin & simvastatin, ezetimibe & simvastatin, ezetimibe & atorvastatin

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**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**

The numerator is defined as individuals with a PDC of 0.8 or greater.

The PDC is calculated as follows:

**PDC NUMERATOR**

The PDC numerator is the sum of the days covered by the days’ supply of all prescription drug claims for all antipsychotic medications. The period covered by the PDC starts on the day the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescription drug 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 there are claims for the same drug (generic name) on the same date of service, keep the claim with the largest days’ supply. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.

**PDC DENOMINATOR**

The PDC denominator is the number of days from the first prescription drug claim date through the end of the measurement period, or death date, whichever comes first.
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

A glucose test (Glucose Tests Value Set) or an HbA1c test (HbA1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data.
See corresponding Excel document for the Glucose Tests Value Set and the HbA1c Tests Value Set.

Denominator Statement

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year.
For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the treatment period. Exclude any patient with ESRD
For RASA rate only: Exclude any patient with one or more prescription claims for sacubitril/valsartan during the treatment period. Exclude any patient with ESRD

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug claims for antipsychotic medications during the measurement period (12 consecutive months).

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.

Denominator Details

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Target population meets the following conditions:
1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement year;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement year; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement year.
IDENTIFICATION OF BIPOLAR I DISORDER

Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient or outpatient claims data. Individuals must have:
At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;

OR

At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.

CODES USED TO IDENTIFY BIPOLAR I DISORDER DIAGNOSIS

Codes used to identify bipolar I disorder are included in the attached Excel worksheet of codes (NQF_1880_Code Tables_2018 Final) under the tab NQF_1880_Bipolar_ICD9-10.

TABLE 1. BIPOLAR I DISORDER DIAGNOSIS

ICD-9-CM: 296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7


CODES USED TO IDENTIFY ENCOUNTER TYPE

Codes used to identify encounters are under tab NQF_1880_Encounter_types.

TABLE 2.1. OUTPATIENT SETTING


UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72

TABLE 2.2. EMERGENCY DEPARTMENT SETTING

CPT: 99281-99285

UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981

OR

CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

POS: 23

TABLE 2.3. NON-ACUTE INPATIENT SETTING

CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 31, 32, 56

TABLE 2.4. ACUTE INPATIENT SETTING
UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729, 0987
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 21, 51

IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR MOOD STABILIZER MEDICATION
Individuals with at least two prescription drug claims for any of the following mood stabilizer medications (Table 3: Mood Stabilizer Medications) or long-acting injectable antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1880_Mood_Stabilizers of the attached Excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

MOOD STABILIZER MEDICATIONS

TABLE 3. MOOD STABILIZER MEDICATIONS
Active ingredients listed below are limited to oral, buccal, sublingual, and translingual formulations only.
Anticonvulsants:
carbamazepine
divalproex sodium
lamotrigine
valproic acid
Atypical Antipsychotics:
aripiprazole
asenapine
cariprazine
lurasidone
olanzapine
quetiapine
quetiapine fumarate (Seroquel)
risperidone
ziprasidone
Phenothiazine/Related Antipsychotics:
chlorpromazine
loxpine succinate
Other Antipsychotics:
olanzapine-fluoxetine
Lithium Salts:
lithium carbonate
lithium citrate

TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS
The following are the long-acting (depot) injectable antipsychotic medications. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

Atypical Antipsychotic Medications:
aripiprazole (J0401)
risperidone microspheres (J2794)

Note: Since the days' supply variable is not reliable for long-acting injections in administrative data, the days' supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
aripiprazole (J0401) – 28 days’ supply
risperidone microspheres (J2794) – 14 days’ supply

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
Patients age 18 years and older who were dispensed at least two prescriptions in a specific therapeutic category on two unique dates of service during the measurement year.
(For the Diabetes rate only: Exclude any patient with one or more prescriptions for insulin in the measurement period - See S.10)

RENIN ANGIOTENSIN SYSTEM (RAS) ANTAGONISTS: aliskiren, candesartan, eprosartan, irbesartan, losartan, olmesartan, telmisartan, valsartan, azilsartan, benazepril, captopril, enalapril, fosinopril, lisinopril, moexipril, perindopril, quinapril, ramipril, trandolopril, amlodipine & benazepril, benazepril & HCTZ, captopril & HCTZ, enalapril & HCTZ, fosinopril & HCTZ, lisinopril & HCTZ, moexipril & HCTZ, perindopril & amlodipine, quinapril & HCTZ, trandolopril & verapamil HCL, candesartan & HCTZ, eprosartan & HCTZ, telmisartan & amilodipine, nebivolol & valsartan, irbesartan & HCTZ, losartan & HCTZ, amlodipine & olmesartan, azisartan & chlorothalidone, olmesartan & HCTZ, telmisartan & HCTZ, olmesartan & amlodipine & HCTZ, valsartan & HCTZ, amlodipine & valsartan, amlodipine & valsartan & HCTZ, aliskiren & amlodipine, aliskiren & amlodipine & HCTZ, aliskiren & HCTZ, DIABETES MEDICATIONS: (Biguanides, Sulfonylureas, Thiazolidinediones, DPP-IV Inhibitors, Incretin Mimetic Agents, Meglitinides, Sodium glucose co-transporter2 (SGLT2) inhibitors and combination products that include these medications)
metformin, glipizide & metformin, glyburide & metformin, chlorpropamide, glimepiride, glipizide, glyburide, tolazamide, tolbutamide, pioglitazone, rosiglitazone, rosiglitazone & metformin, rosiglitazone & glimepiride, pioglitazone & metformin, pioglitazone & glimepiride, alogliptin & pioglitazone, sitagliptin, saxagliptin, alogliptin, sitagliptin & metformin, saxagliptin & metformin SR, sitagliptin & simvastatin, linagliptin & metformin, alogliptin & metformin, exenatide, liraglutide, nateglinide, repaglinide, repaglinide & metformin, canagliflozin, alogliptin & metformin, empagliflozin & linagliptin, dulaglutide, liraglutide, lixisenatide, albiglutide, empagliflozin, dapagliflozin, dapagliflozin & metformin, empagliflozin & linagliptin, canagliflozin & metformin, empagliflozin & metformin

STATINS: lovastatin, rosuvastatin, fluvastatin, atorvastatin, pravastatin, pitavastatin, simvastatin, niacin & lovastatin, atorvastatin & amlodipine, niacin & simvastatin, sitagliptin & simvastatin, ezetimibe & simvastatin, ezetimibe & atorvastatin

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Target population meets the following conditions:
1. Continuously enrolled in Medicare Part D with no more than a one-month gap in enrollment during the measurement period;
2. Continuously enrolled in Medicare Part A and Part B with no more than a one-month gap in Part A enrollment and no more than a one-month gap in Part B enrollment during the measurement period; and,
3. No more than one month of HMO (Health Maintenance Organization) enrollment during the measurement period.

IDENTIFICATION OF SCHIZOPHRENIA

Individuals with schizophrenia or schizoaffective disorder are identified by having a diagnosis of schizophrenia within the inpatient or outpatient claims data. Individuals must have:

At least two encounters with a diagnosis of schizophrenia or schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;

OR

At least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period.

CODES USED TO IDENTIFY SCHIZOPHRENIA OR SCHIZOAFFECTIVE DISORDER DIAGNOSIS

Codes used to identify schizophrenia or schizoaffective disorder are included in the attached excel worksheet of codes (NQF_1879_Code Tables_2018_Final.xlsx) under the tab NQF_1879_Schizophrenia.

Table 1: Schizophrenia or Schizoaffective Disorder Diagnosis

ICD-9-CM: 295.xx

CODES USED TO IDENTIFY ENCOUNTER TYPE:

Codes used to identify encounters are under tab NQF_1879_Encounter_types.

Table 2.1: Outpatient Setting
UB-92 revenue: 0510, 0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0770, 0771, 0779, 0900-0905, 0907, 0911-0917, 0919, 0982, 0983
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
Place of Service (POS): 03, 05, 07, 09, 11, 12, 13, 14, 15, 20, 22, 24, 33, 49, 50, 52, 53, 71, 72
Table 2.2: Emergency Department Setting
CPT: 99281-99285
UB-92 revenue: 0450, 0451, 0452, 0456, 0459, 0981
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 23
Table 2.3: Non-Acute Inpatient Setting
CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 0190-0194, 0199, 0524, 0525, 0550-0552, 0559, 0660-0663, 0669, 1000, 1001, 1003-1005
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99291
WITH
POS: 31, 32, 56
Table 2.4: Acute Inpatient Setting
UB-92 revenue: 0100, 0101, 0110-0114, 0119-0124, 0129-0134, 0139-0144, 0149-0154, 0159, 0160, 0164, 0167, 0169, 0200-0204, 0206-0209, 0210-0214, 0219, 0720-0724, 0729, 0987
OR
CPT: 90791, 90792, 90832-90834, 90836-90840, 90845, 90847, 90849, 90853, 90863, 90867-90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291
WITH
POS: 21, 51
IDENTIFICATION OF PRESCRIPTION DRUG CLAIMS FOR ANTIPSYCHOTIC MEDICATION:

Individuals with at least two prescription drug claims for any of the following oral antipsychotic medications (Table 3: Oral Antipsychotic Medications) or long-acting injectable antipsychotic medications (see Table 4: Long-acting injectable antipsychotic medications). The National Drug Center (NDC) identifier for medications included in the measure denominator are listed in tab NQF_1879_Antipsychotics of the attached excel workbook. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than six years prior to the beginning of the measurement period or look-back period.

TABLE 3: ORAL ANTIPSYCHOTIC MEDICATIONS

The following are oral formulations only.

**Typical Antipsychotic Medications:**
- chlorpromazine
- fluphenazine
- haloperidol
- loxapine
- molindone
- perphenazine
- prochlorperazine
- thioridazine
- thiothixene
- trifluoperazine

**Atypical Antipsychotic Medications:**
- aripiprazole
- asenapine
- brexpiprazole
- cariprazine
- clozapine
- iloperidone
- lurasidone
- olanzapine
- paliperidone
- quetiapine
- quetiapine fumarate (Seroquel)
- risperidone
- ziprasidone

**Antipsychotic Combinations:**
- perphenazine-amitriptyline

TABLE 4: LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS
The following are the long-acting (depot) injectable antipsychotic medications by class for the denominator. The route of administration includes all injectable and intramuscular formulations of the medications listed below.

**Typical Antipsychotic Medications:**
- fluphenazine decanoate (J2680)
- haloperidol decanoate (J1631)

**Atypical Antipsychotic Medications:**
- aripiprazole (J0401)
- aripiprazole lauroxil (Aristada)
- olanzapine pamoate (J2358)
- paliperidone palmitate (J2426)
- risperidone microspheres (J2794)

**Note:** Since the days' supply variable is not reliable for long-acting injections in administrative data, the days' supply is imputed as listed below for the long-acting (depot) injectable antipsychotic medications billed under Medicare Part D and Part B:
- fluphenazine decanoate (J2680) – 28 days' supply
- haloperidol decanoate (J1631) – 28 days' supply
- aripiprazole (J0401) – 28 days' supply
- aripiprazole lauroxil (Aristada) - 28 days' supply
- olanzapine pamoate (J2358) – 28 days' supply
- paliperidone palmitate (J2426) – 28 days’ supply
- risperidone microspheres (J2794) – 14 days’ supply

**1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)**

Follow the steps below to identify the eligible population.

