

**Measure #383 (NQF 1879): Adherence to Antipsychotic Medications For Individuals with Schizophrenia – National Quality Strategy Domain: Patient Safety**

**2017 OPTIONS FOR INDIVIDUAL MEASURES:**  
**REGISTRY ONLY**

**MEASURE TYPE:**  
Intermediate Outcome

**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 reported 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 reported by 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 Reporting:**

The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

**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 any antipsychotic medication 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
- pimozide
- prochlorperazine
- thioridazine
- thiothixene
- trifluoperazine

***ATYPICAL ANTIPSYCHOTIC  
MEDICATIONS:***

- aripiprazole

- asenapine
- clozapine
- olanzapine
- iloperidone
- lurasidone
- paliperidone
- quetiapine
- risperidone
- ziprasidone

**ANTIPSYCHOTIC COMBINATIONS:**

- olanzapine-fluoxetine
- perphenazine-amitriptyline

**ATYPICAL 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:**

- olanzapine pamoate (J2358)
- paliperidone palmitate (J2426)
- risperidone microspheres (J2794)
- aripiprazole (J0401)

*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:*

- fluphenazine decanoate (J2680) – 28 days' supply
- haloperidol decanoate (J1631) – 28 days' supply
- olanzapine pamoate (J2358) – 28 days' supply
- paliperidone palmitate (J2426) – 28 days' supply
- aripiprazole (J0401) – 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 registry-based measures.*

**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, 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, 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, 90833, 90834, 90836, 90837, 90838, 90839, 90840, 90845, 90847, 90849, 90853, 90863\*, 90867, 90868, 90869, 90870, 90875\*, 90876\*, 90880, 99221, 99222, 99223, 99231, 99232, 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

**OR**

Emergency Department Setting Option 1 (CPT): 99281, 99282, 99283, 99284, 99285

**OR**

Emergency Department Setting Option 2 (CPT): 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838, 90839, 90840, 90845, 90847, 90849, 90853, 90863\*, 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

**OR**

Non-Acute Inpatient Setting Option 2 (CPT): 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838, 90839, 90840, 90845, 90847, 90849, 90853, 90863\*, 90867, 90868, 90869, 90870, 90875\*, 90876\*, 99291

**WITH**

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

**OR**

Acute Inpatient Setting (CPT): 90791, 90792, 90832, 90833, 90834, 90836, 90837, 90838, 90839, 90840, 90845, 90847, 90849, 90853, 90863\*, 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:**

**OR**

***Performance Met:***

Individual had a PDC of 0.8 or greater (G9512)

***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. The Schizophrenia Patient Outcomes Research Team (PORT) recommends that "persons who experience acute symptom relief with an antipsychotic medication should continue to receive this medication for at least 1 year" (Lehman & Steinwachs, 1998), and according to an American Psychiatric Association Clinical Practice Guideline, "antipsychotic medications substantially reduce the risk of relapse in the stable phase of illness and are strongly recommended" (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 relates to mental disorders that have been identified by AHRQ as a priority area for future effectiveness metrics (2009) and by the Institute of Medicine as a priority area (2003).

Approximately 1.1% of the adult American population has schizophrenia (Regier et al., 1993). Individuals suffering from schizophrenia have service utilization rates above 60% (Regier et al.), and the overall U.S. cost of schizophrenia has been estimated at \$11.6 to \$19.5 billion annually (Andrews et al., 1985). 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.

**CLINICAL RECOMMENDATION STATEMENTS:**

The 2009 PORT Schizophrenia Psychopharmacological Treatment Recommendations state the following about "Maintenance Antipsychotic Medication Treatment": "People with treatment-responsive, multi-episode schizophrenia who experience acute and sustained symptom relief with an antipsychotic medication should be offered continued

antipsychotic treatment in order to maintain symptom relief and to reduce the risk of relapse or worsening of positive symptoms". This recommendation is found on page 76 of the 2009 PORT Treatment Recommendations in the section entitled "Maintenance Pharmacotherapy in Treatment-Responsive People with Schizophrenia" (Buchanan et al., 2010).

