

Health Benchmarks® Program

Clinical Quality Indicator Specification 2011

Measure Title	LDL FOR DIABETES		
Disease State	Diabetes	Indicator Classification¹	Disease Monitoring
Strength of Recommendation²	B (for most adults with diabetes) C (for adults with low-risk lipid values [LDL < 100 mg/dl, HDL > 50 mg/dl, and triglycerides <150 mg/dl])		
Organizations Providing Recommendation	American Diabetes Association		
Clinical Intent	To ensure that all members with diabetes receive LDL monitoring at least annually.		
Background	<p>Disease Burden</p> <ul style="list-style-type: none"> • In 2007, it was estimated that 24 million Americans have diabetes[1, 2] • This disease is the leading cause of new cases of blindness among adults aged 20-74, the leading cause of end-stage renal disease, and a major contributing cause of lower extremity amputations,[3-5] and is responsible for over 200,000 deaths each year. • About 65% of patients with diabetes die from cardiovascular events.[6] <p>Reason for Indicated Intervention or Treatment</p> <ul style="list-style-type: none"> • Diabetes is a major risk factor for cardiovascular disease, and is considered to be a coronary heart disease (CHD) equivalent in terms of risk stratification for cholesterol management.[7-10] • Lipid screening in patients with diabetes is essential for treatment decisions. <p>Evidence Supporting Intervention or Treatment</p> <ul style="list-style-type: none"> • A meta-analysis of 12 large randomized trials evaluating lipid lowering drug treatment found that diabetics on primary prevention therapy had a 21% risk reduction in major coronary events (i.e., coronary artery disease death, non-fatal myocardial infarction, or myocardial revascularization procedures).[11] <p>A randomized control trial comparing the use of atorvastatin lipid-lowering therapy for type 2 diabetics found a 36% reduction in coronary events, 31% reduction in coronary revascularization procedures, and a 48% reduction in stroke compared to those on placebo.[12]</p>		
Clinical Recommendations	<ul style="list-style-type: none"> • The American Diabetes Association (ADA) and NCEP-ATP-III guidelines both recommend that all adults with diabetes be managed to achieve an LDL cholesterol < 100 mg/dl. For diabetics with CAD, it is recommended 		

that LDL cholesterol be <70mg/dL.[8, 13] ADA recommends that patients receive lipid monitoring at least yearly, and more often if needed to manage care.[2, 13]

- The ADA’s Standards of medical care in diabetes recommends that adults with diabetes be tested at least annually for lipid disorders, and more often if needed to achieve desired lipid levels, but that in adults with low-risk lipid values (low-density lipoprotein [LDL] cholesterol <100 mg/dL, high-density lipoprotein [HDL] cholesterol >50 mg/dL, and triglycerides <150 mg/dL), lipid assessments may be repeated every 2 years.[14]
- According to the ADA, adults with low-risk lipid values (LDL < 100 mg/dL, HDL > 50 mg/dL, triglycerides < 150 mg/dL) should get checked every 2 years.[15]

Source Healthcare Effectiveness Data and Information Set (HEDIS®) 2011 Technical Specification for Physician Measurement

Denominator

Denominator Definition Continuously enrolled members ages 18-75 years by the end of the measurement year who were identified as having diabetes during the measurement year or year prior.

Denominator Index Date N/A

Denominator Encounters/Claims Criteria CPT-4 code(s): 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99221-99223, 99231-99233, 99238, 99239, 99241-99245, 99251-99255, 99281-99285, 99291, 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456

ICD-9 diagnosis code(s): 250.xx, 357.2x, 362.0x, 366.41, 648.0x

UB revenue code(s): 010x, 0110-0114, 0118, 0119, 0120-0124, 0128, 0129, 0130-0134, 0138, 0139, 0140-0144, 0148, 0149, 0150-0154, 0158, 0159, 016x, 019x, 020x-021x, 045x, 051x, 0520-0529, 055x, 057x-059x, 066x, 072x, 080x, 082x-085x, 088x, 0981, 0982, 0983, 0987

Denominator Exclusion

Denominator Exclusion Definition Members in the denominator with a diagnosis of polycystic ovaries at any time prior to the end of the measurement year who did **NOT** have a face-to-face encounter with a diagnosis of diabetes in any setting during the measurement year or year prior or members diagnosed with gestational diabetes or steroid-induced diabetes during the measurement year or year prior who did **NOT** have a face-to-face encounter with a diagnosis of diabetes in any setting during the measurement year or year prior.

Note: The denominators for all adult diabetes care measures must be the same.