Identify members with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year.

- At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria:
  - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
  - BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.
  - BH Stand Alone Acute Inpatient Value Set with Other Bipolar Disorder Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Bipolar Disorder Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Other Bipolar Disorder Value Set.

- At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
- BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
- BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
- ED Value Set with Schizophrenia Value Set.
- BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
- BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
- BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Schizophrenia Value Set.

- At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of bipolar disorder. Any two of the following code combinations meet criteria:
  - BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.
  - BH Stand Alone Outpatient/PH/IOP Value Set with Other Bipolar Disorder Value Set.
  - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Bipolar Disorder Value Set.
  - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Other Bipolar Disorder Value Set.
  - ED Value Set with Bipolar Disorder Value Set.
  - ED Value Set with Other Bipolar Disorder Value Set.
  - BH ED Value Set with ED POS Value Set with Bipolar Disorder Value Set.
  - BH ED Value Set with ED POS Value Set with Other Bipolar Disorder Value Set.
  - BH Stand Alone Nonacute Inpatient Value Set with Bipolar Disorder Value Set.
  - BH Stand Alone Nonacute Inpatient Value Set with Other Bipolar Disorder Value Set.
  - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Bipolar Disorder Value Set.
  - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Other Bipolar Disorder Value Set.

(See corresponding Excel document for the above value sets)

Exclusions

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
Not Applicable

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

Exclusion criteria for the PDC category of Diabetes medications:
1. Patients who have one or more prescriptions for insulin in the treatment period.
2. Patients with ESRD.

Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes

Exclusion criteria for the PDC category of RASA:
1. Patients with ESRD
Patients with ESRD can be identified using RxHCC 121 - Dialysis Status (for payment year 2015) or RxHCC 261 - Dialysis Status (for payment year 2016 or 2017) or by using the ICD codes.

2. Patients with one or more prescription claims for the medication, sacubitril/valsartan, during the treatment period.

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Individuals with any diagnosis of dementia during the measurement period.

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

Exclude patients with diabetes during the measurement year or the year prior to the measurement year.

Exclude patients who had no antipsychotic medications dispensed during the measurement year.

Exclusion Details

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

Not Applicable

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

Exclusion details for PDC category of Diabetes medications (one or more prescriptions for insulin):

INSULINS: insulin aspart, insulin aspart Protamine & Aspart, insulin detemir, insulin glargine, insulin glulisine, insulin isophane & regular human insulin, insulin isophane (human N), insulin lispro, insulin lispro Protamine & Insulin lispro, insulin regular (human R), Insulin regular (human) inhalation powder, Insulin degludec, Insulin degludec & liraglutide, Insulin glargine & lixisenatide

ESRD ICD codes:
ESRD ICD9 codes:
S85.6 End stage renal disease
ESRD ICD10 codes:
I12.0 Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
I13.11 Hypertensive heart and chronic kidney disease without heart failure, with stage 5 chronic kidney disease, or end stage renal disease
I13.2 Hypertensive heart and chronic kidney disease with heart failure and with stage 5 chronic kidney disease, or end stage renal disease
N18.5 Chronic kidney disease, stage 5
N18.6 End stage renal disease
N19 Renal failure, unspecified
Z91.15 Patient's noncompliance with renal dialysis
Z99.2 Dependence on renal dialysis
1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Individuals with any diagnosis of dementia are identified with the diagnosis codes listed below tab NQF_1879_Dementia

Table 5: Codes Used to Identify Dementia

ICD-9-CM: 290.0, 290.10, 290.11, 290.12, 290.20, 290.21, 290.3, 290.40, 290.41, 290.42, 290.43, 290.8, 290.9, 291.2, 292.82, 294.10, 294.11, 294.20, 294.21, 330.1, 331.0, 331.19, 331.82

ICD-10-CM: E75.00, E75.01, E75.02, E75.09, E75.10, E75.11, E75.19, E75.4, F01.50, F01.51, F02.80, F02.81, F03.90, F03.91, F05, F10.27, F11.122, F13.27, F13.97, F18.17, F18.27, F18.97, F19.17, F19.27, F19.97, G30.0, G30.1, G30.8, G30.9, G31.09, G31.83

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These members may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).

Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year). There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Diabetes Medications List).

Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years).

- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.
- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List):

Alpha-glucosidase inhibitors:
Acarbose, Miglitol

Amylin analogs:
Pramlinitide

Antidiabetic combinations:
Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-linagliptin, Empagliflozin-metformin, Glimepiride-pioglitazone, Glimepiride-rosiglitazone, Glipizide-metformin, Glyburide-metformin, Linaglipti-
metformin, Metformin-pioglitazone, Metformin-repaglinide, Metformin-rosiglitazone, Metformin-saxagliptin, Metformin-sitagliptin, Sitagliptin-simvastatin

Insulin:
Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane human, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled

Meglitinides:
Nateglinide, Repaglinide

Glucagon-like peptide-1 (GLP1) agonists:
Dulaglutide, Exenatide, Liraglutide, Albiglutide

Sodium glucose cotransporter 2 (SGLT2) inhibitor:
Canagliflozin, Dapagliflozin, Empagliflozin

Sulfonylureas:
Chlorpropamide, Glibenpiride, Glipizide, Glyburide, Tolazamide, Tolbutamide

Thiazolidinediones:
Pioglitazone, Rosiglitazone

Dipeptidyl peptidase-4 (DDP-4) inhibitors:
Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

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Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.

- Claim/encounter data. An antipsychotic medication (Long-Acting Injections Value Set).
- Pharmacy data. Dispensed an antipsychotic medication (Antipsychotic Medications List; Antipsychotic Combination Medications List) on an ambulatory basis.

ANTIPSYCHOTIC MEDICATIONS:
(Antipsychotic Medications List)

Miscellaneouse antipsychotic agents:
Aripiprazole, Asenapine, Brexipiprazole, Cariprazine, Clozapine, Haloperidol, Iloperidone, Loxapine, Lurisadone, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine, Quetiapine fumarate, Risperidone, Ziprasidone

Phenothiazine antipsychotics:
Chlorpromazine, Fluphenazine, Perphenazine, Prochlorperazine, Thoridazine, Trifluoperazine

Thioxanthenes:
Thiothixene

Long-acting injections:
Aripiprazole, Fluphenazine decanoate, Haloperidol decanoate, Olanzapine, Paliperidone palmitate, Risperidone
(Antipsychotic Combination Medications List)
Psychotherapeutic combinations:
Fluoxetine-olanzapine, Perphenazine-amitriptyline
See corresponding Excel document for the value sets referenced above.

**Risk Adjustment**

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
No risk adjustment or risk stratification

**0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category**
No risk adjustment or risk stratification

**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
No risk adjustment or risk stratification

**1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)**
No risk adjustment or risk stratification

**Stratification**

**1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder**
Depending on the operational use of the measure, measure results may be stratified by:
• State
• Accountable Care Organization (ACOs)*
• Plan
• Physician Group**
• Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
• Race/Ethnicity
• Dual Eligibility

*ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.

**See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

**0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category**
None

**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**
Depending on the operational use of the measure, measure results can be stratified by:
• State
• Physician Group*
• Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
• Race/Ethnicity
• Dual Eligibility
*See Calculation Algorithm/Measure Logic S.14 below for physician group attribution methodology used for this measure.

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
None.

Type Score

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
  Rate/proportion better quality = higher score

0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category
  Rate/proportion better quality = higher score

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
  Rate/proportion better quality = higher score

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
  Rate/proportion better quality = higher score

Algorithm

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder
  Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.
  Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with bipolar I disorder and at least two prescription drug claims for mood stabilizer medications during the measurement period (12 consecutive months).
  CREATE DENOMINATOR:
  1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
  2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.
  3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).
  4. Of those individuals identified in Step 3, keep those who had:
  At least two encounters with a diagnosis of bipolar I disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
  OR
  At least one encounter with a diagnosis of bipolar I disorder in an acute inpatient setting during the measurement period.
5. Of the individuals identified in Step 4, extract Medicare Part D claims for a mood stabilizer during the measurement period. Attach the drug ID and the generic name to the dataset.

6. For the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any mood stabilizer on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.

Numerator: Individuals with bipolar I disorder who had at least two prescription drug claims for mood stabilizer medications and have a PDC of at least 0.8 for mood stabilizer medications.

CREATE NUMERATOR:

For the individuals in the denominator, calculate the PDC for each individual according to the following methods:

1. Determine the individual’s medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for a mood stabilizer medication in the measurement period.

2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.
   b. Calculate the number of days covered by mood stabilizer therapy per individual.
      i. For prescription drug 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.
      ii. If claims for the same drug (generic name) overlap, then adjust the latest prescription start date to be the day after the previous fill has ended.
      iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.
   3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is also available at the URL: [http://www2.sas.com/proceedings/forum2007/043-2007.pdf](http://www2.sas.com/proceedings/forum2007/043-2007.pdf).

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the mood stabilizers. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPIs. Valid NPIs have 10 numeric characters (no alpha characters).
2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.
3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.
4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).
5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)
   a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.
   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.
   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).
8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.
9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.
   a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
   b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims
10. Create individual sample.
   a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
   b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
      • A = working-age individual/spouse with an employer group health plan (EGHP)
      • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
      • G = working disabled for any month of the year
   c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
   d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
   e. Exclude individuals who died during the measurement year.
11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.
   a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
   b. Exclude claims with no npi_prfrmg.
12. Attach medical group TIN to claims by NPI.
III. Patient Attribution
13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.
   a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.
   b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.
14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.
15. Attribute the individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.
16. Attach the medical group TIN to the denominator and numerator files by individual.
Provider Specialties and Specialty Codes
Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:
01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*  
09—Interventional pain management  
10—Gastroenterology  
11—Internal medicine*  
12—Osteopathic manipulative therapy  
13—Neurology  
14—Neurosurgery  
16—Obstetrics/gynecology*  
18—Ophthalmology  
20—Orthopedic surgery  
22—Pathology  
24—Plastic and reconstructive surgery  
25—Physical medicine and rehabilitation  
26—Psychiatry*  
28—Colorectal surgery  
29—Pulmonary disease  
30—Diagnostic radiology  
33—Thoracic surgery  
34—Urology  
36—Nuclear medicine  
37—Pediatric medicine  
38—Geriatric medicine*  
39—Nephrology  
40—Hand surgery  
44—Infectious disease  
46—Endocrinology  
50—Nurse practitioner*  
66—Rheumatology  
70—Multi-specialty clinic or group practice*  
72—Pain management  
76—Peripheral vascular disease  
77—Vascular surgery  
78—Cardiac surgery  
79—Addiction medicine  
81—Critical care (intensivists)  
82—Hematology  
83—Hematology/oncology  
84—Preventive medicine*  
85—Maxillofacial surgery
0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category

For EACH PDC rate identify the Denominator:
Step 1: Identify the eligible population that is 18 years and older as of the last day of the measurement year and that are continuously enrolled in the drug plan.
Step 2: Identify those patients in Step 1 that have filled at least two prescriptions for the target class of medication (either RAS Antagonist, Diabetes medication or Statin)
For the Diabetes rate only: Step 3: Exclude any patient with one or more prescriptions for insulin in the measurement period. Exclude any patient with ESRD.
For the RASA rate only: Exclude any patient with one or more prescription claims for the medication sacubitril/valsartan during the treatment period. Exclude any patient with ESRD.

