



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 2111

Corresponding Measures:

De.2. Measure Title: Antipsychotic Use in Persons with Dementia

Co.1.1. Measure Steward: Pharmacy Quality Alliance

De.3. Brief Description of Measure: The percentage of individuals 65 years and older with dementia who are receiving an antipsychotic medication without evidence of a psychotic disorder or related condition.

A lower rate indicates better performance.

1b.1. Developer Rationale: There is increasing concern about the overutilization of antipsychotics in older adults. Evidence shows that antipsychotic medications increase the risk of death and cerebrovascular events in people with dementia. This performance measure may help improve medication use and outcomes for older persons with dementia by reducing their exposure to potentially inappropriate medications through education of clinicians and patients on proper drug selection and usage. "Avoiding the use of inappropriate drugs is an important, simple, and effective strategy in reducing medication-related problems and adverse drug events in older adults." (1) Improvement in performance on this measure (reduction of non-indicated antipsychotic use in patients with dementia) may lessen the amount of cerebrovascular events and reduce the risk of death in elderly patients with dementia.

1.The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc. 2012 Feb 29

S.4. Numerator Statement: The number of individuals from the denominator who had one or more prescription claims and more than 30 days' supply for any antipsychotic medication AND do not have a diagnosis of schizophrenia, bipolar disorder, Huntington's disease or Tourette's Syndrome during the measurement year.

S.6. Denominator Statement: Individuals 65 years and older as of the first day of the measurement year, meeting continuous enrollment criteria (the measurement year, with one allowable gap), and with at least one of the following during the measurement year:

- Dementia diagnosis
- Two or more prescription claims and more than 60 days' supply for a cholinesterase inhibitor or NMDA receptor antagonist.

S.8. Denominator Exclusions: N/A

De.1. Measure Type: Process

S.17. Data Source: Claims

S.20. Level of Analysis: Health Plan

IF Endorsement Maintenance – Original Endorsement Date: Mar 06, 2013 **Most Recent Endorsement Date:** Sep 23, 2016

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results? N/A

1. Evidence, Performance Gap, Priority – Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. **Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria.**

1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form

[2111_Evidence.docx](#)

1a.1 For Maintenance of Endorsement: Is there new evidence about the measure since the last update/submission?

Do not remove any existing information. If there have been any changes to evidence, the Committee will consider the new evidence. Please use the most current version of the evidence attachment (v7.1). Please use red font to indicate updated evidence.

1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- Disparities in care across population groups.

1b.1. Briefly explain the rationale for this measure (e.g., how the measure will improve the quality of care, the benefits or improvements in quality envisioned by use of this measure)

If a COMPOSITE (e.g., combination of component measure scores, all-or-none, any-or-none), SKIP this question and answer the composite questions.

There is increasing concern about the overutilization of antipsychotics in older adults. Evidence shows that antipsychotic medications increase the risk of death and cerebrovascular events in people with dementia. This performance measure may help improve medication use and outcomes for older persons with dementia by reducing their exposure to potentially inappropriate medications through education of clinicians and patients on proper drug selection and usage. "Avoiding the use of inappropriate drugs is an important, simple, and effective strategy in reducing medication-related problems and adverse drug events in older adults." (1) Improvement in performance on this measure (reduction of non-indicated antipsychotic use in patients with dementia) may lessen the amount of cerebrovascular events and reduce the risk of death in elderly patients with dementia.

1.The American Geriatrics Society 2012 Beers Criteria Update Expert Panel. American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc. 2012 Feb 29

1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. *(This is required for maintenance of endorsement. Include mean, std dev, min, max, interquartile range, scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include.) This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.*
[2016 Entry]

The mean measure rate was calculated using all Centers for Medicaid & Medicare (CMS) 2013 Part D contract data. The number of measured entities is 731 contracts including 652 Medicare Advantage Prescription Drug Plan (MA-PD) contracts and 79 Medicare Prescription Drug Plans (PDP). Over 35 million Medicare beneficiaries were enrolled in prescription drug plans in 2013. This includes 22.5 million in Medicare Prescription Drug Plans and 12.8 million in Medicare Advantage Prescription Drug Plans.

