



## 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 #: 2608**

**Corresponding Measures:**

**De.2. Measure Title:** Diabetes Care for People with Serious Mental Illness: Hemoglobin A1c (HbA1c) Control (<8.0%)

**Co.1.1. Measure Steward:** National Committee for Quality Assurance

**De.3. Brief Description of Measure:** The percentage of patients 18-75 years of age with a serious mental and diabetes (type 1 and type 2) whose most recent HbA1c level during the measurement year is <8.0%.

**Note:** This measure is adapted from an existing health plan measure used in a variety of reporting programs for the general population (NQF #0575: Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control <8.0). This measure is endorsed by NQF and is currently stewarded by NCQA.

**1b.1. Developer Rationale:** The goal of this measure is to assess whether patients who have serious mental illness and diabetes receive adequate care for their diabetes. This measure specifically assesses HbA1c control among patients with serious mental illness and diabetes. The opportunity for quality improvement is to reduce the proportion of patients with serious mental illness and diabetes 18-75 years of age with HbA1c levels above 9.0%. This measure is important from a clinical perspective because the largest improvement in outcomes occurs by reduction of sugar levels in those patients with the highest glycohemoglobin levels. This measure is part of a group of measures developed to address situations where people with serious mental illness are at higher risk of condition or problem and where there is evidence of a disparity in receipt of evidence-based care compared to the general population.

High risk, link to poor outcomes for people with serious mental illness:

Evidence suggests that individuals with serious mental illness are at increased risk of developing diabetes due to higher instances of tobacco and alcohol use, poor nutrition/obesity and weight gain from the use of psychotropic medications (Parks, 2006; Newcomer, 2007). Individuals with serious mental illness were found to have a 70% greater chance of developing diabetes compared to the general population (Osborn, 2008). Additionally, people with mental illness have a higher risk of hospitalization for complications from diabetes (Mai, 2011). Despite these risks, people with serious mental illness are less likely to have annual A1c testing (Banta 2009; Mai, 2011).

Benefits of A1c testing and control:

This measure is important from a clinical perspective because the largest improvement in outcomes for diabetics occurs by reduction of sugar levels in those patients with the highest glycohemoglobin levels. Glycemic control is an important way to minimize the incidence of the microvascular complications of diabetes (ADA, 2013), including retinopathy (an important precursor to blindness), nephropathy (which precedes renal failure), and neuropathy (a significant cause of foot ulcers and amputation in patients with diabetes) (ADA, 2014). Reducing HbA1c blood level results by 1 percentage point helps reduce the risk of microvascular complications (eye, kidney and nerve diseases) by as much as 40 percent (CDC-b, 2011). Actuarial projections suggest that by 2031, a reduction of uncontrolled HbA1c by 10% could save \$39 billion due to avoided diabetes-related complications (Fitch, 2010). Additionally, models suggest that by 2031, a 50% improvement in diabetes management and control could reduce approximately 49,000 deaths associated with diabetes, the incidence of diabetes-related complications, and costs by \$196 billion (Fitch, 2010).

Citations:

American Diabetes Association (ADA). (2014) Standards of Medical Care in Diabetes. Guideline available from:

[http://care.diabetesjournals.org/content/37/Supplement\\_1/S14.full.pdf+html](http://care.diabetesjournals.org/content/37/Supplement_1/S14.full.pdf+html), accessed June 11, 2014.

American Diabetes Association (ADA). (2013). Economic Costs of Diabetes in the U.S. in 2012. Diabetes Care. 36(4); 1033–46. <http://care.diabetesjournals.org/content/36/4/1033.full>

Banta JE, Morrato EH, Lee SW, et al. (2009) Retrospective Analysis of Diabetes Care in California Medicaid Patients with Mental Illness. J Gen Intern Med. 24:802-8.

