

**Quality ID #383 (NQF 1879): Adherence to Antipsychotic Medications For Individuals with Schizophrenia**  
– National Quality Strategy Domain: Patient Safety  
– Meaningful Measure Area: Prevention, Treatment, and Management of Mental Health

**2020 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 measurement 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 measurement period (12 consecutive months)

**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 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.

**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 measurement period with schizophrenia or schizoaffective disorder and at least two prescriptions filled for antipsychotic medications during the measurement period (12 consecutive months)

***DENOMINATOR NOTE:*** *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
- brexpiprazole
- cariprazine
- clozapine
- olanzapine
- iloperidone
- 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.

**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 Part D and Part B:

- aripiprazole (J0401) – 28 days' supply
- aripiprazole lauroxil (Aristada) – 28 days' supply
- 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

\*Signifies that this CPT Category I 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.

**Denominator Criteria (Eligible Cases):**

Patients aged  $\geq$  18 years at the beginning of the measurement period

**AND**

**Diagnosis for schizophrenia or schizoaffective disorder (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

**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 measurement 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 measurement period**

**AND**

**\*\*Patient encounter during the performance period determination Outpatient Setting Option 1 (CPT or HCPCS):**  
98960, 98961, 98962, 99078, 99201, 99202, 99203, 99204, 99205, 99211, 99212, 99213, 99214, 99215, 99217, 99218, 99219, 99220, 99241\*, 99242\*, 99243\*, 99244\*, 99245\*, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99315, 99316, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350, 99385\*, 99386\*, 99387\*, 99395\*, 99396\*, 99397\*, 99401\*, 99402\*, 99403\*, 99404\*, 99411\*, 99412\*, 99429\*, 99510, G0155\*, G0176\*, G0177\*, G0409, G0410\*, G0411\*, G0463\*, H0002\*, H0004\*, H0031\*, H0034\*, H0035\*, H0036\*, H0037\*, H0039\*, H0040\*, H2000\*, H2001\*, H2010\*, H2011\*, H2012\*, H2013\*, H2014\*, H2015\*, H2016\*, H2017\*, H2018\*, H2019\*, H2020\*, M0064, S0201\*, S9480\*, S9484\*, S9485\*, T1015\*

**OR**

**Outpatient Setting Option 2 (CPT):** 90791, 90792, 90832, 90834, 9083790839, 90845, 90847, 90849, 90853, 90867, 90868, 90869, 90870, 90875\*, 90876\*, 90880, 99221, 99222, 99223, 99231, 99232, 99233, 99238, 99239, 99251\*, 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, 99318, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99337

**Non-Acute Inpatient Setting Option 1 (HCPCS):** H0017, H0018, H0019, T2048

**OR**

**Non-Acute Inpatient Setting Option 2 (CPT):** 90791, 90792, 9083290834, 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, 99251\*, 99252\*, 99253\*, 99254\*, 99255\*, 99291

**WITH**

**Place of Service (POS):** 21, 51

**AND NOT**

**DENOMINATOR EXCLUSION:**

**Diagnosis for dementia (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, 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

**NUMERATOR:**

Individuals 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 the first prescription is filled (index date) and lasts through the end of the measurement period, or death, whichever comes first. For prescriptions 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 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 PDC denominator is the number of days from the first prescription date through the end of the measurement period, or death date, 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 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 American Psychiatric Association (APA) emphasize the importance of treatment adherence and uninterrupted antipsychotic regimens to prevent symptoms and relapse (National Collaborating Centre for Mental Health 2014; Lehman et al. 2004). This measure will describe the degree of compliance or non-compliance with these recommendations. By providing information on the percentage of schizophrenic individuals with appropriate long-term use of antipsychotic medications, this measure has the potential to improve management of schizophrenia.

This measure addresses a Health People 2020 goal to increase the proportion of adults with serious mental illness who receive treatment (ODPHP, 2018).

Although the prevalence of schizophrenia in the adult American population is less than 1% (Kessler et al. 2005), this population has a higher risk of premature mortality than the general population. The estimated average potential life lost is 28.5 years for individuals with schizophrenia compared to the general population (Olsson et al. 2015). The overall U.S. cost of schizophrenia has been estimated at \$155.7 billion annually with direct health care costs of \$37.7 billion (Cloutier et al., 2016). Antipsychotic medications have proven to be effective in treating this disease, and this measure will help to capture the extent of utilization of this treatment.