For EACH PDC rate calculate the Numerator:
Step 1: Determine the patient's treatment period, defined as the index prescription date (first fill of the target medication) to the end of the calendar year, disenrollment, or death.
Step 2: Within the treatment period, count the days the patient was covered by at least one drug in the class based on the prescription fill date and days supply. If prescriptions for the same drug (generic ingredient) overlap, then adjust the prescription start date to be the day after the previous fill has ended.*
Step 3: Divide the number of covered days found in Step 2 by the number of days found in Step 1. Multiply this number by 100 to obtain the PDC (as a percentage) for each patient.
Step 4: Count the number of patients who had a PDC greater than 80% and then divide by the total number of eligible patients.
*Adjustment of overlap should also occur when there is overlap of a single drug product to a combination product containing the single drug or when there is an overlap of a combination product to another combination product where at least one of the drugs is common.

1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia
Target Population: Individuals at least 18 years of age as of the beginning of the measurement period who have met the enrollment criteria for Medicare Parts A, B, and D.
Denominator: Individuals at least 18 years of age as of the beginning of the measurement period with schizophrenia or schizoaffective disorder and at least two prescription drug
claims for antipsychotic medications during the measurement period (12 consecutive months).

CREATE DENOMINATOR:
1. Pull individuals who are 18 years of age or older as of the beginning of the measurement period.
2. Include individuals who were continuously enrolled in Medicare Part D coverage during the measurement period, with no more than a one-month gap in enrollment during the measurement period, or up until their death date if they died during the measurement period.
3. Include individuals who had no more than a one-month gap in Medicare Part A enrollment, no more than a one-month gap in Part B enrollment, and no more than one month of HMO (Health Maintenance Organization) enrollment during the current measurement period (fee-for-service [FFS] individuals only).
4. Of those individuals identified in Step 3, keep individuals who had:
   - At least two encounters with a diagnosis of schizophrenia of schizoaffective disorder with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the measurement period;
   OR
   - Individuals who had at least one encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the measurement period;
5. For the individuals identified in Step 4, extract Medicare Part D claims for any antipsychotic medication during the measurement period. Attach the generic name and the drug ID to the dataset.
6. Of the individuals identified in Step 5, exclude those who did not have at least two prescription drug claims for any antipsychotic medication on different dates of service (identified by having at least two Medicare Part D claims with the specific codes) during the measurement period.
7. Exclude those individuals with a diagnosis of dementia during the measurement period.

Numerator: Individuals with schizophrenia or schizoaffective disorder who had at least two prescription drug claims for antipsychotic medications and have a PDC of at least 0.8 for antipsychotic medications.

CREATE NUMERATOR:
For the individuals in the denominator, calculate the PDC for each individual according to the following methods:
1. Determine the individual’s medication therapy period, defined as the number of days from the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for an antipsychotic medication in the measurement period.
2. Within the medication therapy period, count the days the individual was covered by at least one drug in the antipsychotic medication class based on the prescription drug claim service date and days of supply.
   a. Sort and de-duplicate Medicare Part D antipsychotic medication claims by beneficiary ID, service date, generic name, and descending days’ supply. If prescriptions for the same drug
(generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days’ supply.

b. Calculate the number of days covered by antipsychotic drug therapy per individual.
   i. For prescription drug 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.
   ii. If claims for the same drug (generic name) overlap, then adjust the prescription start date to be the day after the previous fill has ended.
   iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.

3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual’s medication therapy period found in Step 1.

An example of SAS code for Steps 1-3 was adapted from Pharmacy Quality Alliance (PQA) and is available at the URL: http://www2.sas.com/proceedings/forum2007/043-2007.pdf.

4. Of the individuals identified in Step 3, count the number of individuals with a calculated PDC of at least 0.8 for the antipsychotic medications. This is the numerator.

PHYSICIAN GROUP ATTRIBUTION:

Physician group attribution was adapted from Generating Medicare Physician Quality Performance Measurement Results (GEM) Project: Physician and Other Provider Grouping and Patient Attribution Methodologies (http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/GEM/downloads/GEMMethodologies.pdf). The following is intended as guidance and reflects only one of many methodologies for assigning individuals to a medical group. Please note that the physician group attribution methodology excludes patients who died, even though the overall measure does not.

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPIs) combinations from all Medicare Part B claims in the measurement year and the prior year. Keep records with valid NPI. Valid NPIs have 10 numeric characters (no alpha characters).

2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.

3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.

4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).

5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Medicare Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)

   a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.

   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.

   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.

7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).

8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.

9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.
   a. From the TIN/NPI list created in Step 8, count the NPIs per TIN/specialty.
   b. The specialty with the maximum count is assigned to the medical group.

II. Identify Individual Sample and Claims

10. Create individual sample.
    a. Pull individuals with 11+ months of Medicare Parts A, B, and D during the measurement year.
    b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
        • A = working-age individual/spouse with an employer group health plan (EGHP)
        • B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
        • G = working disabled for any month of the year
    c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
    d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
    e. Exclude individuals who died during the measurement year.

11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.
    a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
    b. Exclude claims with no npi_prftrmg.

12. Attach medical group TIN to claims by NPI.

III. Patient Attribution

13. Pull all Medicare Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.
a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.
b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.

14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.

15. Attribute individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.

16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

Provider specialties and specialty codes include only physicians, physician assistants, and nurse practitioners for physician grouping, TIN selection, and patient attribution. The provider specialty codes and the associated provider specialty are shown below:

01—General practice*
02—General surgery
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04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery
16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year.

Step 2. Search for an exclusion in the patient’s history: Exclude patients from the eligible population if they meet the following criteria:

- Patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
- Patients with diabetes during the measurement year or the year prior to the measurement year.
- Patients who had no antipsychotic medications dispensed during the measurement year.

Step 3. Determine the numerator: the number of patients who had a diabetes screening test during the measurement year.

Step 4. Calculate the rate.

Submission items

1880 Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder

5.1 Identified measures: 0543: Adherence to Statin Therapy for Individuals with Cardiovascular Disease
0542: Adherence to Chronic Medications
0545: Adherence to Statins for Individuals with Diabetes Mellitus
0541: Proportion of Days Covered (PDC): 3 Rates by Therapeutic Category
0580: Bipolar antimanic agent
0109: Bipolar Disorder and Major Depression: Assessment for Manic or hypomanic behaviors
0110: Bipolar Disorder and Major Depression: Appraisal for alcohol or chemical substance use
0111: Bipolar Disorder: Appraisal for risk of suicide
0112: Bipolar Disorder: Level-of-function evaluation
0003: Bipolar Disorder: Assessment for diabetes
1879: Adherence to Antipsychotic Medications for Individuals with Schizophrenia
1927: Cardiovascular Health Screening for People With Schizophrenia or Bipolar Disorder Who Are Prescribed Antipsychotic Medications
1932: Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized with the related measure, Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879) and the NCQA version of the same measure (Adherence to Antipsychotic Medications for Individuals with Schizophrenia), where possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in all three measures. The methodology used to identify the denominator population is also calculated the same in all three measures, with the exception of the clinical conditions which is the target of the measure. The data collection burden is identical for the measures. The only differences between Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NQF #1879), and the related NCQA measure are: (1) the clinical codes used to identify the different populations in each measure (NQF #1880 – individuals with bipolar I disorder; NQF #1879 and NCQA measure – individuals with schizophrenia); (2) the medications includes in each measure (NQF #1880- mood stabilizers; NQF #1879 and the NCQA...
measure—antipsychotics); and, (3) an exclusion for dementia which is included in NQF #1879 and the NCQA measure but not in NQF #1880. The rationale for these difference is due to the different clinical focus of each measure. There is no impact on interpretability since the measures clearly identify the disparate clinical focus. During development the measure developers worked to harmonize this measure with other measures which were NQF-endorsed at the time of development. The section below is from the original submission of the measure for initial endorsement and refers to measures which are no longer NQF-endorsed. We are including this language to demonstrate the efforts of the measure developers to harmonize this measure with other measures.

**MEASURES WITH WHICH THE MEASURE IS HARMONIZED.** The measure has been harmonized where feasible with NQF #0542, #0543, #0545, #0541, #1879, #1927, and #1932.

**MEASURES WITH WHICH THE MEASURE IS NOT HARMONIZED.** The measure specifications of the measure are not harmonized with the following NQF-endorsed measures that have the same measure focus (use of mood stabilizers among patients with Bipolar Disorder): NQF #0580 Bipolar antimanic agent.

**DIFFERENCES BETWEEN MEASURE 1880 AND MEASURE 0580.** One NQF-endorsed measure (NQF #0580) focuses on a similar concept, but differs from this measure in two important ways. First, the NQF-endorsed measure includes individuals with newly diagnosed bipolar disorder and major depressive disorder. However, this measure includes all individuals with bipolar I disorder, not just those who are newly diagnosed, and does not include individuals with major depressive disorder. Second, the NQF-endorsed measure identifies the percentage of eligible individuals who have received at least 1 prescription for a mood-stabilizing agent during the measurement year, while this measure measures the percentage of eligible individuals with a proportion of days covered (PDC) for mood stabilizer medications greater than 0.8 during the measurement year.

**RATIONALE.** This measure is an improved measure that adds value because it measures adherence to mood stabilizer treatment for individuals with bipolar I disorder. In contrast, the NQF measure (NQF# 0580) is linked to a one-time prescription for mood stabilizer treatment.

**IMPACT ON INTERPRETABILITY AND DATA COLLECTION BURDEN.** Differences have not been identified concerning the data collection burden between Measure 1880 and Measure 0580. However, interpretability for Measure 1880 (as compared to NQF #0580) is improved because Measure 1880 focuses on adherence rather than a single prescription, and Measure 1880 is harmonized with the majority of adherence measures for other chronic diseases in the NQF portfolio and those that are being publicly reported by CMS.

5b.1 If competing, why superior or rationale for additive value: This measure does not address both the same measure focus and population as another NQF-endorsed measure.

**0541 Proportion of Days Covered (PDC) 3 Rates by Therapeutic Category**

5.1 Identified measures:

5a.1 Are specs completely harmonized?

5a.2 If not completely harmonized, identify difference, rationale, impact:

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

**1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia**

5.1 Identified measures: 0544 : Use and Adherence to Antipsychotics among members with Schizophrenia

0543 : Adherence to Statin Therapy for Individuals with Cardiovascular Disease

0542 : Adherence to Chronic Medications
5a.1 Are specs completely harmonized? Yes

5a.2 If not completely harmonized, identify difference, rationale, impact: The measure specifications are harmonized with the related measure, Adherence to Mood Stabilizers for Individuals with Bipolar I Disorder (NQF #1880), where possible. The methodology used to calculate adherence in these measures is proportion of days covered (PDC) which is calculated the same in both measures. The methodology used to identify the denominator population is also calculated the same in both measures with the exception of the clinical conditions which is the target of the measure. The medications included in both measures are specific to the clinical condition targeted in the measure.

5b.1 If competing, why superior or rationale for additive value: The Adherence to Antipsychotic Medications for Individuals with Schizophrenia (NCQA) measure is used for HEDIS reporting and is harmonized with the NQF #1879 in condition, target population, methodology, and medications. The HEDIS measure is only used in Medicaid health plans and therefore is restricted to adults age 18-64.