Antipsychotic Use in Persons with Dementia Mean Measure Rate

All Contracts (N=731); Rate 12.8%

MA-PD (n= 652); Rate 12.8%

PDP (n=79); Rate13.1%

Minimum	0%
Maximum	48.0%
Mean	12.8%
Median	12.1%
Standard Deviation	5.8%
Interquartile Range	4.9%
Total Range	47.9%

Scores by deciles:

10th	20th	30th	40th	50th	60th	70th	80th	90th
7.7%	9.3%	10.3%	11.3%	12.1%	13.0%	14.0%	15.4%	19.4%

The rates reported in 1b.2 are the most recent scores. Since the measure has not been used prior to 2015, there is no data to compare rates over time. CMS intends to start reporting this measure to prescription drug plans in the 2018 Part D display measure set (using 2016 data). The original testing information (2011 data) will be used to address improvement in section 4b.1.

[2012 Entry]

In general, problems related to medication use are widespread. They bare significant costs in terms of both dollars and poor outcomes but are often preventable. In particular, research has shown usage of drugs for indications other than what the FDA approved the drug for (off-label use) is not untypical. For example one study published in 2006 showed off-label use accounted for just over 20 percent of prescriptions written in 2001. (1)

In relation to atypical antipsychotic drugs, a 2009 Department of Veterans Affairs study showed about 60 percent of individuals received antipsychotic drugs for off-label conditions.(2) An AHRQ report which looked at the drugs' efficacy and comparative effectiveness, listed the most common off-label uses as treatment of agitation in dementia, depression, OCD, PTSD, personality disorders, Tourette's syndrome, and autism.(3)

In the nursing home setting, a 2010 study published in the Archives of Internal Medicine showed that over 30% of nursing home residents received at least one antipsychotic medication in 2006 and 43% of patients with dementia and no psychosis received the medication.(4)

A review by the Office of Inspector General of atypical antipsychotic Medicare drug claims for elderly residents showed 14 percent of residents with Medicare claims for atypical antipsychotic drugs, 83 percent of the claims were associated with prescribing for off-label conditions and 88 percent of the claims were associated with patients who had a diagnosis of dementia (a condition for which there is a black-box warning).(5) In addition, a separate review was conducted by the Office of the Inspector General to understand how well nursing homes comply with extra protections set forth for nursing facility residents receiving antipsychotic drugs.(6) The study looked for evidence of compliance with Federal requirements for resident assessments, documentation of decision making, care plan development and implementation. Strikingly, almost all records studied did not meet one or more Federal requirements for resident assessments and/or care plans.(6)

Finally, third quarter 2010 results from the Minimum Data Set (MDS) 2.0, which includes measures to facilitate nursing home resident assessment and care screening, showed the national average prevalence of antipsychotic use, in the absence of psychotic or related conditions to be 18.5%.(7) In addition, the national average prevalence of antipsychotic use, in the absence of psychotic or related conditions for those considered high risk was 39.4%.⁷ High risk is defined as those residents who exhibit both cognitive impairment and behavior problems on the most recent assessment. The national average prevalence of antipsychotic use, in the absence of psychotic or related conditions for those considered low risk was 15.6%.(7) Low risk is defined as all other residents who are not high risk (i.e., did not exhibit both cognitive impairment and behavior problems on the most recent assessment.)

Pilot testing of the measure under NQF endorsement consideration, Antipsychotic Use in Persons with Dementia, by two large Medicare Advantage plans using 2011 data also showed room for improvement in performance. Data across the 2 plans found 13.7-15.9% of patients with dementia were receiving an antipsychotic medication, without evidence of a psychotic disorder or related condition.(8) An additional analysis was conducted for a retiree population within an employer-sponsored health plan which found a rate of 18.5%.(8)

1b.3. If no or limited performance data on the measure as specified is reported in 1b2, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement.

1. D.C. Radley, S.N. Finkelstein, and R.S. Stafford, "Off-Label Prescribing Among Office-Based Physicians," Archives of Internal Medicine, Vol. 166, 2006, pp. 1021–1026.

