Quality ID #383 (NQF 1879): Adherence to Antipsychotic Medications For Individuals with Schizophrenia

2023 COLLECTION TYPE:
MIPS CLINICAL QUALITY MEASURES (CQMS)

MEASURE TYPE:
Intermediate Outcome – High Priority

DESCRIPTION:
Percentage of individuals at least 18 years of age as of the beginning of the performance period with schizophrenia or schizoaffective disorder who had at least two prescriptions filled for any antipsychotic medication and who had a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications during the performance period.

INSTRUCTIONS:
This measure is to be submitted a minimum of once per performance period for all patients with a diagnosis of schizophrenia or schizoaffective disorder who are seen during the performance period. This measure may be submitted by Merit-based Incentive Payment System (MIPS) eligible clinicians who perform the quality actions described in the measure for the primary management of patients with schizophrenia or schizoaffective disorder based on the services provided and the measure-specific denominator coding.

NOTE: Patient encounters for this measure conducted via telehealth (e.g., encounters coded with GQ, GT, 95, or POS 02 modifiers) are allowable.

Measure Submission Type:
Measure data may be submitted by individual MIPS eligible clinicians, groups, or third party intermediaries. The listed denominator criteria are used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions as allowed by the measure. The quality data codes listed do not need to be submitted by MIPS eligible clinicians, groups, or third party intermediaries that utilize this modality for submissions; however, these codes may be submitted for those third party intermediaries that utilize Medicare Part B claims data. For more information regarding Application Programming Interface (API), please refer to the Quality Payment Program (QPP) website.

DENOMINATOR:
Individuals at least 18 years of age as of the beginning of the performance period with schizophrenia or schizoaffective disorder and at least two prescriptions filled for antipsychotic medications during the performance period

DENOMINATOR NOTE: *Signifies that this CPT Category I or HCPCS code is a non-covered service under the Medicare Part B Physician Fee Schedule (PFS). These non-covered services should be counted in the denominator population for MIPS CQMs.

The following are the oral antipsychotic medications by class for the denominator. The route of administration includes all oral formulations of the medications listed below.

TYPICAL ANTIPSYCHOTIC MEDICATIONS:
- chlorpromazine
- fluphenazine
- haloperidol
- loxapine
- molindone
- perphenazine
- prochlorperazine
• thioridazine
• thiothixene
• trifluoperazine

ATYPICAL ANTIPSYCHOTIC MEDICATIONS:
• aripiprazole
• asenapine
• brexipiprazole
• cariprazine
• clozapine
• olanzapine
• iloperidone
• lumateperone
• lurasidone
• paliperidone
• quetiapine
• quetiapine fumarate (Seroquel)
• risperidone
• ziprasidone

ANTIPSYCHOTIC COMBINATIONS:
• perphenazine-amitriptyline

LONG-ACTING INJECTABLE ANTIPSYCHOTIC MEDICATIONS:

NOTE: 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. 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 Part D and Part B.

TYPICAL ANTIPSYCHOTIC MEDICATIONS:
• fluphenazine decanoate (J2680) – 28 days’ supply
• haloperidol decanoate (J1631) – 28 days’ supply

ATYPICAL ANTIPSYCHOTIC MEDICATIONS:
• aripiprazole (J0401) – 28 days’ supply
• aripiprazole lauroxil (Aristada) (J1944) – 28 days’ supply
• olanzapine pamoate (J2358) – 28 days’ supply
• paliperidone palmitate (J2426) – 28 days’ supply
• risperidone microspheres (J2794) – 14 days’ supply

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years at the beginning of the performance period
AND
AND
Filled at least two prescriptions during the performance period for any combination of the qualifying oral antipsychotic medications listed under “Denominator Note” or the long-acting injectable antipsychotic medications listed under “Denominator Note” (i.e. those medications with the following HCPCS codes: J2680, J1631, J0401, J1944, J2358, J2426, J2794)
AND
At least two encounters** with a diagnosis of schizophrenia or schizoaffective disorder (see code set below) with different dates of service in an outpatient setting, emergency department setting, or non-acute inpatient setting during the performance period

OR

At least one encounter** with a diagnosis of schizophrenia or schizoaffective disorder (see code set below) in an acute inpatient setting during the performance period

**Patient encounter during the performance period determination Outpatient Setting Option 1 (CPT or HCPCS):


OR

Outpatient Setting Option 2 (CPT):

90791, 90792, 90832, 90834, 90837, 90839, 90845, 90847, 90849, 90853, 90867, 90868, 90869, 90870, 90875*, 90876*, 90880, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99252*, 99253*, 99254*, 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

OR

Emergency Department Setting Option 1 (CPT):

99281, 99282, 99283, 99284, 99285*

OR

Emergency Department Setting Option 2 (CPT):