Centers for Disease Control and Prevention (CDC). (2011b) Diabetes Public Health Resource. 2011 National Diabetes Fact Sheet: National Estimates. [www.cdc.gov/diabetes/pubs/estimates11.htm#10](http://www.cdc.gov/diabetes/pubs/estimates11.htm#10) (June 19, 2013)

Fitch K, Iwasaki K, Pyenson, B. (2010) Improved management can help reduce the economic burden of type 2 diabetes: a 20-year actuarial projection. Milliman Client Report. Retrieved from: <http://publications.milliman.com/publications/health-published/pdfs/improved-management-can-help.pdf>. Accessed July 20, 2014.

Mai, Q., Holman, C.D., Sanfilippo, F.M., et al. (2011) Mental illness related disparities in diabetes prevalence, quality of care and outcomes: a population-based longitudinal study. BMC Medicine. 9:118.

Newcomer, JW, Hennekens CH. (2007) Severe Mental Illness and Risk of Cardiovascular Disease. JAMA. 298:1794–1796.

Osborn, D.P.J. et al. (2008). Relative risk of diabetes, dyslipidaemia, hypertension and the metabolic syndrome in people with severe mental illnesses: Systematic review and metaanalysis. BMC Psychiatry. 8:84 doi:10.1186/1471-244X-8-84

Parks, J, Svendsen D, Singer P et al. (2006) Morbidity and Mortality in People with Serious Mental Illness.” Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD). Available at <http://www.nasmhpd.org/docs/publications/MDCdocs/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf>

**S.4. Numerator Statement:** Patients whose most recent HbA1c level was less than 8.0% during the measurement year.

The outcome is an out of range result of an HbA1c test, indicating good control of diabetes. Good control reduces the risk for complications including renal failure, blindness, and neurologic damage. There is no need for risk adjustment for this intermediate outcome measure.

**S.6. Denominator Statement:** Patients 18-75 years as of December 31st of the measurement year with at least one acute inpatient visit or two outpatient visits for schizophrenia or bipolar I disorder, or at least one inpatient visit for major depression during the measurement year AND diagnosis of diabetes (type 1 and type 2) during the measurement year or the year before.

**S.8. Denominator Exclusions:** Patients who do not have a diagnosis of diabetes and who had a diagnosis of gestational or steroid-induced diabetes.

**De.1. Measure Type:** Outcome

**S.17. Data Source:** Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records

**S.20. Level of Analysis:** Health Plan

**IF Endorsement Maintenance – Original Endorsement Date:** Mar 06, 2015 **Most Recent Endorsement Date:** Mar 06, 2015

**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?** The percentage of patients 18-75 years of age with a serious mental and diabetes (type 1 and type 2) whose most recent HbA1c level during the measurement year is <8.0%.

Note: This measure is adapted from an existing health plan measure used in a variety of reporting programs for the general population (NQF #0575: Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control <8.0). This measure is endorsed by NQF and is currently stewarded by NCQA.

## 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

[EF\\_-\\_HbA1c\\_8-\\_072814.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.*

The goal of this measure is to assess whether patients who have serious mental illness and diabetes receive adequate care for their diabetes. This measure specifically assesses HbA1c control among patients with serious mental illness and diabetes. The opportunity for quality improvement is to reduce the proportion of patients with serious mental illness and diabetes 18-75 years of age with HbA1c levels above 9.0%. This measure is important from a clinical perspective because the largest improvement in outcomes occurs by reduction of sugar levels in those patients with the highest glycohemoglobin levels. This measure is part of a group of measures developed to address situations where people with serious mental illness are at higher risk of condition or problem and where there is evidence of a disparity in receipt of evidence-based care compared to the general population.

High risk, link to poor outcomes for people with serious mental illness:

Evidence suggests that individuals with serious mental illness are at increased risk of developing diabetes due to higher instances of tobacco and alcohol use, poor nutrition/obesity and weight gain from the use of psychotropic medications (Parks, 2006; Newcomer, 2007). Individuals with serious mental illness were found to have a 70% greater chance of developing diabetes compared to the general population (Osborn, 2008). Additionally, people with mental illness have a higher risk of hospitalization for complications from diabetes (Mai, 2011). Despite these risks, people with serious mental illness are less likely to have annual A1c testing (Banta 2009; Mai, 2011).