(NCQA)

Denominator Exclusion Claims Criteria CPT-4 code(s): 92002-92014, 99201-99205, 99211-99215, 99217-99220, 99221-99223, 99231-99233, 99238, 99239, 99241-99245, 99251-99255, 99281-99285, 99291, 99304-99310, 99315, 99316, 99318, 99324-99328, 99334-99337, 99341-99345, 99347-99350, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99455, 99456

ICD-9 diagnosis code(s): 249.xx, 250.xx, 251.8x, 256.4x, 357.2x, 362.0x, 366.41, 648.0x, 648.8x, 962.0x

UB revenue code(s): 010x, 0110-0114, 0118, 0119, 0120-0124, 0128, 0129, 0130-0134, 0138, 0139, 0140-0144, 0148, 0149, 0150-0154, 0158, 0159, 016x, 019x, 020x-021x, 045x, 051x, 0520-0529, 055x, 057x-059x, 066x, 072x, 080x, 082x-085x, 088x, 0981, 0982, 0983, 0987

Numerator

Numerator Definition Members who had LDL levels measured through direct means during the measurement year.

Numerator Claims Criteria CPT-4 code(s): 80061, 83700, 83701, 83704, 83721

CPT category II code(s): 3048F, 3049F, 3050F

LOINC code(s): 2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 39469-2, 49132-4, 55440-2 (if available)

Physician Attribution

Physician Attribution Description Score all physicians who saw the member during the measurement year.

- References**
1. Centers for Disease Control and Prevention. *National diabetes fact sheet: general information and national estimates on diabetes in the United States, 2007*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2008. .
 2. ADA, *Standards of Medical Care in Diabetes - 2010*. Diabetes Care, 2010. **33**(Supplement 1): p. 536-37.
 3. CDC. *National Diabetes Surveillance System*. 2004 [cited 2004 November 17th]; Available from: <http://www.cdc.gov/diabetes/statistics/prev/national/figpersons.htm>
 4. Centers for Disease Control and Prevention, *National diabetes fact sheet*. 2004, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention: Atlanta, GA.
 5. National Institute of Diabetes and Digestive and Kidney Diseases, *National Diabetes Statistics fact sheet: general information and national estimates on diabetes in the United States*. 2004, U.S. Department of Health and Human Services, National Institutes of Health: Bethesda, MD.

6. CDC. *National Diabetes Fact Sheet*. 2005 Jan 31 2005 [cited 2007 October 15]; Available from: <http://www.cdc.gov/diabetes/pubs/estimates.htm#deaths>.
7. *Diabetes mellitus: a major risk factor for cardiovascular disease. A joint editorial statement by the American Diabetes Association; The National Heart, Lung, and Blood Institute; The Juvenile Diabetes Foundation International; The National Institute of Diabetes and Digestive and Kidney Diseases; and The American Heart Association*. *Circulation*, 1999. **100**(10): p. 1132-3.
8. *Third Report of the National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III) final report*. *Circulation*, 2002. **106**(25): p. 3143-421.
9. Brown, A.S., *Lipid management in patients with diabetes mellitus*. *Am J Cardiol*, 2005. **96**(4A): p. 26E-32E.
10. Ganda, O.P., *The role of lipid management in diabetes*. *Cardiol Clin*, 2005. **23**(2): p. 153-64, vi.
11. Costa, J., et al., *Efficacy of lipid lowering drug treatment for diabetic and non-diabetic patients: meta-analysis of randomised controlled trials*. *Bmj*, 2006. **332**(7550): p. 1115-24.
12. Betteridge, J., *Benefits of lipid-lowering therapy in patients with type 2 diabetes mellitus*. *Am J Med*, 2005. **118 Suppl 12A**: p. 10-5.
13. ADA, *Standards of Medical Care in Diabetes* *Diabetes Care*, 2006. **29** ((Supplement 1): S4).
14. *Standards of medical care in diabetes--2008*. *Diabetes Care*, 2008. **31 Suppl 1**: p. S12-54.
15. *American Diabetes Association (ADA). Standards of medical care in diabetes. VI. Prevention and management of diabetes complications*. *Diabetes Care*, 2007. **30**(Suppl 1): p. S15-24.

