

National Quality Forum (NQF) Measure #0059: Why Is It Important?

Agency for Healthcare Research and Quality (AHRQ) Measure Summary

[National Quality Measures Clearinghouse](#)

Title

Comprehensive diabetes care: Percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) whose most recent hemoglobin A1c (HbA1c) level is greater than 9 percent (poorly controlled).

Sources

National Committee for Quality Assurance (NCQA). HEDIS 2014: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2013. various p.

National Committee for Quality Assurance (NCQA). HEDIS 2014: Healthcare Effectiveness Data and Information Set. Vol. 2, technical specifications for health plans. Washington (DC): National Committee for Quality Assurance (NCQA); 2013. various p.

Measure Domain

Primary measure domain - clinical quality measures: outcome.

Secondary measure domain - does not apply to this measure.

Brief Abstract

Description

This measure is used to assess the percentage of members 18 to 75 years of age with diabetes (type 1 and type 2) whose most recent hemoglobin A1c (HbA1c) level is greater than 9 percent (poorly controlled).

This measure is a component of the comprehensive diabetes care composite measure—one of 10 different rates—looking at how well an organization cares for the common and serious chronic disease of diabetes.



The denominator for all rates must be the same, with the exception of HbA1c control (less than 7.0 percent) for a selected population.

Note from the National Quality Measures Clearinghouse (NQMC):

- For this measure, there are both administrative and hybrid specifications. This NQMC measure summary is based on the administrative specification. Refer to the original measure documentation for details pertaining to the hybrid specification.
- Measure specifications reference value sets that must be used for HEDIS reporting. In this NQMC measure summary, value set references are capitalized and underlined. A value set is the complete set of codes used to identify the service or condition included in the measure. Refer to the original measure documentation for the Value Set Directory.

Rationale

Diabetes is one of the most costly and highly prevalent chronic diseases in the United States. Approximately 20.8 million Americans have diabetes, and half these cases are undiagnosed. Complications from the disease cost the country nearly \$100 billion annually. In addition, diabetes accounts for nearly 20 percent of all deaths in people over 25. Many complications, such as amputation, blindness and kidney failure, can be prevented if detected and addressed in the early stages.

Evidence for Rationale

- Centers for Disease Control and Prevention (CDC). National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2005. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (CDC); 2005. 10 p.
- National Committee for Quality Assurance (NCQA). HEDIS 2014: Healthcare Effectiveness Data and Information Set. Vol. 1, narrative. Washington (DC): National Committee for Quality Assurance (NCQA); 2013. various p.

Primary Health Components

Diabetes; hemoglobin A1c (HbA1c) testing.

Denominator Description

Members 18 to 75 years of age as of Dec. 31 of the measurement year with diabetes (type 1 and type 2) (see the related "Denominator Inclusions/Exclusions" field).

Numerator Description



Use codes to identify the most recent hemoglobin A1c (HbA1c) test during the measurement year. The member is numerator compliant if the most recent HbA1c level is greater than 9 percent or is missing a result, or if an HbA1c test was not done during the measurement year (see the related "Numerator Inclusions/Exclusions" field).

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

- A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences.
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal.

Additional Information Supporting Need for the Measure

- As the seventh leading cause of death in the U.S, diabetes kills nearly 70,000 people a year. Diabetes is a group of diseases marked by high blood glucose levels, resulting from the body's inability to produce or use insulin. Especially when unmanaged, diabetes can cause serious health complications, including heart disease and stroke, hypertension, blindness, kidney disease, nervous system disease, amputations, dental disease and pregnancy complications.
- Nearly 26 million people in the U.S.—8.3 percent of the population—have diabetes. Of those, 7 million are undiagnosed.
- Type 2 diabetes is the most common form of diabetes, accounting for 90 to 95 percent of all cases, and is often associated with older age and obesity.
- A healthy meal plan and exercise program; losing excess weight; and insulin and oral medication to lower blood glucose levels are critical components of treating and managing diabetes. Patient education and self-care are also important to help people with diabetes lead normal lives.
- In 2012, diabetes cost the U.S. an estimated \$245 billion: \$176 billion in direct medical costs and \$69 billion in reduced productivity. This is a 41 percent increase from the estimated \$174 billion spent on diabetes in 2007.
- On average, people with diagnosed diabetes spend approximately twice as much on medical expenses than those without diabetes. Average medical expenditures incurred by people with diabetes are about \$13,700 per year, \$7,900 of which is directly attributed to their diabetes.
- If current trends continue, the Centers for Disease Control and Prevention (CDC) estimates that one in three U.S. adults could have diabetes by 2050.
- With support from health care providers and others, people with diabetes can reduce their risk of serious complications by controlling their levels of blood glucose, their blood pressure and their blood lipids and by receiving preventive



screenings in a timely manner. Studies have shown the following benefits of properly managing diabetes:

- Reducing A1c blood test results by 1 percentage point (e.g., from 8 percent to 7 percent) reduces the risk of microvascular complications (eye, kidney and nerve diseases) by as much as 40 percent.
- Blood pressure control reduces the risk of cardiovascular disease by as much as 50 percent and the risk of microvascular complications by 33 percent.
- Improved LDL cholesterol control reduces cardiovascular complications by as much as 50 percent.

Evidence for Additional Information Supporting Need for the Measure

- American Diabetes Association. Diabetes basics. [internet]. Alexandria (VA): American Diabetes Association (ADA); 2013 [accessed 2013 Jun 19].
- American Diabetes Association. Economic costs of diabetes in the U.S. in 2012. *Diabetes Care*. 2013 Apr; 36(4):1033-46.
- Centers for Disease Control and Prevention (CDC). Diabetes public health resource. 2011 national diabetes fact sheet: general information. [internet]. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2011 [accessed 2013 Jun 19].
- Centers for Disease Control and Prevention (CDC). Diabetes public health resource. 2011 national diabetes fact sheet: national estimates. [internet]. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2011 [accessed 2013 Jun 19].
- Centers for Disease Control and Prevention (CDC). FastStats: deaths and mortality. [internet]. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2013 [accessed 2013 Jun 19].
- Centers for Disease Control and Prevention (CDC). National diabetes fact sheet: national estimates and general information on diabetes and prediabetes in the United States, 2011. Atlanta (GA): U.S. Department of Health and Human Services, Centers for Disease Control and Prevention; 2011. 12 p.
- Centers for Disease Control and Prevention. CDC features. Get the facts on diabetes. [internet]. Atlanta (GA): Centers for Disease Control and Prevention; 2011 [accessed 2013 Jun 19].
- Mayo Clinic. Type 2 diabetes. [internet]. Scottsdale (AZ): Mayo Clinic; 2013 [accessed 2013 Jun 19].
- National Committee for Quality Assurance (NCQA). Improving quality and patient experience. The state of health care quality 2013. Washington (DC): National Committee for Quality Assurance (NCQA); 2013 Oct. 203 p.



Denominator Inclusions/Exclusions

Inclusions

Members 18 to 75 years of age as of Dec. 31 of the measurement year with diabetes (type 1 and type 2).

Note:

- Members must have been continuously enrolled during the measurement year.
- Allowable gap: No more than one gap in continuous enrollment of up to 45 days during the measurement year (commercial, Medicare). To determine continuous enrollment for a Medicaid beneficiary for whom enrollment is verified monthly, the member may not have more than a one-month gap in coverage.
- There are two ways to identify members with diabetes: by claim/encounter data and by pharmacy data. The organization must use both to identify the eligible population, but a member only needs to be identified by one method to be included in the measure. Members may be identified as having diabetes during the measurement year or the year prior to the measurement year.
- Claim/encounter data: Members met any of the following criteria during the measurement year or the year prior to the measurement year (count services that occur over both years):
 - At least two outpatient visits (outpatient value set), observation visits (observation 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 visits.
 - At least one acute inpatient encounter (acute inpatient value set) with a diagnosis of diabetes (diabetes value set).
 - At least one emergency department (ED) visit (ED value set) with a diagnosis of diabetes (diabetes value set).
- Pharmacy data: Members who were dispensed insulin or hypoglycemics/antihyperglycemics on an ambulatory basis during the measurement year or the year prior to the measurement year (refer to table CDC-A in the original measure documentation for prescriptions to identify members with diabetes).

Exclusions

Identify members who do not have a diagnosis of diabetes (diabetes value set), in any setting, during the measurement year or year prior to the measurement year and who meet either of the following criteria:



- A diagnosis of polycystic ovaries (polycystic ovaries value set), in any setting, any time during the member's history through Dec. 31 of the measurement year (optional).
- A diagnosis of gestational diabetes or steroid-induced diabetes (gestational or steroid – **induced diabetes value set**), in any setting, during the measurement year or the year prior to the measurement year (optional).

Note: Organizations that apply optional exclusions must exclude members from the denominator for all indicators in the composite measure.