Benefits of A1c testing and control:

This measure is important from a clinical perspective because the largest improvement in outcomes for diabetics occurs by reduction of sugar levels in those patients with the highest glycohemoglobin levels. Glycemic control is an important way to minimize the incidence of the microvascular complications of diabetes (ADA, 2013), including retinopathy (an important precursor to blindness), nephropathy (which precedes renal failure), and neuropathy (a significant cause of foot ulcers and amputation in patients with diabetes) (ADA, 2014). Reducing HbA1c blood level results by 1 percentage point helps reduce the risk of microvascular complications (eye, kidney and nerve diseases) by as much as 40 percent (CDC-b, 2011). Actuarial projections suggest that by 2031, a reduction of uncontrolled HbA1c by 10% could save \$39 billion due to avoided diabetes-related complications (Fitch, 2010). Additionally, models suggest that by 2031, a 50% improvement in diabetes management and control could reduce approximately 49,000 deaths associated with diabetes, the incidence of diabetes-related complications, and costs by \$196 billion (Fitch, 2010).

Citations:

American Diabetes Association (ADA). (2014) Standards of Medical Care in Diabetes. Guideline available from: [http://care.diabetesjournals.org/content/37/Supplement\\_1/S14.full.pdf+html](http://care.diabetesjournals.org/content/37/Supplement_1/S14.full.pdf+html), accessed June 11, 2014.

American Diabetes Association (ADA). (2013). Economic Costs of Diabetes in the U.S. in 2012. *Diabetes Care*. 36(4); 1033–46. <http://care.diabetesjournals.org/content/36/4/1033.full>

Banta JE, Morrato EH, Lee SW, et al. (2009) Retrospective Analysis of Diabetes Care in California Medicaid Patients with Mental Illness. *J Gen Intern Med*. 24:802-8.

Centers for Disease Control and Prevention (CDC). (2011b) Diabetes Public Health Resource. 2011 National Diabetes Fact Sheet: National Estimates. [www.cdc.gov/diabetes/pubs/estimates11.htm#10](http://www.cdc.gov/diabetes/pubs/estimates11.htm#10) (June 19, 2013)

Fitch K, Iwasaki K, Pyenson, B. (2010) Improved management can help reduce the economic burden of type 2 diabetes: a 20-year actuarial projection. Milliman Client Report. Retrieved from: <http://publications.milliman.com/publications/health-published/pdfs/improved-management-can-help.pdf>. Accessed July 20, 2014.

Mai, Q., Holman, C.D., Sanfilippo, F.M., et al. (2011) Mental illness related disparities in diabetes prevalence, quality of care and outcomes: a population-based longitudinal study. *BMC Medicine*. 9:118.

Newcomer, JW, Hennekens CH. (2007) Severe Mental Illness and Risk of Cardiovascular Disease. *JAMA*. 298:1794–1796.

Osborn, D.P.J. et al. (2008). Relative risk of diabetes, dyslipidaemia, hypertension and the metabolic syndrome in people with severe mental illnesses: Systematic review and metaanalysis. *BMC Psychiatry*. 8:84 doi:10.1186/1471-244X-8-84

Parks, J, Svendsen D, Singer P et al. (2006) Morbidity and Mortality in People with Serious Mental Illness.” Alexandria, VA: National Association of State Mental Health Program Directors (NASMHPD). Available at <http://www.nasmhpd.org/docs/publications/MDCdocs/Mortality%20and%20Morbidity%20Final%20Report%208.18.08.pdf>

**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.*

Not Applicable – New Measure

**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.**

The limited available evidence among people with serious mental illness and diabetes reports on A1c testing rather than control. One study found that among Medicaid psychiatric patients with diabetes, only 47.3% received annual HbA1c testing (Banta, 2009). Another reported that 37.2% of patients with serious mental illness, compared to 42.9% of patients without serious mental illness, received a recommended HbA1c annual test (Mai, 2011). In general, patients with mental health illness received less ongoing diabetes monitoring and had higher risk for diabetes complications and diabetes-related mortality compared to non-mental health patients (Correll, 2010).