2.D.L. Leslie, S. Mohamed, and R.A. Rosenheck, "Off-Label Use of Antipsychotic Medications in the Department of Veterans Affairs Health Care System," *Psychiatric Services*, Vol. 60, No. 9, 2009, pp. 1175–1181.

3.AHRQ, *Efficacy and Comparative Effectiveness of Off-Label Use of Atypical Antipsychotics* (07-EHCOO3-EF), January 2007.

4. Chen Y, Briesacher B, Field T, Unexplained Variation across U.S. Nursing Homes in Antipsychotic Prescribing Rates. *Arch Intern Med*. 2010 January 11; 170(1): 89–95.

5. DHHS. Office of Inspector General, Medicare Atypical Antipsychotic Drug Claims for Elderly Nursing Home Residents. 2011. <http://oig.hhs.gov/oei/reports/oei-07-08-00150.pdf> Accessed August 7, 2012.

6. DHHS. Office of Inspector General, Nursing Facility Assessments and Care Plans for Residents Receiving Atypical Antipsychotic Drugs. 2012. <http://oig.hhs.gov/oei/reports/oei-07-08-00151.pdf>. Accessed August 7, 2012.

7. CMS. MDS Quality Measure/Indicator Report.Psychotropic Drug Use- July/September 2010. <http://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MDSPubQlandResRep/qmreport.html> Accessed August 14, 2012.

8. Pharmacy Quality Alliance Field Test Results, using 2011 data. www.pqaalliance.org

1b.4. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability. (*This is required for maintenance of endorsement. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included.*) For measures that show high levels of performance, i.e., "topped out", disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b1) under Usability and Use.

[2016 Entry]

Low Income Subsidy

The measure was calculated at the contract level, and was grouped by low-income subsidy (LIS) status, which is a proxy for socioeconomic status. Medicare 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.

The same data source was used for this calculation as in 1b.2.

Antipsychotic Use in Persons with Dementia (N= number of contracts)

Measure Rate Statistics*

All Contracts (N=731)

Mean 12.8%; Std Dev. 5.8%; Min 0%; Max 47.9%

Low Income Subsidy (n= 726)

Mean 15.8%; Std Dev. 7.4%; Min 0%; Max 71.4%

Non-LIS (n=630)

Mean 11.3%; Std Dev. 12.3%; Min 0%; Max 100.0%

Scores by deciles:

	10th	20th	30th	40th	50th	60th	70th	80th	90th
LIS	7.8%	10.6%	12.6%	14.3%	15.6%	17.2%	18.7%	20.6%	23.8%
Non LIS	0.0%	6.9%	8.1%	8.9%	9.7%	10.4%	11.4%	12.6%	15.0%

*Rates include outliers, which are often due to contracts with very small denominators.

Long-term Nursing Home Stay vs. Community Residence

The measure was calculated at the contract level, and was grouped by whether the patient resided in a nursing home for longer than 100 days at any time during the measure year versus whether they resided in the community during the year. The measure results show an increased use of antipsychotics in persons with dementia who reside in a nursing home facility longer than 100 days.

The same data source was used for this calculation as in 1b.2.

Antipsychotic Use in Persons with Dementia (N= number of contracts)

Measure Rate Statistics*

All Contracts (N=731)

Mean 12.8%; Std Dev. 5.8%; Min 0%; Max 47.9%

Community Only (N=731)

Mean 10.8%; Std Dev. 6.2%; Min 0%; Max 49.0%

Long-Term Nursing Home Stay (N=678)

Mean 23.9%; Std Dev. 13.7%; Min 0%; Max 100.0%

*Rates include outliers, which are often due to contracts with very small denominators

[2012 Entry]

Data is available to show disparities in antipsychotic prescribing relative to nursing home residence. A 2010 study published in the Archives of Internal Medicine reported evidence of facility-level variation in the prescribing of antipsychotics.¹ The study also found newly-admitted nursing home residents were more likely to receive an antipsychotic if they were in a facility with a higher antipsychotic prescribing rate. This seems to signal that risky prescribing of antipsychotics seems to be a practice norm in some nursing homes and may be due to a nursing home antipsychotic prescribing culture.⁽¹⁾