During development the measure developers identified another competing measure which eventually lost NQF endorsement. The section below is from the original submission of the measures for initial endorsement and compares this measure (#1879 Adherence to Antipsychotic Medications for Individuals with Schizophrenia) to a previously NQF-endorsed measure (#0544 Use and Adherence to Antipsychotics among Members with Schizophrenia).

Measure 1879 (Adherence to Antipsychotic Medications for Individuals with Schizophrenia) has both the same measure focus and essentially the same target population as Measure 0544 (Use and Adherence to Antipsychotics among Members with Schizophrenia), which is no longer endorsed after the measure’s time-limited endorsement (TLE) status expired. Measure 1879 is superior to the existing Measure 0544 because it represents a more valid and efficient approach to measuring medication adherence to antipsychotic medications. In addition, as discussed above in Section 5a.2, Measure 1879 is harmonized with several other adherence measures in the NQF portfolio. Key differences in measure validity and efficiency are addressed in the sections below.

VALIDITY

The Proportion of Days Covered (PDC), which is the method used to calculate adherence in Measure 1879, has several advantages over the Medication Possession Ratio (MPR), which is used in Measure 0544. First, the PDC was found to be more conservative compared to the Medication Possession Ratio (MPR) and was preferred in clinical scenarios in which there is the potential for more than one drug to be used within a drug class concomitantly (e.g., antipsychotics). This clinical situation applies directly to Measure 1879. Martin et al. (2009) demonstrated this in a study published in the Annals of Pharmacotherapy by comparing the methodology for drugs that are commonly switched, where the MPR was 0.690, truncated MPR was 0.624, and PDC was 0.562 and found significant differences between the values for adherence (p < 0.001). Martin et al (2009) also compared drugs with therapeutic duplication where the PDC was 0.669, truncated MPR was 0.774, and MPR was 1.238, and again obtained significant differences (p < 0.001). These findings were
partially replicated by testing results from FMQAI (now HSAG) of Measure 1879 where MPR produced a higher measure rate (as compared to PDC) as shown below.

Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Method Measure Rate
Comparison of MPR and PDC

Method Measure Rate

<table>
<thead>
<tr>
<th>Method</th>
<th>Measure Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPR</td>
<td>74.4%</td>
</tr>
<tr>
<td>PDC</td>
<td>70.0%</td>
</tr>
</tbody>
</table>

Based on initial draft measure specifications and data from a 100% sample of Medicare fee-for-service beneficiaries with Part D coverage in Florida and Rhode Island, using 2008 Medicare Parts A, B, and D data.

Additional differences between Measure 1879 and TLE 0544 related to validity include the following concerns:

Denominator: The measure denominator requires at least two antipsychotic medication prescriptions; whereas, the NQF TLE measure (NQF# 0544) does not require any antipsychotic medication prescriptions in the measure denominator. In 0544, an MPR of “0” is assigned to those without any antipsychotic medication prescriptions, which may falsely lower measure rates, specifically in scenarios where the prescriber has made the decision not to prescribe antipsychotic medications for an individual diagnosed with schizophrenia.

Exclusion related to a diagnosis of dementia: Measure 1879 excludes individuals with a diagnosis of dementia during the measurement year which is not considered in Measure 0544. Antipsychotic medications are currently labeled with a Food and Drug Administration (FDA) Black Box warning that states, “Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death. Analyses of seventeen placebo-controlled trials (modal duration of 10 weeks), largely in patients taking atypical antipsychotic drugs, revealed a risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients.” The Technical Expert Panel, which reviewed the measure, recommended excluding these individuals from the measure denominator, since continued adherence to antipsychotic medications in this subpopulation may increase mortality and not represent quality of care. (Please see Section 2b3.2 that provides descriptive results of testing related to exclusions.)

EFFICIENCY

Measure 1879 requires only one year of administrative claims data, rather than two years of data which is required for TLE 0544. The Technical Expert Panel that reviewed Measure 1879 indicated that the burden of requiring two years of administrative claims data would not meaningfully modify measure rates and would potentially result in the unnecessary exclusion of individuals for which adherence should be assessed but for which only 1 year of claims data were available. Additional rationale for this TEP recommendation was related to an increased length of the continuous enrollment criteria to specify the measure use with two years of data. FMQAI’s (now HSAG) empirical analysis of a related adherence measure (NQF 0542 – Adherence to Chronic Medications) using 2007 and 2008 Medicare Part D data for beneficiaries in Florida and Rhode Island validated this concern and
indicated that approximately 10% of the eligible population would be excluded from the measure if the enrollment criteria required two years of administrative claims data as opposed to one year.

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
5.1 Identified measures: 1933: Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
1934: Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
5a.1 Are specs completely harmonized? Yes
5a.2 If not completely harmonized, identify difference, rationale, impact: N/A
5b.1 If competing, why superior or rationale for additive value: N/A

Comparison of NQF #1932, NQF #1933 and NQF #1934
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

Steward
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
National Committee for Quality Assurance
1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
National Committee for Quality Assurance
1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
National Committee for Quality Assurance

Description
1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
The percentage of patients 18 – 64 years of age with schizophrenia or bipolar disorder, who were dispensed an antipsychotic medication and had a diabetes screening test during the measurement year.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
The percentage of patients 18 – 64 years of age with schizophrenia and cardiovascular disease, who had an LDL-C test during the measurement year.

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
The percentage of patients 18 – 64 years of age with schizophrenia and diabetes who had both an LDL-C test and an HbA1c test during the measurement year.
Type

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Process

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

Process

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

Process

Data Source

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system.

No data collection instrument provided Attachment 1932_SSD_Value_Sets.xlsx

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

Claims This measure is based on administrative claims and medical record documentation 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 plans via NCQA’s online data submission system.

No data collection instrument provided Attachment 1933_SMC_Value_Sets.xlsx

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

Claims 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 plans via NCQA’s online data submission system.

No data collection instrument provided Attachment 1934_SMD_Value_Sets.xlsx

Level

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)

Health Plan, Integrated Delivery System, Population : Regional and State

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

Health Plan, Integrated Delivery System, Population : Regional and State

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

Health Plan, Integrated Delivery System, Population : Regional and State
Setting

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Other, Outpatient Services Any outpatient setting represented with Medicaid claims data

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
Outpatient Services

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
Outpatient Services

Numerator Statement

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Among patients 18-64 years old with schizophrenia or bipolar disorder, those who were dispensed an antipsychotic medication and had a diabetes screening testing during the measurement year.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
An LDL-C test performed during the measurement year.

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
One or more HbA1c tests and one or more LDL-C tests performed during the measurement year.

Numerator Details

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
A glucose test (Glucose Tests Value Set) or an HbA1c test (HbA1c Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data.
See corresponding Excel document for the Glucose Tests Value Set and the HbA1c Tests Value Set.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
An LDL-C test (LDL-C Tests Value Set) performed during the measurement year, as identified by claim/encounter or automated laboratory data.
- See corresponding Excel document for the LDL-C Tests Value Set
The organization may use a calculated or direct LDL.

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
An HbA1c test (HbA1c Tests Value Set) and an LDL-C test (LDL-C Tests Value Set) performed during the measurement year (on the same or different dates of service), as identified by claim/encounter or automated laboratory data. The patient must have both tests to be included in the numerator. The organization may use a calculated or direct LDL.
See corresponding Excel document for the LDL-C Tests Value Set and the HbA1c Tests Value Set

Denominator Statement

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Patients ages 18 to 64 years of age as of the end of the measurement year (e.g., December 31) with a schizophrenia or bipolar disorder diagnosis and who were prescribed an antipsychotic medication.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
Patients 18-64 years of age as of the end of the measurement year (e.g., December 31) with a diagnosis of schizophrenia and cardiovascular disease.

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
Patients age 18-64 years of age as of the end of the measurement year (e.g. December 31) with a schizophrenia and diabetes diagnosis.

Denominator Details

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Follow the steps below to identify the eligible population.
Identify members with schizophrenia or bipolar disorder as those who met at least one of the following criteria during the measurement year.
• At least one acute inpatient encounter, with any diagnosis of schizophrenia or bipolar disorder. Any of the following code combinations meet criteria:
  - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
  - BH Stand Alone Acute Inpatient Value Set with Bipolar Disorder Value Set.
  - BH Stand Alone Acute Inpatient Value Set with Other Bipolar Disorder Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Bipolar Disorder Value Set.
• At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
  - BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
  - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
  - ED Value Set with Schizophrenia Value Set.
  - BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
  - BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
- BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Schizophrenia Value Set.
  • At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of bipolar disorder. Any two of the following code combinations meet criteria:
    - BH Stand Alone Outpatient/PH/IOP Value Set with Bipolar Disorder Value Set.
    - BH Stand Alone Outpatient/PH/IOP Value Set with Other Bipolar Disorder Value Set.
    - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Bipolar Disorder Value Set.
    - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Other Bipolar Disorder Value Set.
    - ED Value Set with Bipolar Disorder Value Set.
    - ED Value Set with Other Bipolar Disorder Value Set.
    - BH ED Value Set with ED POS Value Set with Bipolar Disorder Value Set.
    - BH ED Value Set with ED POS Value Set with Other Bipolar Disorder Value Set.
    - BH Stand Alone Nonacute Inpatient Value Set with Bipolar Disorder Value Set.
    - BH Stand Alone Nonacute Inpatient Value Set with Other Bipolar Disorder Value Set.
    - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Bipolar Disorder Value Set.
    - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Other Bipolar Disorder Value Set.

(See corresponding Excel document for the above value sets)

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

Follow the steps below to identify the eligible population.

Step 1: Identify patients with schizophrenia as those who met at least one of the following criteria during the measurement year:
  • At least one acute inpatient encounter with any diagnosis of schizophrenia. Either of the following code combinations meets criteria:
    – BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
    – BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.
  • At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
    – BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
    – BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
    – ED Value Set with Schizophrenia Value Set.
    – BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
    – BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
Step 2: Identify patients from step 1 who also have cardiovascular disease. Members are identified as having cardiovascular disease in two ways: by event or by diagnosis. The organization must use both methods to identify the eligible population, but a patient need only be identified by one to be included in the measure.

Event. Any of the following during the year prior to the measurement year meet criteria:
- AMI. Discharged from an inpatient setting with an AMI (AMI Value Set). To identify discharges:
  1. Identify all acute and nonacute inpatient stays (Inpatient Stay Value Set).
  2. Identify the discharge date for the stay.
- CABG. Members who had CABG (CABG Value Set) in any setting.
- PCI. Members who had PCI (PCI Value Set) in any setting (e.g., inpatient, outpatient, ED).

Diagnosis. Identify members with IVD as those who met at least either of the following criteria during both the measurement year and the year prior to the measurement year. Criteria need not be the same across both years.
- At least one outpatient visit (Outpatient Value Set) with a diagnosis of IVD (IVD Value Set).
- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of IVD (IVD Value Set).

(See corresponding Excel document for the above value sets)

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

Follow the steps below to identify the eligible population.