Citations:

Banta JE, Morrato EH, Lee SW, et al. (2009) Retrospective Analysis of Diabetes Care in California Medicaid Patients with Mental Illness. *J Gen Intern Med*. 24:802-8.

Correll CU, Druss BG, Lombardo I, et al. (2010) Findings of a U.S. National Cardiometabolic Screening Program Among 10,084 Psychiatric Outpatients. *Psychiatric Services*. 61:892–898.

Mai Q, Holman CD, Sanfilippo FM, et al. (2011) Mental illness related disparities in diabetes prevalence, quality of care and outcomes: a population-based longitudinal study. *BMC Medicine*. 9:118.

**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.

Our field test among 3 Medicaid health plans showed that 32.8% of people with serious mental illness and diabetes met the recommended HbA1c level of 8% for 2012, compared to 46.5% (among people with diabetes) in Medicaid plans, and 63.6% in Medicare plans that reported to NCQA.

More information on differences by age, gender and diagnosis are provided in the testing results. We were unable to assess differences by race/ethnicity or language needs in our field test because health plans did not consistently capture this information.

**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**

## 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, Endocrine : Diabetes

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

Disparities Sensitive

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

Populations at Risk, Populations at Risk : Dual eligible beneficiaries, Populations at Risk : Individuals with multiple chronic conditions

**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.)

Not Applicable

**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: 2608\_Diabetes\_SMI\_HbA1c\_8.0\_Value\_Sets.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.

No

**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.

Not Applicable

**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).*

Patients whose most recent HbA1c level was less than 8.0% during the measurement year.

The outcome is an out of range result of an HbA1c test, indicating good control of diabetes. Good control reduces the risk for complications including renal failure, blindness, and neurologic damage. There is no need for risk adjustment for this intermediate outcome measure.

**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).*

**ADMINISTRATIVE CLAIMS:** Use codes (HbA1c Tests Value Set) to identify the most recent HbA1c test during the measurement year. The patient is numerator compliant if the most recent HbA1c level is <8.0%. The patient is not numerator compliant if the result for the most recent HbA1c test is =8.0% or is missing a result, or if an HbA1c test was not done during the measurement year.

Organizations that use CPT Category II codes to identify numerator compliance for this indicator must search for all codes in the following value sets and use the most recent code during the measurement year to evaluate whether the patient is numerator compliant.

#### VALUE SET / NUMERATOR COMPLIANCE

HbA1c Level Less Than 7.0 Value Set / Compliant

HbA1c Level 7.0–9.0 Value Set / Not compliant

HbA1c Level Greater Than 9.0 Value Set / Not compliant

**MEDICAL RECORD:** At a minimum, documentation in the medical record must include a note indicating the date when the HbA1c test was performed and the result. The patient is numerator compliant if the result for the most recent HbA1c level during the measurement year is <8.0%. The patient is not numerator compliant if the result for the most recent HbA1c test is =8.0% or is missing a result, or if an HbA1c test was not done during the measurement year.

Ranges and thresholds do not meet criteria for this measure. A distinct numeric result is required for numerator compliance.

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

Patients 18-75 years as of December 31st of the measurement year with at least one acute inpatient visit or two outpatient visits for schizophrenia or bipolar I disorder, or at least one inpatient visit for major depression during the measurement year AND diagnosis of diabetes (type 1 and type 2) during the measurement year or the year before.

**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).

Age: 18-75 years as of December 31 of the measurement year

Benefit: Medical

Continuous Enrollment: No more than one gap in enrollment of up to 45 days during the measurement year. To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the individual may not have more than a 1-month gap in coverage (i.e., an individual whose coverage lapses for 2 months [60 days] is not considered continuously enrolled).