1b.5. If no or limited data on disparities from the measure as specified is reported in 1b.4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in 1b.4

1. Chen Y, Briesacher B, Field T, Unexplained Variation across U.S. Nursing Homes in Antipsychotic Prescribing Rates. Arch Intern Med. 2010 January 11; 170(1): 89–95

2. Reliability and Validity—Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

2a.1. Specifications The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

De.5. Subject/Topic Area (check all the areas that apply):

Behavioral Health, Behavioral Health : Other Serious Mental Illness, Neurology

De.6. Non-Condition Specific(check all the areas that apply):

Safety, Safety : Medication

De.7. Target Population Category (Check all the populations for which the measure is specified and tested if any):

Elderly

S.1. Measure-specific Web Page (Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials. Do not enter a URL linking to a home page or to general information.)

<https://www.pqaalliance.org/pqa-measures>

S.2a. If this is an eMeasure, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

This is not an eMeasure Attachment:

S.2b. Data Dictionary, Code Table, or Value Sets (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

Attachment Attachment: [ICD_Codes_APD_July_2018_v3.xlsx](#)

S.2c. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

No, this is not an instrument-based measure Attachment:

S.2d. Is this an instrument-based measure (i.e., data collected via instruments, surveys, tools, questionnaires, scales, etc.)? Attach copy of instrument if available.

Not an instrument-based measure

S.3.1. For maintenance of endorsement: Are there changes to the specifications since the last updates/submission. If yes, update the specifications for S1-2 and S4-22 and explain reasons for the changes in S3.2.

Yes

S.3.2. For maintenance of endorsement, please briefly describe any important changes to the measure specifications since last measure update and explain the reasons.

2018 Update

Value Set (S.2b): Updated value sets. The value set was divided into two sheets "ICD Codes APD Value Sets, psychotic disorders, July 2018" and "PQA ICD Value Set, APD, Dementia." ICD-9 information was removed, as it no longer is needed due to mandatory ICD 10 compliance as of October 2015.

Numerator (S.5): New medications added to Table APD-B Antipsychotic Medications (brexpiprazole, molindone, pimavanserin)

Denominator (S.7): Added language on the allowable gap as part of the enrollment criteria. This is a standard definition used for PQA measures.

Stratification (S.10): Added stratification details (Commercial, Medicaid, Medicare (report each product line separately). For Medicare, report rates for low-income subsidy (LIS) and non-LIS populations separately. This is consistent with PQA plan-level measures.

S.4. Numerator Statement (Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome) DO NOT include the rationale for the measure.

IF an OUTCOME MEASURE, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

The number of individuals from the denominator who had one or more prescription claims and more than 30 days' supply for any antipsychotic medication AND do not have a diagnosis of schizophrenia, bipolar disorder, Huntington's disease or Tourette's Syndrome during the measurement year.

S.5. Numerator Details (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b)

IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

The number of individuals in the denominator who had one or more prescription claims and more than 30 days' supply for any antipsychotic medication (See Table APD-B: Antipsychotic Medications) and do not have a diagnosis for schizophrenia, bipolar disorder, Huntington's disease or Tourette's Syndrome (See ICD Codes APD Value Sets, psychotic disorders, July 2018) during the measurement year.

Table APD-B: Antipsychotic Medications

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

Note: The active ingredients are limited to oral, sublingual, injectable and intramuscular formulations only. Includes combination products.

ICD Value Set, APD, Psychotic Disorders

- See attached Excel file in S.2b.

S.6. Denominator Statement *(Brief, narrative description of the target population being measured)*

Individuals 65 years and older as of the first day of the measurement year, meeting continuous enrollment criteria (the measurement year, with one allowable gap), and with at least one of the following during the measurement year:

- Dementia diagnosis
- Two or more prescription claims and more than 60 days' supply for a cholinesterase inhibitor or NMDA receptor antagonist.

S.7. Denominator Details *(All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)*

IF an OUTCOME MEASURE, describe how the target population is identified. Calculation of the risk-adjusted outcome should be described in the calculation algorithm (S.14).