Step 1: Identify members with schizophrenia as those who met at least one of the following criteria during the measurement year:
- At least one acute inpatient encounter, with any diagnosis of schizophrenia. Either of the following code combinations meets criteria:
  - BH Stand Alone Acute Inpatient Value Set with Schizophrenia Value Set.
  - BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set with Schizophrenia Value Set.
- At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or nonacute inpatient setting, on different dates of service, with any diagnosis of schizophrenia. Any two of the following code combinations meet criteria:
  - BH Stand Alone Outpatient/PH/IOP Value Set with Schizophrenia Value Set.
  - BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set with Schizophrenia Value Set.
  - ED Value Set with Schizophrenia Value Set.
  - BH ED Value Set with ED POS Value Set with Schizophrenia Value Set.
  - BH Stand Alone Nonacute Inpatient Value Set with Schizophrenia Value Set.
  - BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set with Schizophrenia Value Set.
Step 2 Identify members from step 1 who also have diabetes. There are two ways to identify members with diabetes: by claim/encounter data and by pharmacy data. The organization must use both methods to identify the eligible population, but a member need only be identified by one to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.

Claim/encounter data. Members who met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years):

- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set), on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.
- At least one acute inpatient encounter (Acute Inpatient Value Set), with a diagnosis of diabetes (Diabetes Value Set).

Pharmacy data. Members who were dispensed insulin or oral hypoglycemics/antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (Diabetes Medications List).

(See corresponding Excel document for the above value sets)

PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List):

Alpha-glucosidase inhibitors:
Acarbose, Miglitol

Amylin analogs:
Pramlinitide

Antidiabetic combinations:
Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-linagliptin, Empagliflozin-metformin, Glimepiride-pioglitazone, Glimepiride-rosiglitazone, Glyburide-metformin, Linagliptin-metformin, Metformin-pioglitazone, Metformin-repaglinide, Metformin-rosiglitazone, Metformin-saxagliptin, Metformin-sitagliptin, Sitagliptin-simvastatin

Insulin:
Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane human, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled

Meglitinides:
Nateglinide, Repaglinide

Glucagon-like peptide-1 (GLP1) agonists:
Dulaglutide, Exenatide, Liraglutide, Albiglutide

Sodium glucose cotransporter 2 (SGLT2) inhibitor:
Canagliflozin, Dapagliflozin, Empagliflozin

Sulfonylureas:
Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamide
Thiazolidinediones:
Pioglitazone, Rosiglitazone
Dipeptidyl peptidase-4 (DDP-4) inhibitors:
Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

Exclusions

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
Exclude patients with diabetes during the measurement year or the year prior to the measurement year.
Exclude patients who had no antipsychotic medications dispensed during the measurement year.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
Exclude patients who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.

Exclusion Details

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Exclude members who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These members may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).
Patients are excluded from the denominator if they have diabetes (during the measurement year or the year prior to the measurement year). There are two ways to identify patients with diabetes: 1) pharmacy data or 2) claim/encounter data. Both methods should be used to identify patients with diabetes, but a patient only needs to be identified by one method to be excluded from the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.
Pharmacy data: Patients who were dispensed insulin or oral hypoglycemics/antihyperglycemics during the measurement year or year prior to the measurement year on an ambulatory basis (Diabetes Medications List).
Claim/encounter data: Patients who met at any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years).
- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set) on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.
- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set).

PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES (Diabetes Medications List):
Alpha-glucosidase inhibitors:
Acarbose, Miglitol
Amylin analogs:
Pramlintide
Antidiabetic combinations:
Alogliptin-metformin, Alogliptin-pioglitazone, Canagliflozin-metformin, Dapagliflozin-metformin, Empagliflozin-linagliptin, Empagliflozin-metformin, Glimepiride-pioglitazone, Glimepiride-rosiglitazone, Glipizide-metformin, Glyburide-metformin, Linagliptin-metformin, Metformin-pioglitazone, Metformin-repaglinide, Metformin-rosiglitazone, Metformin-saxagliptin, Metformin-sitagliptin, Sitagliptin-simvastatin
Insulin:
Insulin aspart, Insulin aspart-insulin aspart protamine, Insulin degludec, Insulin detemir, Insulin glargine, Insulin glulisine, Insulin isophane human, Insulin isophane-insulin regular, Insulin lispro, Insulin lispro-insulin lispro protamine, Insulin regular human, Insulin human inhaled
Meglitinides:
Nateglinide, Repaglinide
Glucagon-like peptide-1 (GLP1) agonists:
Dulaglutide, Exenatide, Liraglutide, Albiglutide
Sodium glucose cotransporter 2 (SGLT2) inhibitor:
Canagliflozin, Dapagliflozin, Empagliflozin
Sulfonylureas:
Chlorpropamide, Glimepiride, Glipizide, Glyburide, Tolazamide, Tolbutamide
Thiazolidinediones:
Pioglitazone, Rosiglitazone
Dipeptidyl peptidase-4 (DDP-4) inhibitors:
Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

Exclude patients who had no antipsychotic medications dispensed during the measurement year. There are two ways to identify dispensing events: by claim/encounter data and by pharmacy data. The organization must use both methods to identify dispensing events, but an event need only be identified by one method to be counted.
- Claim/encounter data. An antipsychotic medication (Long-Acting Injections Value Set).
- Pharmacy data. Dispensed an antipsychotic medication (Antipsychotic Medications List; Antipsychotic Combination Medications List) on an ambulatory basis.

**ANTIPSYCHOTIC MEDICATIONS:**

(Antipsychotic Medications List)

Miscellaneous antipsychotic agents:

- Aripiprazole, Asenapine, Brexpiprazole, Cariprazine, Clozapine, Haloperidol, Iloperidone, Loxapine, Lurasadone, Molindone, Olanzapine, Paliperidone, Pimozide, Quetiapine, Quetiapine fumarate, Risperidone, Ziprasidone

Phenothiazine antipsychotics:

- Chlorpromazine, Fluphenazine, Perphenazine, Prochlorperazine, Thioridazine, Trifluoperazine

Thioxanthenes:

- Thiothixene

Long-acting injections:

- Aripiprazole, Fluphenazine decanoate, Haloperidol decanoate, Olanzapine, Paliperidone palmitate, Risperidone

(Antipsychotic Combination Medications List)

Psychotherapeutic combinations:

- Fluoxetine-olanzapine, Perphenazine-amitriptyline

See corresponding Excel document for the value sets referenced above.

**1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)**

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).

**1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)**

Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began. These patients may be identified using various methods, which may include but are not limited to enrollment data, medical record or claims/encounter data (Hospice Value Set).

Optional exclusion: Exclude patients who do not have a diagnosis of diabetes (Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.

If a member was identified as a diabetic based on claim or encounter data, as described in step 2 of S.7, the optional exclusions do not apply because the member had a diagnosis of diabetes.

See corresponding Excel document for the value sets referenced above.
Risk Adjustment

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
No risk adjustment or risk stratification

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
No risk adjustment or risk stratification

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
No risk adjustment or risk stratification

Stratification

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
None.

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
N/A

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
None.

Type Score

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Rate/proportion better quality = higher score

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
Rate/proportion better quality = higher score

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
Rate/proportion better quality = higher score

Algorithm

1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
Step1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year.
Step 2. Search for an exclusion in the patient’s history: Exclude patients from the eligible population if they meet the following criteria:
- Patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
- Patients with diabetes during the measurement year or the year prior to the measurement year.
- Patients who had no antipsychotic medications dispensed during the measurement year.

Step 3. Determine the numerator: the number of patients who had a diabetes screening test during the measurement year.
Step 4. Calculate the rate.

**1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)**
Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year with a diagnosis of schizophrenia and cardiovascular disease
Step 2. Determine the numerator: the number of patients who had an LDL-C test during the measurement year
Step 3. Calculate the rate.

**1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)**
Step 1. Determine the eligible population: identify patients 18-64 years of age by the end of the measurement year
Step 2. Search for an optional exclusion in the patient’s history: Exclude patients from the eligible population if they meet the following criteria:
- Exclude patients who use hospice services or elect to use a hospice benefit any time during the measurement year, regardless of when the services began.
- Exclude patients who do not have a diagnosis of diabetes during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes during the measurement year or the year prior to the measurement year.
Step 3. Determine the numerator: the number of patients who have one or more HbA1c tests and one or more LDL-C tests performed during the measurement year.
Step 4. Calculate the rate.

**Submission items**

**1932 Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)**

5.1 Identified measures: 1933 : Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
1934 : Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)

5a.1 Are specs completely harmonized? Yes
5a.2 If not completely harmonized, identify difference, rationale, impact: N/A
5b.1 If competing, why superior or rationale for additive value: N/A

1933 Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)

5.1 Identified measures: 1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
1934 : Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
5a.1 Are specs completely harmonized? Yes
5a.2 If not completely harmonized, identify difference, rationale, impact: N/A
5b.1 If competing, why superior or rationale for additive value: N/A

1934 Diabetes Monitoring for People With Diabetes and Schizophrenia (SMD)
5.1 Identified measures: 1932 : Diabetes Screening for People With Schizophrenia or Bipolar Disorder Who Are Using Antipsychotic Medications (SSD)
1933 : Cardiovascular Monitoring for People With Cardiovascular Disease and Schizophrenia (SMC)
5a.1 Are specs completely harmonized? Yes
5a.2 If not completely harmonized, identify difference, rationale, impact: N/A
5b.1 If competing, why superior or rationale for additive value: N/A

Comparison of NQF #3389 and NQF#2940, NQF #2950, and NQF #2951

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
2940 Use of Opioids at High Dosage in Persons Without Cancer
2950 Use of Opioids from Multiple Providers in Persons Without Cancer
2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

Steward

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
PQA, Inc.

2940 Use of Opioids at High Dosage in Persons Without Cancer
Pharmacy Quality Alliance

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Pharmacy Quality Alliance

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Pharmacy Quality Alliance

Description

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
The percentage of individuals 18 years and older with concurrent use of prescription opioids and benzodiazepines during the measurement year.
A lower rate indicates better performance.

2940 Use of Opioids at High Dosage in Persons Without Cancer
The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer.

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids from four (4) or more prescribers AND four (4) or more pharmacies.
2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

The proportion (XX out of 1,000) of individuals without cancer receiving prescriptions for opioids with a daily dosage greater than 120mg morphine equivalent dose (MED) for 90 consecutive days or longer, AND who received opioid prescriptions from four (4) or more prescribers AND four (4) or more pharmacies.

Type

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Process

2940 Use of Opioids at High Dosage in Persons Without Cancer
Process

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Process

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Process

Data Source

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Claims Administrative claims: prescription claims, medical claims, Prescription Drug Hierarchical Condition Categories (RxHCCs)
No data collection instrument provided Attachment PQA_ICD_Code_Cancer_Value_Set_Feb_2018.xlsx

2940 Use of Opioids at High Dosage in Persons Without Cancer
Claims Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information.
No data collection instrument provided Attachment Cancer_Exclusion_RxHCC_ICD-9_and_10_Codes.xlsx

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Claims Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information.
No data collection instrument provided Attachment Cancer_Exclusion_RxHCC_ICD-9_and_10_Codes-635969250747751020.xlsx

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Claims Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information.
No data collection instrument provided Attachment Cancer_Exclusion_RxHCC_ICD-9_and_10_Codes-63596926583553126.xlsx

Level

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Health Plan
2940 Use of Opioids at High Dosage in Persons Without Cancer
Health Plan, Other, Population : Regional and State

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Health Plan, Other, Population : Regional and State

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Health Plan, Other, Population : Regional and State

Setting

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Other The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.

2940 Use of Opioids at High Dosage in Persons Without Cancer
Other, Outpatient Services The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Other, Outpatient Services The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Other, Outpatient Services The level of analysis for this measure is the prescription drug health plan, but it contains claims data from multiple care settings, including ambulatory, skilled nursing facility, pharmacy etc.