All patients 18-75 years of age as of December 31 of the measurement year with a serious mental illness [see SMI Value Set] and diabetes (type 1 and type 2) [see Diabetes Value Set]

The following steps should be followed to identify adults with a serious mental illness and a diagnosis for diabetes:

(1) Identify Serious Mental Illness

Step 1: Identify adults with a serious mental illness. They must meet at least one of the following criteria during the measurement year or the year prior:

At least one acute inpatient claim/encounter with any diagnosis of schizophrenia, bipolar I disorder, or major depression using any of the following code combinations:

BH Stand Alone Acute Inpatient Value Set with one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set
- Major Depression Value Set

BH Acute Inpatient Value Set with BH Acute Inpatient POS Value Set and one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set
- Major Depression Value Set

At least two visits in an outpatient, intensive outpatient, partial hospitalization, ED or non-acute inpatient setting, on different dates of service, with any diagnosis of schizophrenia or bipolar I disorder. Any two of the following code combinations meet criteria:

BH Stand Alone Outpatient/PH/IOP Value Set with one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set

BH Outpatient/PH/IOP Value Set with BH Outpatient/PH/IOP POS Value Set and one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set

ED Value Set with one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set

BH ED Value Set with BH ED POS Value Set and one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set

BH Stand Alone Nonacute Inpatient Value Set with one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set

BH Nonacute Inpatient Value Set with BH Nonacute Inpatient POS Value Set and one of the following diagnoses:

- Schizophrenia Value Set
- Bipolar Disorder Value Set



(2) Identify Diabetes

Step 2: Of the adults identified in Step 1, identify adults with diabetes (see Diabetes Value Set) during the measurement year or the year prior using the following data:

- At least one acute inpatient encounter (Acute Inpatient Value Set) with a diagnosis of diabetes (Diabetes Value Set) without telehealth (Telehealth Modifier Value Set; Telehealth POS Value Set).
- At least two outpatient visits (Outpatient Value Set), observation visits (Observation Value Set), ED visits (ED Value Set) or nonacute inpatient encounters (Nonacute Inpatient Value Set), on different dates of service, with a diagnosis of diabetes (Diabetes Value Set). Visit type need not be the same for the two encounters.

Only include nonacute inpatient encounters (Nonacute Inpatient Value Set) without telehealth (Telehealth Modifier Value Set; Telehealth POS Value Set).

Only one of the two visits may be a telehealth visit, a telephone visit or an online assessment. Identify telehealth visits by the presence of a telehealth modifier (Telehealth Modifier Value Set) or the presence of a telehealth POS code (Telehealth POS Value Set) associated with the outpatient visit. Use the code combinations below to identify telephone visits and online assessments:

- A telephone visit (Telephone Visits Value Set) with any diagnosis of diabetes (Diabetes Value Set).
- An online assessment (Online Assessments Value Set) with any diagnosis of diabetes (Diabetes Value Set).

Pharmacy data:

- Patients who were dispensed insulin or hypoglycemics/ antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (see Table 1)

Both methods to identify the eligible population should be used, however, an individual need only be identified by one to be included in the measure.

TABLE 1. PRESCRIPTIONS TO IDENTIFY PATIENTS WITH DIABETES

Alpha-glucosidase inhibitors:

Acarbose, Miglitol

Amylin analogs:

Pramlintide

Antidiabetic combinations:

- Alogliptin-metformin
- Alogliptin-pioglitazone
- Canagliflozin-metformin
- Dapagliflozin-metformin
- Empagliflozin-linagliptin
- Empagliflozin-metformin
- Glimepiride-pioglitazone
- Glimepiride-rosiglitazone
- Glipizide-metformin
- Glyburide-metformin
- Linagliptin-metformin
- Metformin-pioglitazone
- Metformin-repaglinide
- Metformin-rosiglitazone
- Metformin-saxagliptin
- Metformin-sitagliptin
- Sitagliptin-simvastatin

Insulin:

- Insulin aspart



- Insulin aspart-insulin aspart protamine
- Insulin degludec
- Insulin detemir
- Insulin glargine
- Insulin glulisine
- Insulin isophane human
- Insulin isophane-insulin regular
- Insulin lispro
- Insulin lispro-insulin lispro protamine
- Insulin regular human
- Insulin human inhaled