Individuals 65 years and older as of the first day of the measurement year, meeting continuous enrollment criteria (the measurement year, with one allowable gap), with a diagnosis of dementia (PQA ICD Value Set, APD, Dementia) and/or two or more prescription claims and more than 60 days' supply for a cholinesterase inhibitor or NMDA receptor antagonist (Table APD-A: Cholinesterase Inhibitors and NMDA Receptor Antagonist) during the measurement year.

One allowable gap in enrollment is permitted, defined as a gap in enrollment of up to 31 days during the measurement year. When enrollment is verified monthly, the member may not have more than 1-month gap in coverage (i.e., a member whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

Table APD-A: Cholinesterase Inhibitors and NMDA Receptor Antagonists

donepezil
 galantamine
 memantine
 rivastigmine

Note: The active ingredients are limited to oral and transdermal formulations only.

ICD Value Set, APD, Dementia

- See attached Excel file in S.2b.

S.8. Denominator Exclusions (Brief narrative description of exclusions from the target population)

N/A

S.9. Denominator Exclusion Details (All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at S.2b.)

N/A

S.10. Stratification Information (Provide all information required to stratify the measure results, if necessary, including the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format with at S.2b.)

Commercial, Medicaid, Medicare (report each product line separately). For Medicare, report rates for low-income subsidy (LIS) and non-LIS populations separately.

S.11. Risk Adjustment Type (Select type. Provide specifications for risk stratification in measure testing attachment)

No risk adjustment or risk stratification

If other:

S.12. Type of score:

Rate/proportion

If other:

S.13. Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Lower score

S.14. Calculation Algorithm/Measure Logic (Diagram or describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period for data, aggregating data; risk adjustment; etc.)

Step One:

Calculate the denominator by identifying the number of eligible individuals:

1) Identify individuals aged 65 years and older as of the first day of the measurement year

2) Identify individuals meeting the continuous enrollment criteria

3) Identify individuals who met at least one of the following during the measurement year:

- A diagnosis of dementia (PQA ICD Value Set, APD, Dementia)

- Two or more prescription claims and more than 60 days' supply for a cholinesterase inhibitor or NMDA receptor antagonist (Table APD-A: Cholinesterase Inhibitors and NMDA Receptor Antagonist).

Step Two:

Calculate the numerator by identifying the number of individuals from the denominator who met both of the following during the measurement year:

1) One or more prescription claims and more than 30 days' supply for any antipsychotic medication (Table APD-B: Antipsychotic Medications)

2) Do not have a diagnosis for schizophrenia, bipolar disorder, Huntington's Disease or Tourette's Syndrome (PQA ICD Value Set, APD, Psychotic Disorders).

Step Three:

Divide the numerator (Step Two) by the denominator (Step One) and multiply times 100 to calculate the rate as a percentage.

S.15. Sampling (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample

size.)

IF an instrument-based performance measure (e.g., PRO-PM), identify whether (and how) proxy responses are allowed.

N/A

S.16. Survey/Patient-reported data (If measure is based on a survey or instrument, provide instructions for data collection and guidance on minimum response rate.)

Specify calculation of response rates to be reported with performance measure results.

S.17. Data Source (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.18.

Claims

S.18. Data Source or Collection Instrument (Identify the specific data source/data collection instrument (e.g. name of database, clinical registry, collection instrument, etc., and describe how data are collected.)

IF instrument-based, identify the specific instrument(s) and standard methods, modes, and languages of administration.

Health Plan Medical and Pharmacy Claims. Health Plan member enrollment information.

S.19. Data Source or Collection Instrument (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

No data collection instrument provided

S.20. Level of Analysis (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Health Plan

S.21. Care Setting (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

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.

If other:

S.22. COMPOSITE Performance Measure - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

N/A

2. Validity – See attached Measure Testing Submission Form

2111_MeasureTesting_MSF5_0_Data_updated011516.docx

2.1 For maintenance of endorsement

Reliability testing: If testing of reliability of the measure score was not presented in prior submission(s), has reliability testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

2.2 For maintenance of endorsement

Has additional empirical validity testing of the measure score been conducted? If yes, please provide results in the Testing attachment. Please use the most current version of the testing attachment (v7.1). Include information on all testing conducted (prior testing as well as any new testing); use red font to indicate updated testing.