¹ **Indicator Classification** (Adapted from HEDIS® technical specifications)

Diagnosis	Measures applicable to patients receiving diagnostic workups for a symptom or condition that delineate appropriate laboratory or radiological testing to be performed (e.g. evaluation of thyroid nodule; pregnancy test in patients with vaginal bleeding or abdominal pain)
Effectiveness of Care	
Prevention	Measures applicable to asymptomatic individuals that are designed to prevent the onset of the targeted condition (e.g. immunizations).
Screening	Measures applicable to asymptomatic patients who have risk factors or pre-clinical disease, but in whom the condition has not become clinically apparent (e.g. pap smears; screening for elevated blood pressure).
Disease Management	Measures applicable to individuals diagnosed with a condition that are part of the treatment or management of the condition (e.g. cholesterol reduction in patients with diabetes; radiation therapy following breast conserving surgery; appropriate follow-up after acute event).
Medication Monitoring	Measures applicable to patients taking medications with narrow therapeutic windows and / or potential preventable significant side effects or adverse reactions (e.g. thyroid stimulating hormone (TSH) testing after levothyroxine dose change; hepatic enzyme monitoring for patients using antimycotic pharmacotherapy)
Medication Adherence	Measures applicable to patients taking medications for chronic conditions that are designed to assess patient adherence to medication (e.g. adherence to lipid lowering medication).
Utilization	Measures applicable to patients receiving treatment for a symptom or condition that advocate appropriate utilization of laboratory and pharmaceutical resources (e.g. conservative use of imaging for low back pain; inappropriate use of antibiotics for viral upper respiratory infection).

² Strength of Recommendation

Strength of Recommendation Based on a Body of Evidence

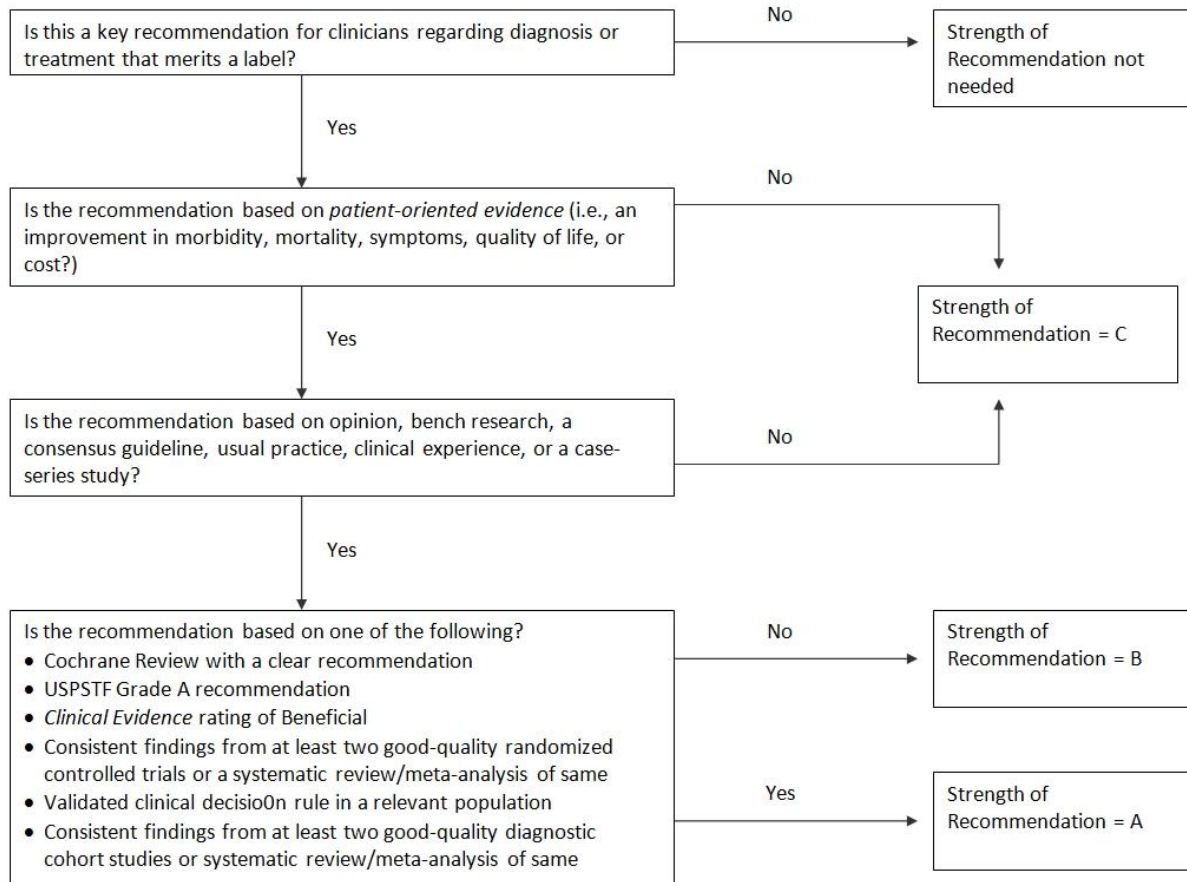


FIGURE 2. Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation based on the benefits, harms, and costs of the intervention being recommended. (USPSTF = U.S. Preventive Services Task Force)