Measure Information Form

Measure Name

Specifications Tab

Descriptive Information

Measure Name (Measure Title De.2.)

NQF 1880: Adherence to Mood Stabilizers For Individuals with Bipolar I Disorder

Measure Type De.1.

Process

Brief Description of Measure De.3.

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

If Paired or Grouped De.4.

Not applicable

Subject/Topic Areas De.5.

Mental Health: Mental Health
Cross-Cutting Areas: Disparities

Measure Specifications

Measure-Specific Web Page S.1.

Not applicable

If This is an eMeasure S.2a.

Not applicable

Data Dictionary Code Table S.2b.

ICD-9 to ICD-10 Crosswalk and National Drug Code (NDC) Table are available in the attached file.

For Endorsement Maintenance S.3.

Date Endorsed: March 4, 2014
Release Notes
Statement of intent for the selection of ICD-10 codes: The goal was to convert this measure to a new code set, fully consistent with the intent of the original measure.

2011 Updates

- Updated NDCs as of October 28, 2011
- Added new 2011 CPT visit type codes, 99224-99226, as of November 2011
- Added new 2011 CPT J-codes for depot injections to be excluded, paliperidone palmitate (J2426), and updated J-code for olanzapine (S0166, J2358)

- Added new drug paliperidone palmitate for injectables to be excluded

2012 Updates
- Updated NDCs as of October 31, 2012
- Modified age requirement to at least 18 years of age at the beginning of the measurement period
- Modified codes used to identify encounter type to align with NQF 1879
- Removed the exclusion for depot injections
- Included antipsychotic depot drugs as part of the mood stabilizer NDC list

2013 Updates
- Updated NDCs as of November 6, 2013

Numerator Statement S.4.

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

Time Period for Data S.5.

The time period of the data is defined as any time during the measurement period (12 consecutive months).

Numerator Details S.6.

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

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

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

Denominator Statement S.7.

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

Target Population Category S.8.

Senior Care

Denominator Details S.9.

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

IDENTIFICATION OF BIPOLAR I DISORDER
Individuals with bipolar I disorder are identified by having a diagnosis of bipolar I disorder within the inpatient or

outpatient claims data. Individuals must have:

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

OR

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

Table 1. Codes Used to Identify Bipolar I Disorder Diagnosis
ICD-9-CM: 296.0x, 296.1x, 296.4x, 296.5x, 296.6x, 296.7
ICD-10-CM: F30.10, F30.11, F30.12, F30.13, F30.2, F30.3, F30.4, F30.9, F31.0, F31.10, F31.11, F31.12, F31.13, F31.2, F31.30, F31.31, F31.32, F31.4, F31.5, F31.60, F31.61, F31.62, F31.63, F31.64, F31.70, F31.71, F31.72, F31.73, F31.74, F31.75, F31.76, F31.77, F31.78, F31.89, F31.9

CODES USED TO IDENTIFY ENCOUNTER TYPE
Table 2.1. Outpatient Setting
Current Procedural Terminology (CPT): 90804-90815, 98960-98962, 99078, 99201-99205, 99211-99215, 99217-99220, 99241-99245, 99341-99345, 99347-99350, 99385-99387, 99395-99397, 99401-99404, 99411, 99412, 99429, 99510
HCPCS: G0155, G0176, G0177, G0409-G0411, H0002, H0004, H0031, H0034-H0037, H0039, H0040, H2000, H2001, H2010-H2020, M0064, S0201, S9480, S9484, S9485
UB-92 revenue: 0510,0511, 0513, 0516-0517, 0519-0523, 0526-0529, 0900, 0901, 0902-0905, 0907, 0911-0917, 0919, 0982, 0983, 077x, 090x, 091x, 0961

OR

CPT: 90801, 90802, 90816-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90875, 90876, 90880, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

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

Table 2.2. Emergency Department Setting
CPT: 99281-99285
UB-92 revenue: 045x, 0981, 0961

OR

CPT: 90801, 90802, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90875, 90876, 99291