Numerator Statement

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
The number of individuals from the denominator with concurrent use of opioids and benzodiazepines for 30 or more cumulative days during the measurement year.

2940 Use of Opioids at High Dosage in Persons Without Cancer
Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer*
*MED calculation is included in S.6 Numerator Details

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Any member in the denominator who received opioid prescription claims from 4 or more prescribers AND 4 or more pharmacies.

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Any member in the denominator with opioid prescription claims where the MED is greater than 120mg for 90 consecutive days or longer* AND who received opioid prescriptions from 4 or more prescribers AND 4 or more pharmacies.
*MED calculation is included in S.6 Numerator Details
Numerator Details

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
The number of individuals from the denominator with:
• 2 or more prescription claims for any benzodiazepine with unique dates of service, AND
• Concurrent use of opioids and benzodiazepines for 30 or more cumulative days.
Complete the steps below to identify individuals with concurrent use of opioids and benzodiazepines:
Step 1: From the denominator population, identify individuals with 2 or more prescription claims on unique dates of service for any benzodiazepine (Table COB-B, below) during the measurement year.
Step 2: Of the population identified in Step 1, determine the total days of overlap (concurrent use) between the opioid and benzodiazepine prescriptions during the measurement year.
• Concurrent use is identified using the dates of service and days’ supply of an individual’s opioid and benzodiazepine prescription drug claims. The days of concurrent use is the sum of the number of days (cumulative) during the measurement year with overlapping days’ supply for an opioid and a benzodiazepine. Exclude days of overlap that occur after the end of the measurement year.
Step 3: Count the number of individuals with concurrent use of opioids and benzodiazepines for 30 or more cumulative days. This is the numerator.
Note: When identifying days’ supply for opioids (or benzodiazepines):
• Exclude any days’ supply that occur after the end of the measurement year.
• Multiple prescription claims with the same date of service: If multiple prescription claims for opioids (or benzodiazepines) are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.
Table COB-B: Benzodiazepines:
Alprazolam, chlordiazepoxide, clobazam, clonazepam, clorazepate, diazepam, estazolam, flurazepam, lorazepam, midazolam, oxazepam, quazepam, temazepam, triazolam
(note: excludes injectable formulations)

2940 Use of Opioids at High Dosage in Persons Without Cancer
Any member in the denominator with opioid prescription claims greater than 120mg MED for 90 consecutive days or longer* (See Table Opioids-A: Opioid Medications)
*Identifying members with prescription opioids that exceeded the MED threshold:
To identify members with prescription opioids that exceeded the MED threshold, each claim is to be converted into the MED using the appropriate conversion factor associated with the opioid product of that prescription claim (see Appendix A). The MED for each day’s claims then are summed to determine the total MED for that day.
For each member in the denominator:
1. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
• # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)

2. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.

3. Identify the days where the MED threshold is exceeded.

4. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.

Table Opioid-A: Opioid Medications (MED conversion factor)

- buprenorphine patch (12.6)
- buprenorphine tab or film (10)
- butorphanol (7)
- codeine (0.15)
- dihydrocodeine (0.25)
- fentanyl buccal or SL tablets, or lozenge/troche (0.13)
- fentanyl film or oral spray (0.18)
- fentanyl nasal spray (0.16)
- fentanyl patch (7.2)
- hydrocodone (1)
- hydromorphone (0.1)
- levorphanol (11)
- meperidine (0.1)
- methadone (3)
- morphine (1)
- opium (1)
- oxycodone (1.5)
- oxymorphone (3)
- pentazocine (0.37)
- tapentadol (0.4)
- tramadol (0.1)

*Note: Injectables and Opioid cough and cold products and combination products containing buprenorphine and naloxone (e.g., BunavailTM, Suboxone®, Zubsolv®) are excluded from the MED calculations. Ionsys® (fentanyl transdermal patch) is also excluded as it is only for inpatient use; It is also only available through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS)

2950 Use of Opioids from Multiple Providers in Persons Without Cancer

For each member in the denominator:

1. Calculate the number of unique pharmacy providers associated with an opioid prescription claim.
2. Calculate the number of unique prescribers associated with an opioid prescription claim.
3. Any member with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

Any member in the denominator with opioid prescription claims greater than 120mg MED for 90 consecutive days or longer* AND who received opioid prescriptions from 4 or more prescribers AND 4 or more pharmacies (See Table Opioids-A: Opioid Medications)

*Identifying members with prescription opioids that exceeded the MED threshold:

To identify members with prescription opioids that exceeded the MED threshold, each claim is to be converted into the MED using the appropriate conversion factor associated with the opioid product of that prescription claim (see Appendix A). The MED for each day’s claims then are summed to determine the total MED for that day.

For each member in the denominator:

1. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
   - # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
   - MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)
2. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.
3. Identify the days where the MED threshold is exceeded.
4. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.
5. From the members meeting the criteria for the MED component of the numerator (4), calculate the number of unique pharmacy providers associated with an opioid prescription claim.
6. From the members meeting the criteria for the MED component of the numerator (4), calculate the number of unique prescribers associated with an opioid prescription claim.
7. From the members meeting the criteria for the MED component of the numerator (4), any member with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.

Table Opioid-A: Opioid Medications (MED conversion factor)

buprenorphine patch (12.6) buprenorphine tab or film (10) butorphanol (7) codeine (0.15)
dihydrocodeine (0.25) fentanyl buccal or SL tablets, or lozenge/troche (0.13) fentanyl film
or oral spray (0.18) fentanyl nasal spray (0.16) fentanyl patch (7.2) hydrocodone (1)
ydromorphine (4) levorphanol (11) meperidine (0.1) methadone (3) morphine (1) opium
(1) oxycodone (1.5) oxymorphone (3) pentazocine (0.37) tapentadol (0.4) tramadol (0.1)
*Note: Injectable opioids and Opioid cough and cold products and combination products
containing buprenorphine and naloxone (e.g., Bunavail™, Suboxone®, Zubsolv®) are
excluded from the MED calculations. Ionsys® (fentanyl transdermal patch) is also excluded
as it is only for inpatient use; It is also only available through a restricted program under a
Risk Evaluation and Mitigation Strategy (REMS)

Denominator Statement

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
The denominator includes individuals 18 years and older with 2 or more prescription
claims for opioids with unique dates of service, for which the sum of the days’ supply is 15
or more days. Individuals with cancer or in hospice are excluded.

2940 Use of Opioids at High Dosage in Persons Without Cancer
Any member with two or more prescription claims for opioids filled on at least two
separate days, for which the sum of the days supply is greater than or equal to 15.

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Any member with two or more prescription claims for opioids filled on at least two
separate days, for which the sum of the days supply is greater than or equal to 15.

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Any member with two or more prescription claims for opioids filled on at least two
separate days, for which the sum of the days supply is greater than or equal to 15.
Denominator Details

3389 Concurrent Use of Opioids and Benzodiazepines (COB)

The denominator includes individuals 18 years and older by the first day of the measurement year with 2 or more prescription claims for opioids with unique dates of service, for which the sum of the days’ supply is 15 or more days. Use Table COB-A: Opioids, below, to identify the opioid medications for the measure.

Complete the steps below to determine the denominator:

Step 1: Identify individuals aged 18 years and older as of the first day of the measurement year

Step 2: Of those identified in step 1, identify individuals meeting the continuous enrollment criteria.

• To be continuously enrolled, an individual may have no more than one gap in enrollment of up to 31 days during the measurement year. When enrollment is verified monthly, the individual may not have more than a 1-month gap in coverage (i.e., an individual whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Step 3: Of those identified in step 2, identify individuals with 2 or more prescription claims for opioids on unique dates of service, for which the sum of the days’ supply is 15 or more days’ supply during the measurement year.

Step 4: Of those identified in step 3, identify individuals where the earliest prescription for an opioid (i.e. Index Prescription Start Date [IPSD]) is 30 or more days from the last day of the measurement year (January 1 through December 2)

Note: When identifying days’ supply for opioids:

• Exclude any days’ supply that occur after the end of the measurement year.

• Multiple prescription claims with the same date of service: If multiple prescription claims for opioids are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Table COB-A: Opioids:

buprenorphine, butorphanol, codeine, dihydrocodeine, fentanyl, hydrocodone, hydromorphone, levorphanol, meperidine, methadone, morphine, opium, oxycodone, oxymorphone, pentazocine, tapentadol, tramadol

(note: excludes injectable formulations; includes prescription opioid cough medications; excludes single-agent and combination buprenorphine products used to treat opioid use disorder (i.e., buprenorphine sublingual tablets, Probuphine® Implant kit subcutaneous implant, and all buprenorphine/naloxone combination products).

2940 Use of Opioids at High Dosage in Persons Without Cancer

Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

Table Opioid-A: Opioid Medications

buprenorphine
butorphanol
codeine
dihydrocodeine
fentanyl
hydrocodone
hydromorphone
levorphanol
meperidine
methadone
morphine
opium
oxycodone
oxymorphone
pentazocine
tapentadol
tramadol

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Table Opioid-A: Opioid Medications
buprenorphine butorphanol
codeine dihydrocodeine
fentanyl
hydrocodone
hydromorphone levorphanol meperidine
methadone morphine
opium
oxycodone oxymorphone pentazocine
tapentadol
tramadol

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Any member with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Table Opioid-A: Opioid Medications
buprenorphine butorphanol
codeine dihydrocodeine fentanyl
hydrocodone
hydromorphone levorphanol meperidine
methadone morphine
opium
oxycodone oxymorphone pentazocine
tapentadol
tramadol
Exclusions

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Individuals with cancer or in hospice at any point during the measurement year are excluded from the denominator.

2940 Use of Opioids at High Dosage in Persons Without Cancer
Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database.

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016; (see list in S.11 and S.2b); or a hospice indicator from the enrollment database.

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Any member with a diagnosis for Cancer or a Prescription Drug Hierarchical Condition Category (RxHCC) 8, 9, 10, or 11 for Payment Year 2015; or RxHCC 15, 16, 17, 18, or 19 for Payment Year 2016 (see list in S.11 and S.2b); or a hospice indicator (Medicare Part D) from the enrollment database.

Exclusion Details

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Hospice exclusion: Exclude any individual in hospice during the measurement year. To identify individuals in hospice:
- Use the hospice indicator from the enrollment database, where available (e.g. Medicare); or
- Use place of service code 34 where a hospice indicator is not available (e.g. Commercial, Medicaid)
Cancer exclusion: Exclude any individuals with cancer during the measurement year. To identify individuals with cancer:
- Using ICD codes, refer to those listed in the file titled, PQA ICD Code Cancer Value Set Feb 2018 and attached in S.2b. The list is based on the American Medical Association-convened Physician Consortium for Performance Improvement Cancer value set (OID: 2.16.840.1.113883.3.526.3.1010). A cancer diagnosis is defined as having at least one claim with any of the listed cancer diagnoses, including primary diagnosis or any other diagnosis fields during the measurement year.
- For Medicare Data, if ICD codes are not available, use Prescription Drug Hierarchical Condition Categories (RxHCCs) 15, 16, 17, 18, 19 for Payment Year 2016 or 2017 to identify cancer exclusions. RxHCCs are available at: https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Risk-Adjustors.html

2940 Use of Opioids at High Dosage in Persons Without Cancer
Hospice exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice.
Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19
ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Hospice Exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice.
Cancer Exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19
ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Hospice exclusion: Exclude those members identified in the Medicare Enrollment Database as being enrolled in hospice.
Cancer exclusion: For Payment Year 2015: RxHCC 8, 9, 10, or 11. For Payment Year 2016: RxHCC 15, 16, 17, 18, or 19
ICD 9 and 10 Codes to Identify Cancer: Please see attachment in S2.b

Risk Adjustment

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
No risk adjustment or risk stratification

2940 Use of Opioids at High Dosage in Persons Without Cancer
No risk adjustment or risk stratification

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
No risk adjustment or risk stratification

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
No risk adjustment or risk stratification

Stratification

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
The measure is stratified by the following lines of business for the health plan:
- Commercial
- Medicare
- Medicaid
Medicare Plans are further stratified by Low-Income Subsidy (LIS) status.
LIS is a subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources. Medicare beneficiaries apply for the LIS with the Social Security Administration or their State Medicaid agency.
The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify LIS status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name corresponds with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-
subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized Part D coverage.

