Diabetes: Foot Exam (NQF 0056)

EMeasure Name	Diabetes: Foot Exam	EMeasure Id	Pending
Version Number	1	Set Id	Pending
Available Date	No information	Measurement Period	January 1, 20xx through December 31, 20xx
Measure Steward	National Committee for Quality Assurance		
Endorsed by	National Quality Forum		
Description	The percentage of patients aged 18-75 years with diabetes (type 1 or type 2) who had a foot exam (visual inspection, sensory exam with monofilament, or pulse exam).		
Measure scoring	Proportion		
Measure type	Process		
Rationale	This measure assesses the percentage of patients in a specific age demographic who were diagnosed with type 1 or type 2 diabetes and who had a foot exam performed. Diabetes mellitus (diabetes) is a group of diseases characterized by high blood glucose levels caused by the body's inability to correctly produce or utilize the hormone insulin. It is recognized as a leading cause of death and disability in the U.S. and is highly underreported as a cause of death. Diabetes of either type may cause life-threatening, life-ending or life-altering complications, including poor circulation, nerve damage or neuropathy in the feet and eventual amputation. Nearly 60%–70% of diabetics suffer from mild or severe nervous system damage. The consensus among established clinical guidelines is that patients with both types of diabetes should have a foot exam soon after diagnosis and annually thereafter (ADA 2009). Comprehensive foot care programs can lower amputation rates by 45%–85%. This measure facilitates the prevention and long-term management of lower extremity-based complications for patients diagnosed with diabetes.		
Clinical Recommendation Statement	American Diabetes Association Guidelines/ Recommendations: Perform annual comprehensive foot examination to identify risk factors predictive of ulcers and amputations. The foot examination should include inspection, assessment of foot pulses, and testing for loss of protective sensation (10-g monofilament plus testing any one of: vibration using 128-Hz tuning fork, pinprick sensation, ankle reflexes, or vibration perception threshold).		
References	America Diabetes Association. Executive Summary: Standards of Medical Care in Diabetes—2009. <i>Diabetes Care January 2009 32:S6-S12; doi:10.2337/dc09-S006</i>		
Definitions			

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Please refer to the spreadsheet for this measure for detail regarding data criteria and code lists.

Population criteria

Initial Patient Population =

AND: "Patient characteristic: birth date" (age) >=17 years and <=74 years to capture all
patients who will reach the ages between 18 and 75 years during the "measurement
period";

• Denominator =

- o AND: All patients in the initial patient population;
- o AND:
 - OR: "Medication dispensed: medications indicative of diabetes" <= 2 years before or simultaneously to "measurement end date";
 - OR: "Medication order: medications indicative of diabetes" <= 2 years before or simultaneously to "measurement end date";
 - OR: "Medication active: medications indicative of diabetes" <= 2 years before or simultaneously to "measurement end date";
 - OR:
- AND: "Diagnosis active: diabetes" <= 2 years before or simultaneously to "measurement end date";
- AND:
 - OR: >=1 count(s) of "Encounter: encounter acute inpatient or ED";
 - OR: >=2 count(s) of "Encounter: encounter non-acute inpt, outpatient, or ophthalmology" occurring on 2 different dates;

• Numerator =

AND: "Procedure performed: foot exam";

Exclusions =

- o OR:
 - AND: "Diagnosis active: polycystic ovaries";
 - AND NOT:
 - AND: "Diagnosis active: diabetes" <= 2 years before or simultaneously to "measurement end date";
 - AND:
 - OR: "Encounter: encounter acute inpatient or ED" <=2 years before or simultaneously to "measurement end date";

 OR: "Encounter: encounter non-acute inpt, outpatient, or ophthalmology" <= 2 years before or simultaneously to "measurement end date";

o OR:

AND:

- OR: "Diagnosis active: gestational diabetes" <= 2 years before or simultaneously to "measurement end date";
- OR: "Diagnosis active: steroid induced diabetes" <= 2 years before or simultaneously to "measurement end date";

AND:

- OR: "Medication order: medications indicative of diabetes" <= 2 years before or simultaneously to "measurement end date";
- OR: "Medication dispensed: medications indicative of diabetes" <=2
 years before or simultaneously to "measurement end date";
- OR: "Medication active: medications indicative of diabetes" <= 2 years before or simultaneously to "measurement end date";

AND NOT:

- AND: "Diagnosis active: diabetes" <=2 years before or simultaneously to "measurement end date";
- AND:
 - OR: "Encounter: Encounter acute inpatient or ED" <= 2 years before or simultaneously to "measurement end date";
 - OR: "Encounter: encounter non-acute inpt, outpatient, or ophthalmology" <= 2 years before or simultaneously to "measurement end date";

Data criteria (QDS Data Elements)

• Initial Patient Population =

 "Patient characteristic: birth date" using "birth date code list" before the "measurement period";

• Denominator =

- "Diagnosis active: diabetes" using "diabetes code list grouping" before or simultaneously to the "measurement end date";
- "Encounter: encounter acute inpatient or ED" using "encounter acute inpatient or ED code list grouping" during the "measurement period";

- "Encounter: encounter non-acute inpt, outpatient, or ophthalmology" using "encounter non-acute inpt, outpatient, or ophthalmology code list grouping" during the "measurement period";
- "Medication order: medications indicative of diabetes" using "medications indicative of diabetes code list grouping" before or simultaneously to the "measurement end date";
- "Medication dispensed: medications indicative of diabetes" using "medications indicative of diabetes code list grouping" before or simultaneously to the "measurement end date";
- o "Medication active: medications indicative of diabetes" using "medications indicative of diabetes code list grouping" before or simultaneously to the "measurement end date";

Numerator =

 "Procedure performed: foot exam" using "foot exam code list" during the "measurement period";

Exclusions =

- "Diagnosis active: polycystic ovaries" using "polycystic ovaries code list grouping" before or simultaneously to the "measurement end date";
- "Diagnosis active: gestational diabetes" using "gestational diabetes code list grouping" before or simultaneously to the "measurement end date";
- "Diagnosis active: steroid induced diabetes" using "steroid induced diabetes code list grouping" before or simultaneously to the "measurement end date";

Summary calculation

Calculation is generic to all measures:

- Calculate the final denominator by adding all that meet denominator criteria.
- Subtract from the final denominator all that do not meet numerator criteria yet also meet exclusion criteria. Note some measures do not have exclusion criteria.
- The performance calculation is the number meeting numerator criteria divided by the final denominator.
- For measures with multiple patient populations, repeat this process for each patient population and report each result separately.
- For measures with multiple numerators, calculate each numerator separately within each population using the paired exclusion.