90791, 90792, 90832, 90834, 90837, 90839, 90845, 90847, 90849, 90853, 90867, 90868, 90869, 90870, 90875*, 90876*, 99291

WITH

Place of Service (POS): 23

OR

Non-Acute Inpatient Setting Option 1 (CPT):

99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316

Non-Acute Inpatient Setting Option 1 (HCPCS):

H0017, H0018, H0019, T2048

OR

Non-Acute Inpatient Setting Option 2 (CPT):

90791, 90792, 90832, 90834, 90837, 90839, 90845, 90847, 90849, 90853, 90867, 90868, 90869, 90870, 90875*, 90876*, 99291

WITH

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

OR

Acute Inpatient Setting (CPT):

90791, 90792, 90832, 90834, 90837, 90839, 90845, 90847, 90849, 90853, 90867, 90868, 90869, 90870, 90875*, 90876*, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99252*, 99253*, 99254*, 99255*, 99291

WITH

Place of Service (POS): 21, 51

AND NOT

DENOMINATOR EXCLUSION:

Diagnosis for dementia (ICD-10-CM):

NUMERATOR:
Indians in the denominator who have a Proportion of Days Covered (PDC) of at least 0.8 for antipsychotic medications

NUMERATOR NOTE: The PDC is calculated as follows:

PDC NUMERATOR:
The PDC numerator is the sum of the days covered by the days’ supply of all antipsychotic prescriptions. The period covered by the PDC starts on the day within the performance period when the first prescription is filled (i.e., the index date) and lasts through the end of the performance period, or death, whichever comes first. For prescriptions with a days’ supply that extends beyond the end of the performance period, count only the days for which the drug was available to the individual during the performance period. If there are prescriptions for the same drug (generic name) on the same date of service, keep the prescription with the largest days’ supply. If prescriptions 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 period covered by the PDC starts on the day within the performance period when the first prescription is filled (i.e., the index date) and lasts through the end of the performance period, or death, whichever comes first.

Numerator Options:
Performance Met: Individual had a PDC of 0.8 or greater (G9512)
OR
Performance Not Met: Individual did not have a PDC of 0.8 or greater (G9513)

RATIONALE:
A large body of evidence has shown that antipsychotic medications (APMs) are effective in treating acute psychotic exacerbations of schizophrenia and in reducing the likelihood of relapse. Guidelines from the National Institute for Clinical Excellence (NICE) and the American Psychiatric Association (APA) emphasize the importance of treatment adherence and uninterrupted antipsychotic regimens to prevent symptoms and relapse [1,2]. However, some studies estimate that the rate of adherence to APMs among patients diagnosed with schizophrenia is about 50 percent, much lower than the 80 percent threshold often used to define adherence [3]. Factors associated with poor medication adherence include greater symptom severity, a more frequent dosing regimen, poor insight, and a more negative attitude towards drugs [4,5]. Some studies have also identified Latino and African American ethnicity, lack of housing, and co-occurring behavioral health and substance use conditions as predictors of increased nonadherence to antipsychotic medications [6]. This measure describes the degree of compliance or non-compliance with recommendations related to medication adherence among patients with schizophrenia and, in doing so, has the potential to improve management of schizophrenia.

This measure addresses a Healthy People 2030 goal to increase the proportion of adults with serious mental illness who receive treatment [7].

Although the prevalence of schizophrenia in the adult American population is less than 1%, this population has a higher risk of premature mortality than the general population [8]. The estimated average potential life lost is 28.5 years for individuals with schizophrenia compared to the general population [9]. The overall U.S. cost of schizophrenia has been estimated at $155.7 billion annually with direct health care costs of $37.7 billion [10]. Antipsychotic medications have proven to be effective in treating this disease. Additionally, adherence to APMs has been associated with lower rates of preventable diabetes hospitalizations and lower rates of emergency department utilization among patients with schizophrenia [11,12,13].

References:


**CLINICAL RECOMMENDATION STATEMENTS:**

The 2014 NICE Guideline on Treatment and Management of Psychosis and Schizophrenia in Adults recommends that “for people with an acute exacerbation or recurrence of psychosis or schizophrenia, offer oral antipsychotic medication in conjunction with psychological interventions (family intervention and individual [cognitive behavioral therapy])”. The guideline also recommends to “consider offering depot /long-acting injectable antipsychotic medication to people with psychosis or schizophrenia who would prefer such treatment after an acute episode [or] where avoiding covert non-adherence (either intentional or unintentional) to antipsychotic medication is a clinical priority within the treatment plan”. These recommendations are found on pages 381 and 382 of the 2014 NICE Guideline under the Clinical Practice Recommendations, Treatment of Acute Episode and Promoting Recovery sections, respectively [1].