## References:

- Cloutier M, Aigbogun MS, Guerin A, Nitulescu R, Ramanakumar AV, Kamat SA, DeLucia M, Duffy R, Legacy SN, Henderson C, Francois C, and Wu E. The economic burden of schizophrenia in the United States in 2013. *The Journal of Clinical Psychiatry*. 2016; 77(6): 764-71.
- Kessler RC, Birnbaum H, Demler O, Falloon IRH, Gagnon E, Guyer M, Howes MJ, Kendler KS, Shi L, Walters E, and Wu EQ. The prevalence and correlates of non-affective psychosis in the National Comorbidity Survey Replication (NCS-R). *Biol Psychiatry*. 2005; 58(8): 668-76.
- Lehman AF, Lieberman JA., Dixon LB, McGlashan TH, Miller AL, Perkins DO, and Kreyenbuhl J. (2004). Practice guidelines for the treatment of patients with schizophrenia. *American Psychiatric Association*. Retrieved from [https://psychiatryonline.org/pb/assets/raw/sitewide/practice\\_guidelines/guidelines/schizophrenia.pdf](https://psychiatryonline.org/pb/assets/raw/sitewide/practice_guidelines/guidelines/schizophrenia.pdf)
- The National Institute for Clinical Excellence and the National Collaborating Centre for Mental health. Psychosis and schizophrenia in adults: prevention and management. 2014; National Clinical Guideline Number 178: 301-379. Retrieved from <https://www.nice.org.uk/guidance/cg178/evidence/full-guideline-pdf-490503565>
- Office of Disease Prevention and Health Promotion (ODPHP). Health People 2020: Mental Health and Mental Disorders.2018; Health People 2020. Retrieved from <https://www.healthypeople.gov/2020/topics-objectives/topic/mental-health-and-mental-disorders/objectives>.
- Olfson M, Gerhard T, Huang C, Crystal S, and Stroup TS. Premature mortality among adults with schizophrenia in the United States. *JAMA Psychiatry*. 2015; 72(12): 1172-81.

## **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” (National Collaborating Centre for Mental Health 2014). 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.

## References:

- The National Institute for Clinical Excellence and the National Collaborating Centre for Mental health. Psychosis and schizophrenia in adults: prevention and management. 2014; National Clinical Guideline Number 178: 301-379. Retrieved from <https://www.nice.org.uk/guidance/cg178/evidence/full-guideline-pdf-490503565>