2.3 For maintenance of endorsement

Risk adjustment: For outcome, resource use, cost, and some process measures, risk-adjustment that includes social risk factors is not prohibited at present. Please update sections 1.8, 2a2, 2b1, 2b4.3 and 2b5 in the Testing attachment and S.140 and S.11 in the online submission form. NOTE: These sections must be updated even if social risk factors are not included in the risk-adjustment strategy. You MUST use the most current version of the Testing Attachment (v7.1) -- older versions of the form will not have all required questions.

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

3a.1. Data Elements Generated as Byproduct of Care Processes.

Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims), Other

If other: Prescription claims data.

3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

3b.1. To what extent are the specified data elements available electronically in defined fields (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields) Update this field for maintenance of endorsement.

ALL data elements are in defined fields in electronic claims

3b.2. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources. For maintenance of endorsement, if this measure is not an eMeasure (eCQM), please describe any efforts to develop an eMeasure (eCQM).

3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL. Please also complete and attach the NQF Feasibility Score Card.

Attachment:

3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

3c.1. Required for maintenance of endorsement. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

IF instrument-based, consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

Pilot test sites indicated the measure was feasible and results were able to be reported efficiently and accurately.

2016 update: CMS calculates the measure for Part D plans. The data is readily available (prescription claims data and medical data).

3c.2. Describe any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm).

PQA develops and maintains numerous performance measures related to the medication use system. The Measures are the proprietary property of PQA, and it is in the interest of PQA to protect and promote the appropriate use of the Measures. PQA may approve an organization's use of the Measures; however, no organization may use the Measures without first obtaining permission from PQA prior to using the Measures. Certain uses of the Measures are only approved with a licensing agreement from PQA that specifies the terms of use and the licensing fee. PQA reserves the right to determine the conditions under which it will approve and/or license the Measures.

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

4.1. Current and Planned Use

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement in addition to performance improvement.

Specific Plan for Use	Current Use (for current use provide URL)

4a1.1 For each CURRENT use, checked above (update for maintenance of endorsement), provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included
- Level of measurement and setting

Name of program and sponsor: CMS Medicare Part D Drug Benefit

Purpose: Decrease use of antipsychotics in Part D beneficiaries with dementia

Geographic area: National, approximately 38 million beneficiaries in Part D plans.

4a1.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)

CMS has been considering using this measure in the Medicare Part D prescription drug program. CMS' further evaluation of the measure has now been completed and the measure will be used N/in the display measure set using 2016 data.

4a1.3. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes -- any accountability application within 3 years and publicly reported within 6 years of initial endorsement. (Credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.)

Planned use includes CMS' addition of the measure to the Medicare Part D patient safety reports, beginning with year of service 2016, and addition to the 2018 Part D display measure set (using 2016 data). From the Memo (Amy Larrick, Acting Director, Medicare Drug Benefit and C&D Data Group, Request for Comments: Enhancements to the Star Ratings for 2017 and Beyond:

CMS (Medicare Part D) will develop new patient safety APD (Antipsychotic Use in Persons with Dementia) measure reports to provide to Part D sponsors on a monthly basis through the Patient Safety Analysis website beginning with year of service 2016. CMS also recommends adding the overall APD measure plus breakout rates for community-only residents, short-term nursing home residents, and long-term nursing home stay residents to the 2018 Part D display measure set (using 2016 data) to continue to draw attention to the inappropriate use of antipsychotics in persons with dementia without an appropriate mental health diagnosis in both the community and nursing home settings. The APD measure will replace the Rate of Chronic Use of Atypical Antipsychotics by Elderly Beneficiaries in Nursing Homes display measure.

4a2.1.1. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

How many and which types of measured entities and/or others were included? If only a sample of measured entities were included, describe the full population and how the sample was selected.

PQA's measure development is a transparent, consensus-driven process to draft, test, refine, and endorse measures. The development process involves six steps: measure conceptualization, measure specification, stakeholder engagement, draft measure testing, measure endorsement, and finally measure use and update.