The American Psychological Association (APA) updated its guidelines for treating patients diagnosed with schizophrenia in December 2019. The following statements pertaining to the use of antipsychotic medications were included in the 2019 guidelines with a grade of 1A, indicating that there was high quality evidence to support them:

The APA recommends that patients with schizophrenia be treated with an antipsychotic medication and monitored for effectiveness and side effects.

The APA recommends that patients with schizophrenia whose symptoms have improved with an antipsychotic medication continue to be treated with an antipsychotic medication [2].

**References:**


COPYRIGHT:
This measure was developed by Health Services Advisory Group (HSAG) with the Centers for Medicare & Medicaid Services. This measure is currently maintained by Mathematica under the Electronic Clinical Quality Measures (eCQM) Development and Maintenance for Eligible Clinicians contract (75FCMC18D0032/75FCMC19F0004) with CMS. This measure is in the public domain.

Limited proprietary coding is contained in the measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. CPT® contained in the measure’s specifications is copyright 2004-2022 American Medical Association. All Rights Reserved.

This performance measure is not clinical a guideline, does not establish a standard of medical care, and has not been tested for all potential applications.

ICD-10 copyright 2022 World Health Organization. All Rights Reserved.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND
2023 Clinical Quality Measure Flow for Quality ID #383 (NQF 1879): Adherence to Antipsychotic Medications for Individuals with Schizophrenia

Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

![Flowchart diagram](attachment:flowchart.png)
### SAMPLE CALCULATIONS

**Data Completeness**

\[
\text{Performance Met (a=40 patients) + Performance Not Met (c=30 patients)} = 70 \text{ patients} = 87.50% \\
\text{Eligible Population / Denominator (d=80 patients)} = 80 \text{ patients}
\]

**Performance Rate**

\[
\frac{\text{Performance Met (a=40 patients)}}{\text{Data Completeness Numerator (70 patients)}} = \frac{40 \text{ patients}}{70 \text{ patients}} = 57.14%
\]

*See the posted measure specification for specific coding and instructions to submit this measure.*

**NOTE:** Submission Frequency: Patient-Process
2023 Clinical Quality Measure Flow Narrative for Quality ID #383 (NQF 1879):
Adherence to Antipsychotic Medications for Individuals with Schizophrenia

 Disclaimer: Refer to the measure specification for specific coding and instructions to submit this measure.

1. Start with Denominator

2. Check Patients aged greater than or equal to 18 years at the beginning of the performance period:
   a. If Patients aged greater than or equal to 18 years at the beginning of the performance period equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Patients aged greater than or equal to 18 years at the beginning of the performance period equals Yes, proceed to check Diagnosis for schizophrenia or schizoaffective disorder as listed in Denominator*.

3. Check Diagnosis for schizophrenia or schizoaffective disorder as listed in Denominator*:
   a. If Diagnosis for schizophrenia or schizoaffective disorder as listed in Denominator* equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Diagnosis for schizophrenia or schizoaffective disorder as listed in Denominator* equals Yes, proceed to check Filled greater than or equal to 2 prescriptions during the performance period for any combination of the qualifying oral antipsychotic medications listed under “Denominator Note” or the long-acting injectable antipsychotic medications listed under “Denominator Note” as listed in the Denominator*.

4. Check Filled greater than or equal to 2 prescriptions during the performance period for any combination of the qualifying oral antipsychotic medications listed under “Denominator Note” or the long-acting injectable antipsychotic medications listed under “Denominator Note” as listed in the Denominator*:
   a. If Filled greater than or equal to 2 prescriptions during the performance period for any combination of the qualifying oral antipsychotic medications listed under “Denominator Note” or the long-acting injectable antipsychotic medications listed under “Denominator Note” as listed in the Denominator* equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Filled greater than or equal to 2 prescriptions during the performance period for any combination of the qualifying oral antipsychotic medications listed under “Denominator Note” or the long-acting injectable antipsychotic medications listed under “Denominator Note” as listed in the Denominator* equals Yes, proceed to check Greater than or equal to 2 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 performance period as listed in Denominator*.

5. Check Greater than or equal to 2 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 performance period as listed in Denominator*:
   a. If Greater than or equal to 2 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 performance period as listed in Denominator* equals No, proceed to check Greater than or equal to 1 encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the performance period as listed in Denominator*.
   b. If Greater than or equal to 2 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 performance period as listed in Denominator* equals Yes, proceed to check Patient encounter during performance period determination Outpatient Setting Option 1 as listed in
6. Check Greater than or equal to 1 encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the performance period as listed in Denominator*.
   a. If Greater than or equal to 1 encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the performance period as listed in Denominator* equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Greater than or equal to 1 encounter with a diagnosis of schizophrenia or schizoaffective disorder in an acute inpatient setting during the performance period as listed in Denominator* equals Yes, proceed to check Patient encounter during performance period determination Outpatient Setting Option 1 as listed in Denominator*.