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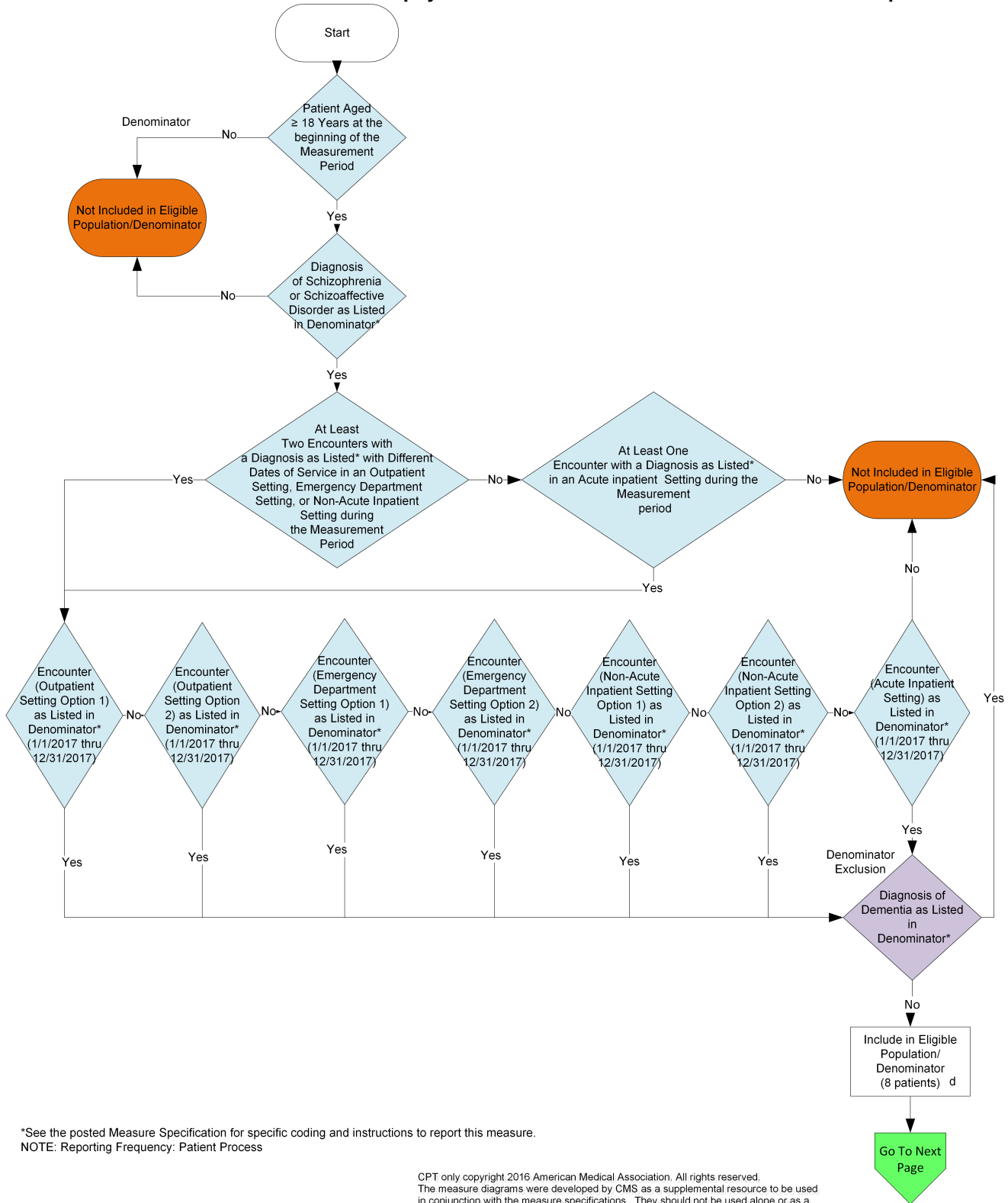
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## 2017 Registry Individual Measure Flow

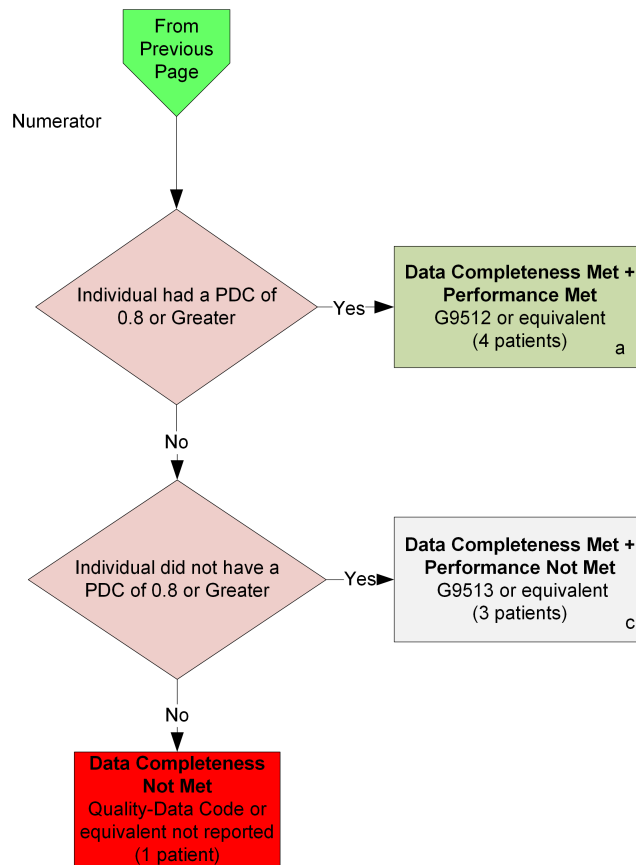
### #383 NQF# 1879: Adherence to Antipsychotic Medications for Individuals with Schizophrenia