After specifications have been drafted for a measure concept, PQA selects partners to test the draft measure. These partners often are PQA member health plans or academic institutions with expertise in quality and performance measure testing that also have access to the data sources needed to calculate the measure rates. The testing partner implements the technical specifications within their existing datasets and provides a report to PQA that details testing results and any recommendations for modifications of the technical specifications. The Quality Metrics Expert Panel (QMEP) reviews the testing results and recommendations and determines final criteria for the measure based on the findings. The QMEP provides a final assessment of the feasibility and scientific acceptability of the draft measures.

PQA owns and maintains the performance measure, including updates to the specifications and all value sets to ensure accurate and consistent calculation of the measure. In addition to describing the steps to calculate our measures, the specifications provide information about how to interpret results (i.e. higher or lower rates are better). Various organizations license the measure specifications for performance evaluation. PQA provides technical assistance and support to licensees and to those with permission to use PQA measures.

4a2.1.2. Describe the process(es) involved, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

PQA owns and maintains the performance measure. PQA is not involved with providing results from the performance evaluation. As the measure steward, PQA provides technical assistance to support accurate implementation of the measure specifications.

PQA receives feedback from measure users via technical assistance email box or inquiries sent directly to staff. PQA staff responds to inquiries in a timely manner. Frequently asked questions and other recommendations are reviewed by PQA staff and brought to the Measure Update Panel (MUP) for further consideration, as appropriate.

4a2.2.1. Summarize the feedback on measure performance and implementation from the measured entities and others described in 4d.1.

Describe how feedback was obtained.

PQA receives feedback from measure users via technical assistance email box or inquiries sent directly to staff. PQA staff responds to inquiries in a timely manner. Frequently asked questions and other recommendations are reviewed by PQA staff and brought to the Measure Update Panel (MUP) for further consideration, as appropriate.

4a2.2.2. Summarize the feedback obtained from those being measured.

General inquiries were received; however, none were substantive or required revisions or refinements to the specifications of this measure.

4a2.2.3. Summarize the feedback obtained from other users

General inquiries were received; however, none were substantive or required revisions or refinements to the specifications of this measure.

4a2.3. Describe how the feedback described in 4a2.2.1 has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

During measure development:

- Performance measures that are recommended by the QMEP for endorsement consideration by PQA membership are posted on the PQA web site for member review, written comments are requested, and a webinar for member organizations is held to address comments and questions. This process allows stakeholders to discuss their views on the measures in advance of the voting period. PQA member organizations vote on endorsement of performance measures.

For revisions:

- After endorsement, PQA leverages a multi-stakeholder advisory panel, the Measure Update Panel (MUP), to consider feedback for potential measure update consideration. The panel's objectives are to identify the need for measure updates based on current evidence, guidelines, and standards, ensure new medications are reflected in the NDC lists and measure specifications, and revise the measures to improve clarity, consistency, and harmonization. Material changes – those that affects the measure result – are also

evaluated and approved by the QMEP. This process, which engages PQA stakeholders, ensures feedback is reviewed and applied based on consensus and evidence.

- Additionally, PQA provides both member and non-member organizations with individual technical assistance upon request. Frequently asked questions and other recommendations are reviewed by PQA staff and brought to the MUP for further consideration.

- Since the last update, PQA, as part of its standardized measure maintenance process, reviewed the value set associated with this measure. The diagnostic codes were updated based on expert review and input through PQA's MUP.

Improvement

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

4b1. Refer to data provided in 1b but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included.)

If no improvement was demonstrated, what are the reasons? If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

PQA is not aware of any programs adopting the measure since its initial endorsement, and therefore we do not currently have data demonstrating improvement. However, per the CMS memo dated November 12, 2015, "Medicare Drug Benefit and C&D Data Group, Request for Comments: Enhancements to the Star Ratings for 2017 and Beyond", CMS will use this measure to monitor use of antipsychotics in persons with dementia covered by the Medicare drug benefit. CMS' most recent analyses show that there has been little change in the measure rate since initial endorsement of the measure in 2012. This helps support the need for a heightened focus and opportunity to decrease the use of antipsychotics in person with dementia and supports CMS' decision to adopt the measure into the Part D Star Ratings program.