7. Check Patient encounter during performance period determination Outpatient Setting Option 1 as listed in Denominator*:
   a. If Patient encounter during performance period determination Outpatient Setting Option 1 as listed in Denominator* equals No, proceed to check Patient encounter Outpatient Setting Option 2 as listed in Denominator* with POS.
   b. If Patient encounter during performance period determination Outpatient Setting Option 1 as listed in Denominator* equals Yes, proceed to check Diagnosis for dementia as listed in Denominator*.

8. Check Patient encounter Outpatient Setting Option 2 as listed in Denominator* with POS:
   a. If Patient encounter Outpatient Setting Option 2 as listed in Denominator* with POS equals No, proceed to check Patient encounter Emergency Department Setting Option 1 as listed in Denominator*.
   b. If Patient encounter Outpatient Setting Option 2 as listed in Denominator* with POS equals Yes, proceed to check Diagnosis for dementia as listed in Denominator*.

9. Check Patient encounter Emergency Department Setting Option 1 as listed in Denominator*:
   a. If Patient encounter Emergency Department Setting Option 1 as listed in Denominator* equals No, proceed to check Patient encounter Emergency Department Setting Option 2 as listed in Denominator* with POS.
   b. If Patient encounter Emergency Department Setting Option 1 as listed in Denominator* equals Yes, proceed to check Diagnosis for dementia as listed in Denominator*.

10. Check Patient encounter Emergency Department Setting Option 2 as listed in Denominator* with POS:
    a. If Patient encounter Emergency Department Setting Option 2 as listed in Denominator* with POS equals No, proceed to check Patient encounter Non-Acute Inpatient Setting Option 1 as listed in Denominator*.
    b. If Patient encounter Emergency Department Setting Option 2 as listed in Denominator* with POS equals Yes, proceed to check Diagnosis for dementia as listed in Denominator*.

11. Check Patient encounter Non-Acute Inpatient Setting Option 1 as listed in Denominator*:
    a. If Patient encounter Non-Acute Inpatient Setting Option 1 as listed in Denominator* equals No, proceed to check Patient encounter Non-Acute Inpatient Setting Option 2 as listed in Denominator* with POS.
    b. If Patient encounter Non-Acute Inpatient Setting Option 1 as listed in Denominator* equals Yes, proceed to check Diagnosis for dementia as listed in Denominator*.

12. Check Patient encounter Non-Acute Inpatient Setting Option 2 as listed in Denominator* with POS:
13. Check Patient encounter Acute Inpatient Setting as listed in Denominator* with POS:
   a. If Patient encounter Acute Inpatient Setting as listed in Denominator* with POS equals No, do not include in Eligible Population/Denominator. Stop processing.
   b. If Patient encounter Acute Inpatient Setting as listed in Denominator* with POS equals Yes, proceed to check Diagnosis for dementia as listed in Denominator*.

14. Check Diagnosis for dementia as listed in Denominator*:
   a. If Diagnosis for dementia as listed in Denominator* equals Yes, do not include in Eligible Population/Denominator. Stop processing.
   b. If Diagnosis for dementia as listed in Denominator* equals No, include in Eligible Population/Denominator.

15. Denominator Population:
   • Denominator Population is All Eligible Patients in the Denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 80 patients in the Sample Calculation.

16. Start Numerator

17. Check Individual had a PDC of 0.8 or greater:
   a. If Individual had a PDC of 0.8 or greater equals Yes, include in Data Completeness Met and Performance Met.
      • Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 40 patients in Sample Calculation.
   b. If Individual had a PDC of 0.8 or greater equals No, proceed to check Individual did not have a PDC of 0.8 or greater.

18. Check Individual did not have a PDC of 0.8 or greater:
   a. If Individual did not have a PDC of 0.8 or greater equals Yes, include in Data Completeness Met and Performance Not Met.
      • Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 30 patients in the Sample Calculation.
   b. If Individual did not have a PDC of 0.8 or greater equals No, proceed to check Data Completeness Not Met.

19. Check Data Completeness Not Met:
   • If Data Completeness Not Met, the Quality Data Code or equivalent was not submitted. 10 patients have been subtracted from the Data Completeness Numerator in Sample Calculation.
Sample Calculations:

Data Completeness equals Performance Met (a equals 40 patients) plus Performance Not Met (c equals 30 patients) divided by Eligible Population/Denominator (d equals 80 patients). All equals 70 patients divided by 80 patients. All equals 87.50 percent.

Performance Rate equals Performance Met (a equals 40 patients) divided by Data Completeness Numerator (70 patients). All equals 40 patients divided by 70 patients. All equals 57.14 percent.

*See the posted measure specification for specific coding and instructions to submit this measure.

NOTE: Submission Frequency: Patient-Process

The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.