**2940 Use of Opioids at High Dosage in Persons Without Cancer**

The measure is stratified by the following lines of business for the health plan:

- Commercial
- Medicare
- Medicaid

Medicare Plans are further stratified by Low Income Subsidy status

Definition: Medicare Low Income Subsidy (LIS) - A subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources. Medicare beneficiaries apply for the LIS with the Social Security Administration or their State Medicaid agency.

The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify Low Income Subsidy status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name correspond with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized Part D coverage.

**2950 Use of Opioids from Multiple Providers in Persons Without Cancer**

The measure is stratified by the following lines of business for the health plan:

- Commercial
- Medicare
- Medicaid

Medicare Plans are further stratified by Low Income Subsidy status

Definition: Medicare Low Income Subsidy (LIS)

A subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources. Medicare beneficiaries apply for the LIS with the Social Security Administration or their State Medicaid agency.

The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify Low Income Subsidy status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name correspond with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized Part D coverage.

**2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer**

The measure is stratified by the following lines of business for the health plan:
Commercial Medicare Medicaid

Medicare Plans are further stratified by Low Income Subsidy status

Definition: Medicare Low Income Subsidy (LIS)

A subsidy paid by the Federal government to the drug plan for Medicare beneficiaries who need extra help with their prescription drug costs due to limited income and resources. Medicare beneficiaries apply for the LIS with the Social Security Administration or their State Medicaid agency.

The Medicare Master Beneficiary Summary file contains the Cost Share Group variable used to identify Low Income Subsidy status, which is subsidized Part D coverage. There are 12 monthly variables - where the 01 through 12 at the end of the variable name correspond with the month (e.g., 01 is January and 12 is December). CMS identifies beneficiaries with fully-subsidized Part D coverage by looking for individuals that have a 01, 02, or 03 for the month. Other beneficiaries who are eligible for the LIS but do not receive a full subsidy have a 04, 05, 06, 07, or 08. The remaining values indicate that the individual is not eligible for subsidized Part D coverage.

Type Score

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
Rate/proportion better quality = lower score

2940 Use of Opioids at High Dosage in Persons Without Cancer
Rate/proportion better quality = lower score

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Rate/proportion better quality = lower score

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
Rate/proportion better quality = lower score

Algorithm

3389 Concurrent Use of Opioids and Benzodiazepines (COB)
A. Target population (denominator):
Step 1: Identify individuals aged 18 years and older as of the first day of the measurement year
Step 2: Of those identified in step 1, identify individuals meeting the continuous enrollment criteria.

• To be continuously enrolled, an individual may have no more than one gap in enrollment of up to 31 days during the measurement year. When enrollment is verified monthly, the individual may not have more than a 1-month gap in coverage (i.e., an individual whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).
Step 3: Of those identified in step 2, identify individuals with 2 or more prescription claims for opioids on unique dates of service, for which the sum of the days’ supply is 15 or more days’ supply during the measurement year.
Step 4: Of those identified in step 3, identify individuals where the earliest prescription for an opioid (i.e. Index Prescription Start Date [IPSD]) is 30 or more days from the last day of the measurement year (January 1 through December 2)

Note: When identifying days’ supply for opioids:
- Exclude any days’ supply that occur after the end of the measurement year.
- Multiple prescription claims with the same date of service: If multiple prescription claims for opioids are dispensed on the same day, calculate the number of days covered by an opioid using the prescriptions with the longest days’ supply.

Step 5: Identify individuals with cancer or in hospice during the measurement year.

To identify individuals in hospice:
- Use the hospice indicator from the enrollment database, where available (e.g. Medicare); or
- Use place of service code 34 where a hospice indicator is not available (e.g. Commercial, Medicaid)

To identify individuals with cancer:
- Using ICD codes, refer to those listed in the file titled, PQA ICD Code Cancer Value Set Feb 2018 and attached in S.2b. The list is based on the American Medical Association-convened Physician Consortium for Performance Improvement Cancer value set (OID: 2.16.840.1.113883.3.526.3.1010). A cancer diagnosis is defined as having at least one claim with any of the listed cancer diagnoses, including primary diagnosis or any other diagnosis fields during the measurement year.
- For Medicare Data, if ICD codes are not available, use Prescription Drug Hierarchical Condition Categories (RxHCCs) 15, 16, 17, 18, 19 for Payment Year 2016 or 2017 to identify cancer exclusions. RxHCCs are available at: https://www.cms.gov/Medicare/Health-Plans/MedicareAdvSpecRateStats/Risk-Adjustors.html

Step 6: Exclude individuals with cancer or in hospice (Step 5) from those identified in Step 4. This is the denominator.

B. Numerator Population:

Step 7: From the denominator population (from Step 6), identify individuals with 2 or more prescriptions claims on unique dates of service for any benzodiazepine during the measurement year.

Step 8: Of the population identified in Step 7, determine the total days of overlap (concurrent use) between the opioid and benzodiazepine prescriptions during the measurement year.

- Concurrent use is identified using the dates of service and days’ supply of an individual’s opioid and benzodiazepine prescription drug claims. The days of concurrent use is the sum of the number of days (cumulative) during the measurement year with overlapping days’ supply for an opioid and a benzodiazepine. Exclude days of overlap that occur after the end of the measurement year.

Step 9: Count the number of individuals with concurrent use of opioids and benzodiazepines for 30 or more cumulative days. This is the numerator.

Note: When identifying days’ supply for opioids (or benzodiazepines):
- Exclude any days’ supply that occur after the end of the measurement year.
• Multiple prescription opioid (or benzodiazepine) claims with overlap: For multiple prescription claims for opioids (or benzodiazepines) with overlapping days’ supply, count each day in the measurement year only once toward the denominator. There is no adjustment for early fills or overlapping days’ supply for opioids (or benzodiazepines).

C. Measure Rate:
Step 10: Divide the number of individuals in the numerator (Step 9) by the denominator (Step 6) and multiply by 100. This is the measure rate reported as a percentage.
• Report the rates separately by line of business (e.g. Medicare, Medicaid, Commercial). For Medicare, report rates for low-income subsidy (LIS) and non-LIS populations separately.

2940 Use of Opioids at High Dosage in Persons Without Cancer
Step One:
Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Step Two:
Calculate the numerator by:
For each member in the denominator:
a. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
• # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
• MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)
b. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.
c. Identify the days where the MED threshold is exceeded.
d. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.
Step Three:
Divide the number of members that met the criteria in numerator (Step Two d.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members.

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
Step One:
Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.
Step Two:
Calculate the numerator by:
a. Calculate the number of unique pharmacy providers associated with an opioid prescription claim.
b. Calculate the number of unique prescribers associated with an opioid prescription claim.
c. Any member with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.

Step Three:
Divide the number of members that met the criteria in numerator (Step Two c.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members.

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

Step One:
Calculate the denominator by identifying the number of all eligible members with two or more prescription claims for opioids filled on at least two separate days, for which the sum of the days supply is greater than or equal to 15.

Step Two:
Calculate the numerator by:
For each member in the denominator:
a. Calculate the MED for each opioid prescription claim during the measurement period, using the following equations:
   • # of Opioid Dosage Units per day = (Opioid claim quantity) / (Opioid claim days supply)
   • MED Daily Dose per claim = (# of opioid dosage units per day) X (# mg opioid per dosage unit) X (MED conversion factor)
b. Sum the daily MEDs of all opioid claims for each day to arrive at a total daily MED for each member.
c. Identify the days where the MED threshold is exceeded.
d. Any member, for whom the MED threshold is exceeded for 90 consecutive days or longer, meets the criteria for the MED component of the numerator.

Step Three: From those members meeting the MED component in (Step 2d.) identify those members who received opioids from 4 or more prescribers AND 4 or more pharmacies.
a. Calculate the number of unique pharmacy providers associated with an opioid prescription claim.
b. Calculate the number of unique prescribers associated with an opioid prescription claim.
c. Any member from Step 2d with four or more unique pharmacy providers AND four or more unique prescribers meets the criteria for the Numerator.

Step Four:
Divide the number of members that met the criteria in numerator (Step Three c.) by the denominator (Step One) and multiply times 1000. The rate is reported as a proportion: XX out of 1,000 members.

Submission items

3389 Concurrent Use of Opioids and Benzodiazepines (COB)

5.1 Identified measures: 2940 : Use of Opioids at High Dosage in Persons Without Cancer
2950 : Use of Opioids from Multiple Providers in Persons Without Cancer
2951: Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer

5a.1 Are specs completely harmonized? Yes
5a.2 If not completely harmonized, identify difference, rationale, impact: The PQA opioid measures (NQF # 2940, 2950, and 2951) use the same target population (denominator), and each have different areas of focus (numerator) related to opioid prescribing. The NCQA opioid measures were developed as an adaptation to existing PQA measures; the NCQA opioid measure denominators are similar to the PQA opioid measures, but have a different area of focus than the concurrent use of opioids and benzodiazepines measure.
5b.1 If competing, why superior or rationale for additive value: There are no competing measures (i.e., those that addresses both the same measure focus and the same target population).

2940 Use of Opioids at High Dosage in Persons Without Cancer
5.1 Identified measures:
5a.1 Are specs completely harmonized?
5a.2 If not completely harmonized, identify difference, rationale, impact:
5b.1 If competing, why superior or rationale for additive value: N/A

2950 Use of Opioids from Multiple Providers in Persons Without Cancer
5.1 Identified measures:
5a.1 Are specs completely harmonized?
5a.2 If not completely harmonized, identify difference, rationale, impact:
5b.1 If competing, why superior or rationale for additive value: N/A

2951 Use of Opioids from Multiple Providers and at High Dosage in Persons Without Cancer
5.1 Identified measures:
5a.1 Are specs completely harmonized?
5a.2 If not completely harmonized, identify difference, rationale, impact:
5b.1 If competing, why superior or rationale for additive value: N/A

Comparison of NQF #3400 and NQF # 3175

3400 Use of pharmacotherapy for opioid use disorder (OUD)
3175 Continuity of Pharmacotherapy for Opioid Use Disorder

Steward

3400 Use of pharmacotherapy for opioid use disorder (OUD)
PCPI

3175 Continuity of Pharmacotherapy for Opioid Use Disorder
University of Southern California

Description

3400 Use of pharmacotherapy for opioid use disorder (OUD)
The percentage of Medicaid beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the
disorder during the measure year. The measure will report any medications used in medication-assisted treatment of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

3175 Continuity of Pharmacotherapy for Opioid Use Disorder
Percentage of adults 18-64 years of age with pharmacotherapy for opioid use disorder (OUD) who have at least 180 days of continuous treatment

Type

3400 Use of pharmacotherapy for opioid use disorder (OUD)
Process

3175 Continuity of Pharmacotherapy for Opioid Use Disorder
Process

Data Source

3400 Use of pharmacotherapy for opioid use disorder (OUD)
Claims Medicaid Alpha-MAX 2014 data: eligible (EL), inpatient (IP), other services (OT), long-term care (LT) and drug (RX) files. The other services file contains facility and individual provider services data. Most notably, it may contain both residential and other stayover service claims data as claims are assigned to MAX claims file types based upon the category of service provided.