**Meglitinides:**

Nateglinide, Repaglinide

**Glucagon-like peptide-1 (GLP1) agonists**

Dulaglutide, Exenatide, Liraglutide, Albiglutide

**Sodium glucose cotransporter 2 (SGLT2) inhibitors:**

Canagliflozin, Dapagliflozin, Empagliflozin

**Sulfonylureas:**

- Chlorpropamide
- Glimepiride
- Glipizide
- Glyburide
- Tolazamide
- Tolbutamide

**Thiazolidinediones:**

Pioglitazone, Rosiglitazone

**Dipeptidyl peptidase-4 (DDP-4) inhibitors:**

Alogliptin, Linagliptin, Saxagliptin, Sitagliptin

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

Patients who do not have a diagnosis of diabetes and who had a diagnosis of gestational or steroid-induced diabetes.

**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.)*

Patients who do not have a diagnosis of diabetes (see Diabetes Value Set), in any setting, during the measurement year or year prior to the measurement year and who had a diagnosis of gestational diabetes or steroid-induced diabetes (see Diabetes Exclusions Value Set), in any setting, during the measurement year or the year prior to the measurement year.

**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.)*

Not applicable

**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 = Higher 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 1: Identify patients with serious mental illness.

Step 2: Identify patients from step 1 who also have a diagnosis of diabetes during the measurement year or the year prior.

Step 3: Exclude patients who meet the exclusion criteria as specified in the "Denominator Exclusion Details" section. This is the denominator.

Step 4: Identify patients with a most recent HbA1c test performed.

Step 5: Identify patients whose result was <8.0%. This is the numerator.

Step 6: Calculate the rate by dividing the numerator (step 5) by the denominator (Step 3 after exclusion).

**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.

Not applicable

**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.

Not applicable

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

If other, please describe in S.18.

Claims, Electronic Health Data, Electronic Health Records, Paper Medical Records

**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.

The denominator for this measure is based on claim/encounter and pharmacy data. The numerator for this measure is based on claim/encounter data and medical record documentation collected in the course of providing care to health plan patients.

**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)

Outpatient Services

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.*)

Not applicable

**2. Validity – See attached Measure Testing Submission Form**

[TF\\_-\\_HBA1c\\_8-\\_072814-635473466446969418.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.**

Generated or collected by and used by healthcare personnel during the provision of care (e.g., blood pressure, lab value, diagnosis, depression score), Coded by someone other than person obtaining original information (e.g., DRG, ICD-9 codes on claims), Abstracted from a record by someone other than person obtaining original information (e.g., chart abstraction for quality measure or registry)

If other:

**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**.

[Some data elements are in defined fields in electronic sources](#)

**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).

To allow for widespread reporting across health plans and health care practices, this measure is collected through multiple data sources (administrative data, electronic clinical data, and paper records). We anticipate as electronic health records become more widespread the reliance on paper record review will decrease.

This measure is based on an existing measure for the general population of people with diabetes (Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%) NQF #0575) and is used in the CMS EHR Incentive ("Meaningful Use") program. Thus, similar data elements are already being captured from electronic sources and this supports the feasibility of implementing this measure in EHRs in the future.

**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.

This measure uses a combination of administrative claims data and medical records. The successful data collection of the proposed measure in field test and the use of the original measure for the general population in HEDIS (Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (8.0%) NQF #0575) supports the feasibility of this data collection strategy.

While this measure currently relies on chart review data collection, the effort could be reduced if this measure is implemented in conjunction with the Preventive Screening and Monitoring of Chronic Conditions for People with Behavioral Health Conditions suite of measures we are bringing forward to NQF. In that case, a single record review could provide information on multiple measures.

**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).**

Broad public use and dissemination of these measures is encouraged and NCQA has agreed with NQF that noncommercial uses do not require the consent of the measure developer. Use by health care physicians in connection with their own practices is not commercial use. Commercial use of a measure requires the prior written consent of NCQA. As used herein, "commercial use" refers to any sale, license or distribution of a measure for commercial gain, or incorporation of a measure into any product or service that is sold, licensed or distributed for commercial gain, even if there is no actual charge for inclusion of the measure.