WITH

POS: 23

Table 2.3. Non-Acute Inpatient Setting
CPT: 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337
HCPCS: H0017-H0019, T2048
UB-92 revenue: 0118, 0128, 0138, 0148, 0158, 019x, 0524, 0525, 055x, 066x, 1000, 1001, 1003-1005, 0961

OR

CPT: 90801, 90802, 90816-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870,

90875, 90876, 99291

WITH

POS: 31, 32, 56

Table 2.4. Acute Inpatient Setting
UB-92 revenue: 010x, 0110-0114, 0119, 0120-0124, 0129, 0130-0134, 0139, 0140-0144, 0149, 0150-0154, 0159, 016x, 020x, 021x, 072x, 0987,080x, 0961

OR

CPT: 90801, 90802, 90816-90819, 90821-90824, 90826-90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870, 90875, 90876, 99221-99223, 99231-99233, 99238, 99239, 99251-99255, 99291

WITH

POS: 21, 51

The following are the mood stabilizer medications by class for the denominator. The route of administration includes all oral formulations of the medications and depot formulations (where they are available).

Table 3. Mood Stabilizer Medications
Anticonvulsants:
carbamazepine
divalproex sodium
lamotrigine
valproic acid

Atypical Antipsychotics:
aripiprazole
asenapine
clozapine
iloperidone
lurasidone
olanzapine
paliperidone
quetiapine
risperidone
ziprasidone

Phenothiazine/Related Antipsychotics:
chlorpromazine
fluphenazine
haloperidol
loxapine succinate
molindone
perphenazine
pimozide
prochlorperazine
thioridazine
thiothixene
trifluoperazine

Other Antipsychotics:
olanzapine-fluoxetine
perphenazine-amitriptyline

Lithium Salts:
lithium carbonate
lithium citrate

Note: Active ingredients listed above are limited to oral, buccal, sublingual, and translingual formulations only. Obsolete drug products are excluded from National Drug Codes (NDCs) with an inactive date more than three years prior to the beginning of the measurement period or look-back period, if applicable.

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.

Table 4: Long-Acting Injectable Antipsychotic Medications
Typical Antipsychotic Medications:
fluphenazine decanoate (J2680)
haloperidol decanoate (J1631)

Atypical Antipsychotic Medications:
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:
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

Denominator Exclusions (NQF Includes "Exceptions" in the "Exclusion" Field) S.10.

Not applicable

Denominator Exclusion Details (NQF Includes "Exceptions" in the "Exclusion" Field) S.11.

Not applicable

Stratification Details/Variables S.12.

Depending on the operational use of the measure, measure results may be stratified by:
- State
- Accountable Care Organization (ACOs)*
- Plan
- Physician Group**
- Age – Divided into six categories: 18-24, 25-44, 45-64, 65-74, 75-84, and 85+ years
- Race/Ethnicity
- Dual Eligibility

*ACO attribution methodology is based on where the beneficiary is receiving the plurality of his/her primary care services and subsequently assigned to the participating providers.
See **Calculation Algorithm/Measure Logic S.18 below for physician group attribution methodology used for this measure.

Risk Adjustment Type S.13.

No risk adjustment or risk stratification

Statistical Risk Model and Variables S.14.

Not applicable

Detailed Risk Model Specifications S.15.

Not applicable

Type of Score S.16.

Rate/proportion

Interpretation of Score S.17.

Better quality = higher score

Calculation Algorithm/Measure Logic S.18.

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

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

Create Denominator:

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

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

Create Numerator:

For the individuals in the denominator, calculate the PDC for each individual according to the following methods:

1. Determine the individual's medication therapy period, defined as the index prescription date through the end of the measurement period, or death, whichever comes first. The index date is the service date (fill date) of the first prescription drug claim for a mood stabilizer medication in the measurement period.
2. Within the medication therapy period, count the days the individual was covered by at least one drug in the mood stabilizer medication class based on the prescription drug claim service date and days of supply.

   a. Sort and de-duplicate Part D claims for mood stabilizers by beneficiary ID, service date, generic name, and descending days' supply. If prescriptions for the same drug (generic name) are dispensed on the same date of service for an individual, keep the dispensing with the largest days' supply.
   b. Calculate the number of days covered by mood stabilizer therapy per individual.
      i. For prescription drug claims with a days' supply that extends beyond the end of the measurement period, count only the days for which the drug was available to the individual during the measurement period.
      ii. If claims for the same drug (generic name) overlap, then adjust the latest prescription start date to be the day after the previous fill has ended.
      iii. If claims for different drugs (different generic names) overlap, do not adjust the prescription start date.
3. Calculate the PDC for each individual. Divide the number of covered days found in Step 2 by the number of days in the individual's medication therapy period found in Step 1.