No data collection instrument provided Attachment NQF_Value_Sets_SUD-4_FINAL_SUD_team.01.24.18.xlsx

3175 Continuity of Pharmacotherapy for Opioid Use Disorder
Claims, Electronic Health Data For measure calculation, the following files from the Truven MarketScan® Commercial Database were used:
• Enrollment data
• Drug claims
• Medical claims

We used data from these files (including data from Standard Quarterly Updates) for calendar years 2010-2015. This database has long been a commonly used data source to study patterns of commercially insured patients. The database contains fully adjudicated, patient-level claims. All records in these files were used as input to identify individuals that met the measure’s eligibility criteria. We present detailed results in the MIF for 2013-2014, as we have the most data for this time period, but we include measure scores for each of the two-year periods within 2010-2015. The final analytic file for 2013-2014 contained a total of 43,812 episodes.

No data collection instrument provided Attachment NQF_3175_OUD_Code_Lists_1-12-17_To_NQF.xlsx

Level

3400 Use of pharmacotherapy for opioid use disorder (OUD)
Population: Regional and State
**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**

**Health Plan, Population:** Regional and State

**Setting**

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**

Emergency Department and Services, Inpatient/Hospital, Outpatient Services

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**

Outpatient Services

**Numerator Statement**

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**

Beneficiaries ages 18 to 64 with an OUD who filled a prescription for or were administered or ordered an FDA-approved medication for the disorder during the measure year.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**

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**

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**

Beneficiaries identified as filling a prescription for or were administered or ordered an FDA-approved medication for OUD, during the 12-month measure year, through pharmacy claims (relevant NDC code) or through relevant HCPCS coding of medical service. Only formulations with an OUD indication (not pain management) are included in measure calculation.

The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

A list of value sets for the measure is attached in the Excel workbook provided for question S.2b. NDC codes listed are codes that were used in testing and are current as of June 2017.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**


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.
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 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 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
- 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 reevaluating 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


Denominator Statement

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**
Number of Medicaid beneficiaries with at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**
Individuals 18-64 years of age who had a diagnosis of OUD and at least one claim for an OUD medication

Denominator Details

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**
Medicaid beneficiaries age 18 through 64, enrolled for full 12 months of measurement year, and had at least one encounter with a diagnosis of opioid abuse, dependence, or remission (primary or other) at any time during the measurement year. ICD-9 and ICD-10 codes for OUD are provided in the attached Excel file in required format at 5.2b.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**
The measure denominator is calculated for rolling two-year periods from 2010 to 2015: 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015. The denominator includes individuals 18-64 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
- 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

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**
None.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**
There are no denominator exclusions.

Exclusion Details

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**
Not applicable.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**
There are no denominator exclusions.

Risk Adjustment

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**
No risk adjustment or risk stratification

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**
No risk adjustment or risk stratification
**Stratification**

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**

The measure will be calculated both overall and stratified by four medications/mode of administration: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

The NDC pharmacy codes used to identify the FDA-approved medications for OUD are listed in an Excel file attached in S.2b.

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**

Measure results may be stratified by:

- Age – Divided into four categories: 18-34, 35-44, 45-54, 55-64 years
- Gender: Male, Female
- State
- Health plan

**Type Score**

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**

Rate/proportion better quality = higher score

**3175 Continuity of Pharmacotherapy for Opioid Use Disorder**

Rate/proportion better quality = higher score

**Algorithm**

**3400 Use of pharmacotherapy for opioid use disorder (OUD)**

Step 1: Identify denominator

Identify Medicaid beneficiaries age 18 through 64 years with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (primary or other diagnosis) during the measurement year and continuously enrolled during the measurement year. Age is calculated as of January 1 of the measurement year.

Step 2: Identify the numerator as beneficiaries with evidence of at least one prescription filled, or were administered or ordered an FDA-approved medication for the disorder during the measurement year.

The measure will report any medications used in MAT of opioid dependence and addiction and four separate rates representing the following types of FDA-approved drug products: buprenorphine; oral naltrexone; long-acting, injectable naltrexone; and methadone.

Step 2A: Identify beneficiaries with evidence of at least one prescription for buprenorphine at any point during the measurement year.

Step 2B: Identify beneficiaries with evidence of at least one prescription for oral naltrexone at any point during the measurement year.

Step 2C: Identify beneficiaries with evidence of at least one prescription for long-acting, injectable naltrexone at any point during the measurement year.

Step 2D: Identify beneficiaries with evidence of at least one prescription for methadone at any point during the measurement year.
Note: Pharmacotherapy for opioid abuse, dependence, or remission prescriptions and procedures, might occur in several files. Similarly, a diagnosis of opioid abuse, dependence, or remission might occur in several files. For example, one claims file may contain injectables while another claims file may contain oral medications. Consequently, pharmacotherapy and opioid abuse, dependence, or remission variables are created separately in each source and then merged by beneficiary ID.

Step 3: Calculate the overall rate by dividing the number of beneficiaries with evidence of at least one prescription (Step 2) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1). Then, calculate rates separately for each of the four medications.

Step 3A: Calculate the buprenorphine prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for buprenorphine during the measurement year (Step 2A) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

Step 3B: Calculate the oral naltrexone prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for oral naltrexone during the measurement year (Step 2B) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

Step 3C: Calculate the long-acting, injectable naltrexone prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for injectable naltrexone during the measurement year (Step 2C) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

Step 3D: Calculate the methadone prescription rate by dividing the number of beneficiaries with evidence of at least one prescription for methadone during the measurement year (Step 2D) by the number of beneficiaries with at least one encounter associated with a diagnosis of opioid abuse, dependence, or remission (Step 1).

3175 Continuity of Pharmacotherapy for Opioid Use Disorder

The measure score is calculated for rolling two-year periods from 2010 to 2015. The steps described below are repeated for five rolling two-year periods: 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015. We present detailed results in the MIF for 2013-2014, as we have the most data for this time period, but we include measure scores for each of the two-year periods within 2010-2015.

DENOMINATOR: Individuals 18-64 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 18-64 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
- 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 injections contribute 30 days’ supply unless another claim is found sooner, in which case the Naltrexone injection 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 Naltrexone injections 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.

Submission items

3400 Use of pharmacotherapy for opioid use disorder (OUD)

5.1 Identified measures: 3175 : Continuity of Pharmacotherapy for Opioid Use Disorder
5a.1 Are specs completely harmonized? Yes
5a.2 If not completely harmonized, identify difference, rationale, impact: Not Applicable.
5b.1 If competing, why superior or rationale for additive value: Not Applicable.

3175 Continuity of Pharmacotherapy for Opioid Use Disorder

5.1 Identified measures: 0004 : Initiation and Engagement of Alcohol and Other Drug Abuse or Dependence Treatment
1664 : SUB-3 Alcohol & Other Drug Use Disorder Treatment Provided or Offered at Discharge and SUB-3a Alcohol & Other Drug Use Disorder Treatment at Discharge
5a.1 Are specs completely harmonized? No
5a.2 If not completely harmonized, identify difference, rationale, impact: The target population of the proposed measure is related to the two measures listed above (NQF 0004 and NQF 1664). Differences among the three measures, along with the rationale and
impact, are discussed below in the text box for Item 5b.1. The text box for this item (5a.2) would not accommodate the length of our response.

5b.1 If competing, why superior or rationale for additive value: There are no competing measures that address both the same measure focus and the same target population as the proposed measure.

RESPONSE TO ITEM 5A.2

The information below is the response to Item 5a.2, describing the differences, rationale, and impact on interpretability and data collection burden for the two NQF-endorsed RELATED measures which were identified. (We have inserted it here because the text box under Item 5a.2 would not accept this volume of formatted text.)

The target population of the proposed measure is related to the two NQF-endorsed measures listed above (NQF 0004 and NQF 1664). The proposed measure focuses on continuity of pharmacotherapy for patients with OUD. NQF 0004 focuses on treatment initiation and engagement of patients with a new episode of OUD or other substance use disorders, including alcohol use disorder (AUD). NQF 1664 focuses on OUD and other drug use disorders among hospital discharges. Differences among the three measures, along with the rationale and impact are discussed below.

Diagnoses Included in Denominator Definition

- Proposed measure: Diagnosis of OUD
- NQF 0004: Diagnosis of alcohol or other drug dependence
- NQF 1664: Diagnosis of AUD or another substance use disorder

- Rationale and impact of focusing on only OUD: There are different medications for treatment of OUD and AUD, and there are no FDA-approved medications for treatment of other substance use disorders. In addition, the conceptual issues related to continuity of pharmacotherapy differ between OUD and AUD, so developing separate measures for the two disorders is required. The impact of this is a more narrowly focused measure that provides information specific to individuals with OUD.

Age Range

- Proposed measure: Patients 18-64 years of age
- NQF 0004: Patients aged 13 years of age and older
- NQF 1664: Patients 18 years of age and older

- Rationale and impact of limiting to individuals 18-64 years of age: Medications for treatment of OUD have not been approved by the FDA for adolescent patients 13-17 years of age; therefore, the proposed measure is restricted to adults 18-64 years of age.

Data Source

- Proposed measure: Electronic claims data
- NQF 0004: Administrative claims, electronic clinical data
- NQF 1664: Electronic clinical data, paper medical records

- Rationale and impact of using electronic claims data: Electronic claims data are timely, accessible, and relatively inexpensive to use for analyses of a large number of patients. Using a single source of data expedites the calculation of the measure, and will provide feedback to providers sooner.

Inpatient vs. Outpatient
- Proposed measure: Inpatient and outpatient
- NQF 0004: Inpatient and outpatient
- NQF 1664: Inpatient discharges
- Rationale and impact of using inpatient and outpatient records to identify patients: A large majority of patients with OUD are not admitted to a hospital, so using inpatient and outpatient data leads to more complete identification of the population eligible for treatment.

Process of Care Included in Numerator Definition
- Proposed measure: Continuity of pharmacotherapy for OUD
- NQF 0004: Inpatient admission, outpatient visit, intensive outpatient encounter, or partial hospitalization for adults with a new episode of AUD, OUD, or other substance use disorders
- NQF 1664: Medication for treatment of alcohol or drug use disorder OR a referral for addictions treatment
- Rationale and impact of the process of care included in the numerator definition: Successful pharmacotherapy of OUD requires continuity over at least a 180-day period. Therefore, providing feedback to providers about continuity of OUD pharmacotherapy has the potential to improve continuity rates by increasing provider awareness, and motivating health plans and insurers to develop educational material and programs about pharmacotherapy for OUD for both providers and patients.