## **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)
Public Reporting	
Regulatory and Accreditation Programs	
Quality Improvement (Internal to the specific organization)	

**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

**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?)**

Not applicable.

**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.)**

This measure is intended for use by health plans, and other stakeholders to monitor and improve quality of care. Stakeholder input (described in detail in the testing form) supported this measure for public reporting and quality improvement.

**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.

NA

**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.**

NA

**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.

NA

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

NA

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

NA

**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.**

NA

#### 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.

Not applicable.

#### 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.**

Not applicable.

**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.

Yes

**5.1a. List of related or competing measures (selected from NQF-endorsed measures)**

0575 : Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%)

**5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.**

#### 5a. Harmonization of Related Measures

The measure specifications are harmonized with related measures;

OR

The differences in specifications are justified

**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?**

Yes

**5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on**

**interpretability and data collection burden.**

This measure was adapted from the existing measure (Comprehensive Diabetes Care: Hemoglobin A1c (HbA1c) Control (<8.0%):NQF #0575) for the subpopulation of people with serious mental illness who have a higher risk of disease and for whom there is evidence of disparity in treatment compared to the general population. The numerator of this measure is consistent with the measure used for the general population while the denominator has been adapted to focus on individuals with serious mental illness. NCQA is the current owner and steward of the existing NQF-endorsed measure and the specifications are harmonized. Building on this existing measure helps to reduce the burden of implementation for organizations and to align incentives for providers and organizations to focus on key quality of care issues.

**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.

**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.)**

Not applicable.

**Appendix**

**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.

No appendix Attachment:

**Contact Information**

**Co.1 Measure Steward (Intellectual Property Owner):** National Committee for Quality Assurance

**Co.2 Point of Contact:** Bob, Rehm, [nqf@ncqa.org](mailto:nqf@ncqa.org), 202-955-1728-

**Co.3 Measure Developer if different from Measure Steward:** National Committee for Quality Assurance

**Co.4 Point of Contact:** Kristen, Swift, [Swift@ncqa.org](mailto:Swift@ncqa.org), 202-955-5174-

**Additional Information**

**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.**

Behavioral Health Quality Measurement Technical Expert Panel

Francisca Azocar, PhD., OptumHealth Behavioral Solutions

Bruce Bagley, M.D., TransforMED

Jonathan Delman, J.D., M.P.H., Ph.D., University of Massachusetts Medical School, Department of Psychiatry

Frank Ghinassi, Ph.D., Western Psychiatric Institute

Renata Henry, Danya Institute

Michael Hogan, Ph.D., Independent Advisor

Kevin Huckshorn, Ph.D., R.N., CADIC, Division of Substance Abuse and Mental Health

Dan Rome, M.D., Rome Healthcare Consulting

Kathleen McCann, Ph.D., R.N., National Association of Psychiatric Health Systems

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David Kelley, M.D., M.P.A., Pennsylvania Department of Public Welfare

Neil Korsen, M.D., M.S., MaineHealth, Behavioral Health Integration Program

Judy Mohr Peterson, Ph.D, Oregon Health Authority



Larry Grab, Anthem Blue Cross and Blue Shield, Empire BlueCross BlueShield  
Keris Myrick, Ph.D, M.B.A, M.S., Project Return Peer Support Network  
Alisa Busch, M.D., M.S., McLean Hospital

**Measure Developer/Steward Updates and Ongoing Maintenance**

**Ad.2 Year the measure was first released:** 2014

**Ad.3 Month and Year of most recent revision:** 07, 2014

**Ad.4 What is your frequency for review/update of this measure?** Every 3 years or sooner if the clinical guidelines have changed significantly.

**Ad.5 When is the next scheduled review/update for this measure?** 12, 2015

**Ad.6 Copyright statement:** © [2014] by the National Committee for Quality Assurance

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**Ad.8 Additional Information/Comments:** Publication of each Measure is to be accompanied by the following notice:

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