\*See the posted Measure Specification for specific coding and instructions to report this measure.  
NOTE: Reporting Frequency: Patient Process

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**2017 Registry Individual Measure Flow**  
**#383 NQF# 1879: Adherence to Antipsychotic Medications for Individuals with Schizophrenia**



**SAMPLE CALCULATIONS:**

**Data Completeness=**  

$$\frac{\text{Performance Met (a=4 patients)} + \text{Performance Not Met (c=3 patients)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**  

$$\frac{\text{Performance Met (a=4 patients)}}{\text{Data Completeness Numerator (7 patients)}} = \frac{4 \text{ patients}}{7 \text{ patients}} = 57.14\%$$

\*See the posted Measure Specification for specific coding and instructions to report this measure.  
 NOTE: Reporting Frequency: Patient Process

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**2017 Registry Individual Measure Flow**  
**#383 NQF #1879: Adherence to Antipsychotic Medications for Individuals with Schizophrenia**

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual 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 Year equals No, do not include in Eligible Population or Denominator. Stop Processing.
  - b. If Patient Age is greater than or equal to 18 Years at the Beginning of the Measurement Year 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 or Denominator. Stop Processing.
  - b. If Diagnosis of Schizophrenia or Schizoaffective Disorder as Listed in the Denominator equals Yes, proceed to check Two Encounter Performed.
4. Check At Least Two Encounters with Diagnosis:
  - a. If At Least Two Encounters with a Diagnosis as Referenced Above 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 Referenced Above 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 Encounter Performed Outpatient Setting Option 1.
5. Check At Least One Encounter with Diagnosis:
  - a. If At Least One Encounter with a Diagnosis as Referenced Above in an Acute Inpatient Setting During the Measurement Period with Diagnosis equals No, do not include in Eligible Population or Denominator. Stop Processing.
  - b. If At Least One Encounter with a Diagnosis as Referenced Above in an Acute Inpatient Setting During the Measurement Period with Diagnosis equals Yes, proceed to 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 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, check 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, check 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, check Diagnosis. Check Non-acute Inpatient Setting Option 1:
  - c. If Non-Acute Inpatient Setting Option 1 Encounter as Listed in the Denominator equals No, proceed to check Non-Acute Inpatient Option 2 Encounter.
  - d. If Non-Acute Inpatient Setting Option 1 Encounter as Listed in the Denominator equals Yes, check Diagnosis.
10. 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, check Diagnosis.
11. Check Acute Inpatient Setting:
  - a. If Acute Inpatient Setting Encounter as Listed in the Denominator equals No, do not include in Eligible Population or Denominator. Stop Processing.
  - b. If Acute Inpatient Setting Encounter as Listed in the Denominator equals Yes, proceed to check patient diagnosis.
12. Check Patient Diagnosis:
  - a. If Diagnosis of Dementia equals Yes, do not include in Eligible Population or Denominator. Stop Processing.
  - b. If Diagnosis of Dementia equals No, include in Eligible Population.
13. Eligible Population or Denominator:
  - a. Eligible population or denominator 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 8 patients in the sample calculation.
14. Start Numerator
15. 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 4 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.

16. 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 3 patients in the Sample Calculation.

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

17. Check Data Completeness Not Met

a. If Data Completeness Not Met, the Quality Data Code or equivalent was not reported. 1 patient has been subtracted from the reporting numerator in sample calculation.

**SAMPLE CALCULATIONS:**

**Data Completeness=**

$$\frac{\text{Performance Met (a=4 patients) + Performance Not Met (c=3 patients)}}{\text{Eligible Population / Denominator (d=8 patients)}} = \frac{7 \text{ patients}}{8 \text{ patients}} = 87.50\%$$

**Performance Rate=**

$$\frac{\text{Performance Met (a=4 patients)}}{\text{Data Completeness Numerator (7 patients)}} = \frac{4 \text{ patients}}{7 \text{ patients}} = 57.14\%$$