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

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

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

I. Identify Physician and Medical Groups

1. Identify all Tax Identification Numbers (TINs)/National Provider Identification (NPI) combinations from all Part B claims in the measurement year and the prior year. Keep records with valid NPIs. Valid NPIs have 10 numeric characters (no alpha characters).
2. For valid NPIs, pull credentials and specialty code(s) from the CMS provider tables.
3. Create one record per NPI with all credentials and all specialties. A provider may have more than one specialty.
4. Attach TIN to NPI, keeping only those records with credentials indicating a physician (MD or DO), physician assistant (PA), or nurse practitioner (NP).
5. Identify medical group TINs: Medical group TINs are defined as TINs that had physician, physician assistant, or nurse practitioner provider specialty codes on at least 50% of Part B carrier claim line items billed by the TIN during the measurement year or prior year. (The provider specialty codes are listed after Patient Attribution.)
   a. Pull Part B records billed by TINS identified in Step 4 during the measurement year and prior year.
   b. Identify claims that had the performing NPI (npi_prfrmg) in the list of eligible physicians/TINs, keeping those that match by TIN, performing NPI, and provider state code.
   c. Calculate the percentage of Part B claims that match by TIN, npi_prfrmg, and provider state code for each TIN, keeping those TINs with percentages greater than or equal to 50%.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
6. Identify TINs that are not solo practices.
   a. Pull Part B records billed by physicians identified in Step 4 for the measurement year and/or prior year.
   b. Count unique NPIs per TIN.
   c. Keep only those TINs having two or more providers.
   d. Delete invalid TINs. Examples of invalid TINs are defined as having the same value for all nine digits or values of 012345678, 012345678, 123456789, 987654321, or 87654321.
7. Create final group of TINs from Step 5 and Step 6 (TINs that are medical groups and are not solo practices).
8. Create file of TINs and NPIs associated with those TINs. These are now referred to as the medical group TINs.
9. Determine the specialty of the medical group (TIN) to be used in determining the specialty of nurse practitioners

and physician assistants. The plurality of physician providers in the medical group determines the specialty of care for nurse practitioners and physician assistants.

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

II. Identify Individual Sample and Claims

10. Create individual sample.
    a. Pull individuals with 11+ months of Parts A, B, & D during the measurement year.
    b. Verify the individual did not have any months with Medicare as secondary payer. Remove individuals with BENE_PRMRY_PYR_CD not equal to one of the following:
        - A = working-age individual/spouse with an employer group health plan (EGHP)
        - B = End Stage Renal Disease (ESRD) in the 18-month coordination period with an EGHP
        - G = working disabled for any month of the year
    c. Verify the individual resides in the U.S., Puerto Rico, Virgin Islands, or Washington D.C.
    d. Exclude individuals who enter the Medicare hospice at any point during the measurement year.
    e. Exclude individuals who died during the measurement year.
11. For individuals identified in Step 10, pull office visit claims that occurred during the measurement year and in the six months prior to the measurement year.
    a. Office visit claims have CPT codes of 99201-99205, 99211-99215, and 99241-99245.
    b. Exclude claims with no npi_prfrmg.
12. Attach medical group TIN to claims by NPI.