4b2. Unintended Consequences

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

4b2.1. Please explain any unexpected findings (positive or negative) during implementation of this measure including unintended impacts on patients.

2016 Update

No unintended negative consequences were identified during the additional testing of the measure.

2012 Entry

As referenced previously, this measure is built on medical and pharmacy claims data. There have been several studies that validate the reliability & validity of prescription claims data.

In addition, additional analyses were carried out during pilot testing (refer to results in sections 2a2.3, 2b2.3, 2b5.3, 2b6.3) to confirm the consistency and accuracy of the measure.

4b2.2. Please explain any unexpected benefits from implementation of this measure.

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

5. Relation to Other NQF-endorsed Measures

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.

No

<p>5.1a. List of related or competing measures (selected from NQF-endorsed measures)</p> <p>5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.</p>
<p>5a. Harmonization of Related Measures The measure specifications are harmonized with related measures; OR The differences in specifications are justified</p> <p>5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s): Are the measure specifications harmonized to the extent possible?</p> <p>5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.</p>
<p>5b. Competing Measures The measure is superior to competing measures (e.g., is a more valid or efficient way to measure); OR Multiple measures are justified.</p> <p>5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s): Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)</p>

Appendix
<p>A.1 Supplemental materials may be provided in an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.</p> <p>Attachment:</p>
Contact Information
<p>Co.1 Measure Steward (Intellectual Property Owner): Pharmacy Quality Alliance Co.2 Point of Contact: Lynn, Pezzullo, lpezzullo@pqaalliance.org, 703-347-7963- Co.3 Measure Developer if different from Measure Steward: Pharmacy Quality Alliance Co.4 Point of Contact: Lynn, Pezzullo, lpezzullo@pqaalliance.org, 703-347-7963-</p>
Additional Information
<p>Ad.1 Workgroup/Expert Panel involved in measure development Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. PQA Quality Metrics Expert Panel: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> Bimal Patel Chris DuPaul Christopher Dezii </div> <div style="width: 45%;"> MedImpact CVS pharmacy Bristol Myers Squibb </div> </div> </p>

Christopher Powers	CMS
Darryl Roberts	Mirixa
Eric Culley	Highmark
Gary Young	Northeastern University
Kent Summers	Endo
Lynn Pezzullo	Healthcentric Advisors
Marissa Schlaifer	Association Managed Care Pharmacists
Mary Ann Kliethermes	Midwestern University
Pat Gleason	Prime Therapeutics
Terri Moore	URAC
David Nau	PQA
Julie Kuhle	PQA

PQA Mental Health Workgroup Co-chairs:

Benjamin Banahan	University of Mississippi
Bill Kehoe	University of the Pacific

PQA Overuse Workgroup Co-chairs:

Denise Kehoe	PerformRx
Donna West	University of Mississippi

The members' role in measure development was as follows: The PQA Overuse Workgroup initiated and developed the measure concept through a consensus based process. The Overuse Workgroup consisted of 20 individuals representing PQA member organizations. The workgroup discussed the measure concept during monthly meetings in 2011. In 2012, the Mental Health Workgroup reviewed the measure concept for clinical content. The measure concept was forwarded from the PQA Mental Health Workgroup to the PQA Quality Metric Expert Panel. The Panel reviewed the measure concept, provided input and recommended that technical specifications be added to the measure. The Mental Health Workgroup and the Quality Metric Expert Panel reviewed the measure with the technical specifications prior to testing and then again post-testing.

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.2 Year the measure was first released: 2012

Ad.3 Month and Year of most recent revision: 12, 2015

Ad.4 What is your frequency for review/update of this measure? Measures are reviewed annually, though NDC lists are updated bi-annually (January and June).

Ad.5 When is the next scheduled review/update for this measure? 07, 2016

Ad.6 Copyright statement: Rights Retained by PQA, Inc 2016.

Ad.7 Disclaimers:

Ad.8 Additional Information/Comments: