Diabetes: LDL Management & Control (NQF 0064)

EMeasure Name	Diabetes: LDL Management & Control	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 18–75 years of age with diabetes (type 1 or type 2) who had LDL-C <100mg/dL.		
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 demonstrate poor low-density lipoprotein (LDL) cholesterol levels. 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 cholesterol, specifically LDL. Clinical guidelines recommend lifestyle modifications that include reducing intake of saturated fat, trans fat and cholesterol; weight loss; and increased physical activity (ADA 2009). Statin therapy is suggested for eligible patients whose levels are consistently and significantly higher (ADA 2009). This measure facilitates long-term management of LDL cholesterol levels for patients diagnosed with diabetes.		
Clinical Recommendation Statement	American Diabetes Association: In most adult patients, measure fasting lipid profile at least annually. In adults with low-risk lipid values (LDL cholesterol <100 mg/dl, HDL cholesterol >50 mg/dl, and triglycerides <150 mg/dl), lipid assessments may be repeated every 2 years. ACE/AACE: Aggressive management of dyslipidemia in patients with diabetes mellitus is critical; treat patients to achieve the following goal: LDL-C <100 mg/dL (<70 mg/dL is recommended for patients with diabetes mellitus and coronary artery disease).		
References	Standards of Medical Care in Diabetes—2009. Diabetes Care January 2009 32:S6-S12; doi:10.2337/dc09-S006 AACE Medical Guidelines for Clinical Practice for the Management of Diabetes Mellitus. Endocrine Practice Vol 13 (Suppl 1) May/June 2007		
Definitions			

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- Summary calculation

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

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Population criteria

- **Initial Patient Population =**

    o 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 1=**

    o AND: "Laboratory test result: LDL test";

- **Numerator 2=**

    o AND: "Laboratory test result: LDL test", value < 100 mg/dL;

- **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 =**

  o "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";
  - "Medication active: medications indicative of diabetes" using "medications indicative of diabetes code list grouping" before or simultaneously to the "measurement end date";

- **Numerator =**

  - "Laboratory test result: LDL test" using "LDL test code list grouping" 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.

Measure set	CLINICAL QUALITY MEASURE SET 2011-2012