III. Patient Attribution

13. Pull all Part B office claims from Step 12 with specialties indicating primary care or psychiatry (see list of provider specialties and specialty codes below). Attribute each individual to at most one medical group TIN for each measure.
    a. Evaluate specialty on claim (HSE_B_HCFA_PRVDR_SPCLTY_CD) first. If specialty on claim does not match any of the measure-specific specialties, then check additional specialty fields.
    b. If the provider specialty indicates nurse practitioners or physician assistants (code 50 or code 97), then assign the medical group specialty determined in Step 9.
14. For each individual, count claims per medical group TIN. Keep only individuals with two or more E&M claims.
15. Attribute individual to the medical group TIN with the most claims. If a tie occurs between medical group TINs, attribute the TIN with the most recent claim.
16. Attach the medical group TIN to the denominator and numerator files by individual.

Provider Specialties and Specialty Codes

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

01—General practice*
02—General surgery
03—Allergy/immunology
04—Otolaryngology
05—Anesthesiology
06—Cardiology
07—Dermatology
08—Family practice*
09—Interventional pain management
10—Gastroenterology
11—Internal medicine*
12—Osteopathic manipulative therapy
13—Neurology
14—Neurosurgery

16—Obstetrics/gynecology*
18—Ophthalmology
20—Orthopedic surgery
22—Pathology
24—Plastic and reconstructive surgery
25—Physical medicine and rehabilitation
26—Psychiatry*
28—Colorectal surgery
29—Pulmonary disease
30—Diagnostic radiology
33—Thoracic surgery
34—Urology
36—Nuclear medicine
37—Pediatric medicine
38—Geriatric medicine*
39—Nephrology
40—Hand surgery
44—Infectious disease
46—Endocrinology
50—Nurse practitioner*
66—Rheumatology
70—Multi-specialty clinic or group practice*
72—Pain management
76—Peripheral vascular disease
77—Vascular surgery
78—Cardiac surgery
79—Addiction medicine
81—Critical care (intensivists)
82—Hematology
83—Hematology/oncology
84—Preventive medicine*
85—Maxillofacial surgery
86—Neuropsychiatry*
90—Medical oncology
91—Surgical oncology
92—Radiation oncology
93—Emergency medicine
94—Interventional radiology
97—Physician assistant*
98—Gynecologist/oncologist
99—Unknown physician specialty
Other—NA
*Provider specialty codes specific to this measure

Calculation Algorithm/Measure Logic Diagram URL or Attachment S.19.

Not applicable

Sampling S.20.

Not applicable; this measure does not use a sample or survey.

Survey/Patient-Reported Data S.21.

Not applicable; this measure does not use a sample or survey.

Missing Data S.22.

To reduce the potential for measure result bias, patients who have prescription drug claims with missing days' supply are excluded from the analysis.

Data Source S.23.

Administrative Claims
Electronic Clinical Data: Pharmacy
Other: Please see the next section for further details.

Data Source or Collection Instrument S.24.

For measure calculation, the following Medicare files are required:

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

For ACO attribution, the following are required:

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

For physician group attribution, the following are required:

- Non-institutional claims (Part B)—physician carrier/non-DME
- Denominator tables to determine individual enrollment
- Beneficiary file or coverage table to determine hospice benefit and Medicare as secondary payer status
- CMS physician and physician specialty tables

Payer Source

- Medicare fee-for-service
- Prescription Drug Plans (PDPs)

Data Source or Collection Instrument (Reference) S.25.

Not applicable

Level of Analysis S.26.

Clinician: Group/Practice
Health Plan
Integrated Delivery System
Population: State

Care Setting S.27.

Ambulatory Care: Clinician Office/Clinic
Behavioral Health/Psychiatric: Outpatient

Composite Performance Measure S.28.

Not applicable

Version Number and Effective Date

Version 3.0
January 1, 2013 – December 31, 2013

Measure Steward

Centers for Medicare & Medicaid Services (CMS)
Point of Contact: CMS Measures Management System, CMS.Measures.Inventory@hsag.com
Measure Developer: FMQAI, 5201 W. Kennedy Blvd., Suite 900, Tampa, Florida, 33609

Copyright/Disclaimer

Limited proprietary coding is contained in the measure specifications for user convenience. Use of these codes may require permission from the code owner or agreement to a license.

ICD-10 codes are copyright © World Health Organization (WHO), Fourth Edition, 2010. CPT © 2010 American Medical Association. CPT is a registered trademark of the American Medical Association. All rights reserved.

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