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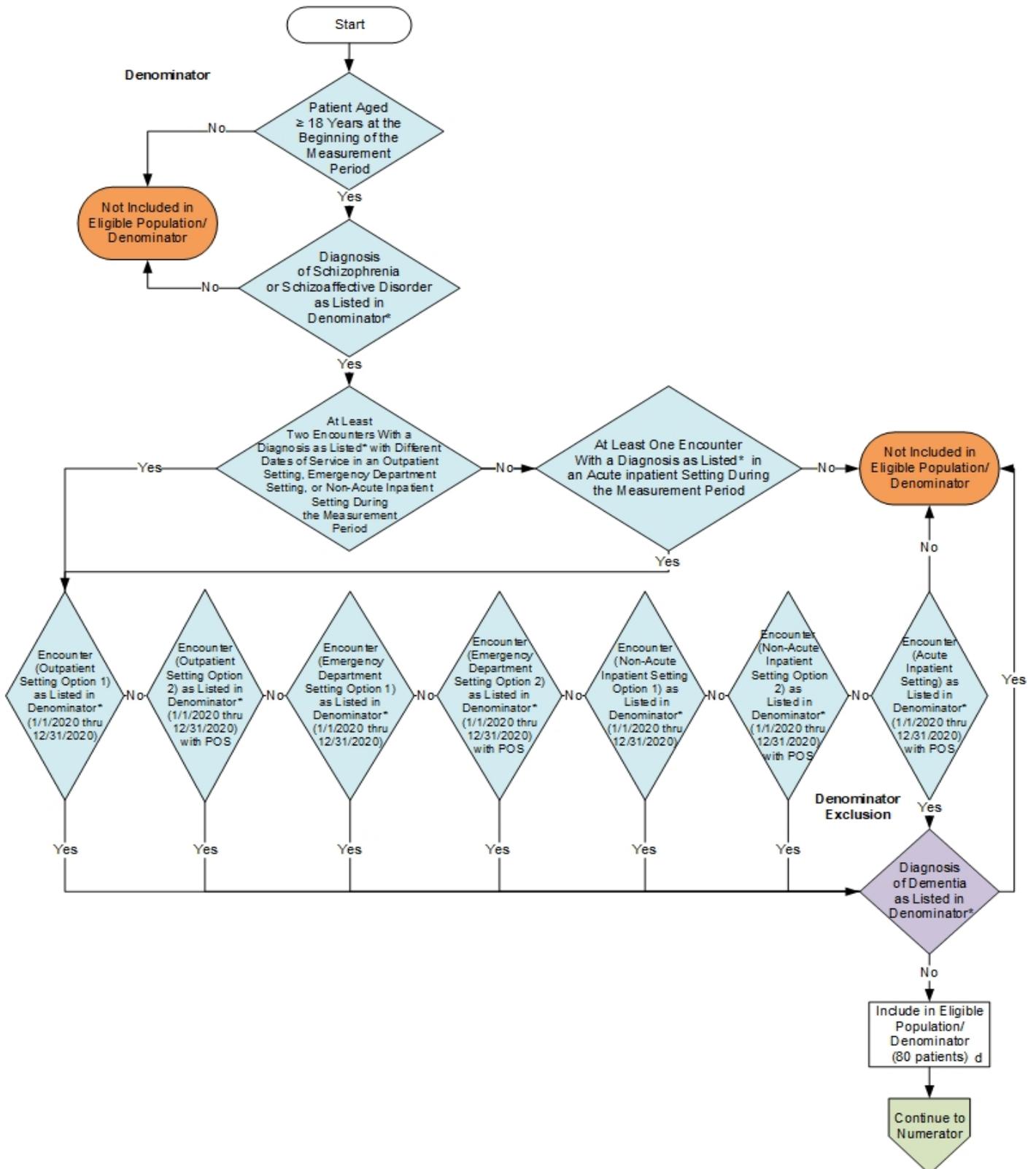
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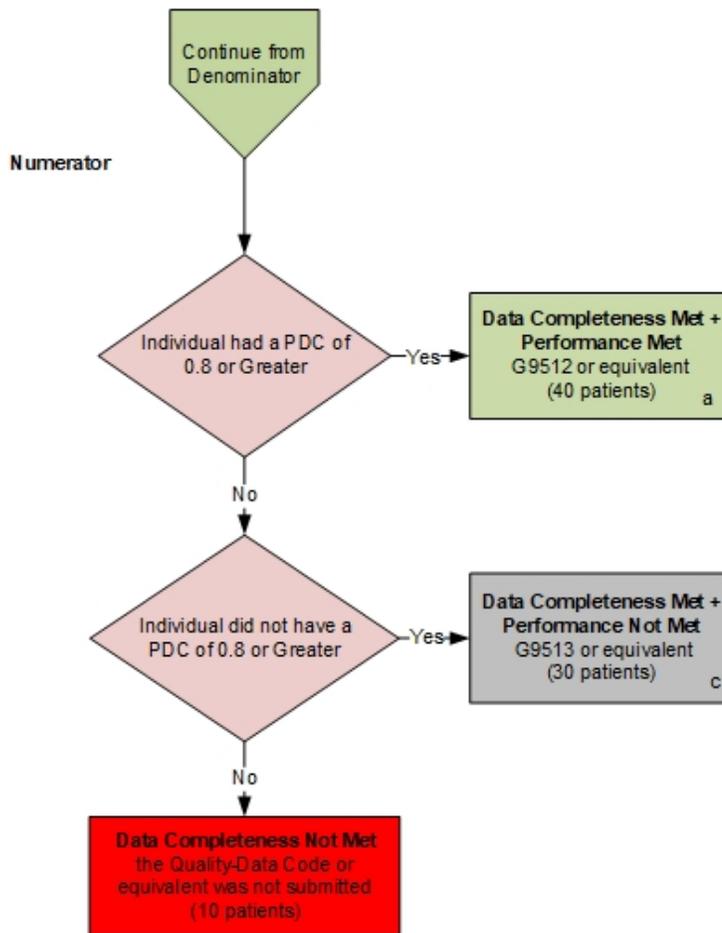
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**2020 Clinical Quality Measure Flow for Quality ID #383 NQF #1879:  
Adherence to Antipsychotic Medications for Individuals with Schizophrenia**

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





**SAMPLE CALCULATIONS:**

Data Completeness=  

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

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

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**2020 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 Patient Age:
  - a. If Patient Age is greater than or equal to 18 Years at the Beginning of the Measurement Period equals No, do not include in Eligible Population. Stop Processing.
  - b. If Patient Age is greater than or equal to 18 Years at the Beginning of the Measurement Period equals Yes, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
  - a. If Diagnosis of Schizophrenia or Schizoaffective Disorder as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Diagnosis of Schizophrenia or Schizoaffective Disorder as Listed in the Denominator equals Yes, proceed to check At Least Two Encounters With a Diagnosis.
4. Check At Least Two Encounters with a Diagnosis:
  - a. If At Least Two Encounters with a Diagnosis as Listed with Different Dates of Service in an Outpatient Setting, Emergency Department Setting, or Non-Acute Inpatient Setting During the Measurement Period equals No, proceed to check At Least One Encounter with Diagnosis.
  - b. If At Least Two Encounters with a Diagnosis as Listed with Different Dates of Service in an Outpatient Setting, Emergency Department Setting, or Non-Acute Inpatient Setting During the Measurement Period equals Yes, proceed to check Encounter Performed Outpatient Setting Option 1.
5. Check At Least One Encounter with Diagnosis:
  - a. If At Least One Encounter with a Diagnosis as Listed in an Acute Inpatient Setting During the Measurement Period with Diagnosis equals No, do not include in Eligible Population. Stop Processing.
  - b. If At Least One Encounter with a Diagnosis as Listed in an Acute Inpatient Setting During the Measurement Period with Diagnosis equals Yes, proceed to check Outpatient Setting Option 1.
6. Check Outpatient Setting Option 1:
  - a. If Outpatient Setting Option 1 Encounter as Listed in the Denominator equals No, proceed to check Outpatient Setting Option 2.
  - b. If Outpatient Setting Option 1 Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.
7. Check Outpatient Setting Option 2:
  - a. If Outpatient Setting Option 2 Encounter as Listed in the Denominator equals No, proceed to check Emergency Department Setting Option 1.
  - b. If Outpatient Setting Option 2 Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.

8. Check Emergency Department Setting Option 1:
  - a. If Emergency Department Setting Option 1 Encounter as Listed in the Denominator equals No, proceed to check Emergency Department Setting Option 2.
  - b. If Emergency Department Setting Option 1 Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.
9. Check Emergency Department Setting Option 2:
  - a. If Emergency Department Setting Option 2 Encounter as Listed in the Denominator equals No, proceed to check Non-Acute Inpatient Setting Option 1.
  - b. If Emergency Department Setting Option 1 Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.
10. Check Non-Acute Inpatient Setting Option 1
  - a. If Non-Acute Inpatient Setting Option 1 Encounter as Listed in the Denominator equals No, proceed to check Non-Acute Inpatient Option 2 Encounter.
  - b. If Non-Acute Inpatient Setting Option 1 Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.
11. Check Non-Acute Inpatient Setting Option 2:
  - a. If Non-Acute Inpatient Setting Option 2 Encounter as Listed in the Denominator equals No, proceed to check Acute Inpatient Encounter.
  - b. If Non-Acute Inpatient Setting Option 2 Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.
12. Check Acute Inpatient Setting:
  - a. If Acute Inpatient Setting Encounter as Listed in the Denominator equals No, do not include in Eligible Population. Stop Processing.
  - b. If Acute Inpatient Setting Encounter as Listed in the Denominator equals Yes, proceed to check Patient Diagnosis.
13. Check Patient Diagnosis:
  - a. If Diagnosis of Dementia as Listed in the Denominator equals Yes, do not include in Eligible Population. Stop Processing.
  - b. If Diagnosis of Dementia as Listed in the Denominator equals No, include in Eligible Population.
14. Eligible Population:
  - a. Eligible 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.
15. Start Numerator

16. 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.
- b. 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.
- c. 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.

17. 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.
- b. 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.
- c. If Individual did not have a PDC of 0.8 or Greater equals No, proceed to check Data Completeness Not Met.

18. Check Data Completeness Not Met:

- a. 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=**

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

**Performance Rate=**

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