

Client	HEALTH BENCHMARKS, INC. STANDARD ALGORITHM		
Measure Title	CHOLESTEROL MANAGEMENT FOR PATIENTS WITH CARDIOVASCULAR CONDITIONS		
Disease State	Cardiovascular Conditions	Indicator Classification¹	2° prevention
Strength of Recommendation²	A		
Organizations Providing Recommendation	American College of Cardiology American Heart Association National Cholesterol Education Program		
Clinical Intent	To ensure that members with cardiovascular conditions receive lipid level monitoring at a clinically appropriate frequency.		
Background	<p>Disease Burden</p> <ul style="list-style-type: none"> • Cardiovascular disease is the leading cause of death in the United States, and is the primary cause of death for persons age 65 and older.[1] • 16 million adults in the United States have coronary heart disease (CHD)[1], which accounts for more than half of all cardiovascular events in men and women under the age of 75.[2] • One of every five deaths in the United States in 2004 (approximately 450,000 deaths) was attributed to CHD.[1] • Within 5 years of experiencing a first myocardial infarction (MI), 16% of men and 22% of women between 40 and 69 years of age will have a recurrent MI or fatal CHD event ,and 33% of men and 43% of women will die.[1] <p>Reason for Indicated Intervention or Treatment</p> <ul style="list-style-type: none"> • Increased blood cholesterol raises the risk for coronary heart disease. Lipid-lowering therapy can help decrease or reverse atherosclerotic lesion progression[3-6], decrease inflammation[7-11], and help with plaque stabilization, endothelial dysfunction reversal, and thrombogenicity reduction.[4, 12, 13] Clinically, lipid-lowering drug treatment is associated with decreased mortality and a lower incidence of cardiovascular events.[14-33] <p>Evidence Supporting Intervention or Treatment</p> <ul style="list-style-type: none"> • Several large randomized controlled trials have shown that simvastatin or pravastatin use in patients with a history of cardiovascular disease reduces the risk of recurrent events and mortality whether the patients have elevated[15, 16], normal or slightly elevated[17-23] cholesterol levels. 		

- Large scale meta-analyses focusing on studies in which cholesterol medications were used have shown that when used as secondary prevention, lipid-lowering therapy is associated with a decreased risk of coronary events, CHD mortality and all-cause mortality.[24-31]
- No well designed trials have directly evaluated whether routine monitoring of lipid levels in patients with coronary artery disease is associated with better clinical outcomes.

Clinical Recommendations

- The 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, or ATP III) recommends lipid monitoring for patients on stable treatment (i.e., at target LDL) every 4-6 months. ATP III recommends that patients with CHD achieve a target LDL cholesterol < 100 mg/dL.[34]
- The 2006 update to the AHA/ACC guidelines for secondary prevention for patients with coronary and other atherosclerotic vascular disease sets the following lipid goals for patients with CVD: LDL-C <100 mg/dL, and if triglycerides are ≥ 200 mg/dL, HDL-C should be less than 120 mg/dL.[35]

Source Healthcare Effectiveness Data and Information Set (HEDIS®) 2009 Technical Specification for Physician Measurement

Denominator

Denominator Definition Continuously enrolled members 18-75 years of age who were discharged alive for an acute myocardial infarction (AMI), coronary artery bypass graft (CABG) or percutaneous transluminal coronary angioplasty (PTCA) during the first 10 months of the year prior to the measurement year, or who had a diagnosis of ischemic vascular disease (IVD) during the measurement year and the year prior to the measurement year.

Denominator Index Date N/A

Denominator Encounters/Claims Criteria ICD-9 diagnosis code(s): 410.x1, 411.xx, 413.x, 414.0x, 414.2x, 414.8x, 414.9x, 429.2, 433.xx, 434.xx, 440.1, 440.2x, 440.4x 444.xx, 445.xx
 CPT-4 code(s): 33140, 33510-33514, 33516-33519, 33521-33523, 33533-33536, 92980, 92982, 92995, 99201-99205, 99211-99215, 99217-99220, 99221-99223, 99231-99233, 99238, 99239, 99241-99245, 99251-99255, 99261-99263, 99291-99300, 99341-99345, 99347-99350, 99356-99357, 99384-99387, 99394-99397, 99401-99404, 99411, 99412, 99420, 99429, 99431-99440, 99455, 99456

UB revenue code(s): 010x, 0100-0114, 0117, 0119, 0120-0124, 0121-0123, 0127, 0129, 0130-0134, 0131-0133, 0137, 0139, 0140-0144, 0141-0143, 0147, 0149, 0150-0154, 0151-0153, 0157, 0159, 016x, 0200-0219, 020x-022x, 0220-0229, 051x, 0520-0523, 0526-0529, 057x-059x, 072x, 0720-0729, 077x, 0800-0809, 0982, 0983, 0987

PTCA during the first 10 months of the year prior to the measurement year.

ICD-9 surgical proc code(s): 00.66, 36.1x, 36.2x, 36.06, 36.07, 36.09

HCPCS code(s): S2205-S2209

Denominator criteria represent every possible permutation of having at least one outpatient visit with an IVD diagnosis or at least one inpatient visit with an IVD diagnosis both in the measurement year and year prior to the measurement year (criteria need not be the same across both years). It has been constructed as such for clarity programmatically.

Denominator Exclusion

Denominator Exclusion Definition Patients who were discharged as expired from the denominator qualifying AMI, CABG or PTCA (i.e., denominator criterion).

Denominator Exclusion Claims Criteria Patients who were discharged as expired from the denominator qualifying AMI, CABG or PTCA (i.e. denominator criterion).

Numerator

Numerator Definition Members who received a lipid panel or had LDL levels measured through direct means during the measurement year.

Numerator Claims Criteria CPT-4 code(s): 80061, 83700, 83701, 83704, 83721
LOINC code(s): 2089-1, 12773-8, 13457-7, 18261-8, 18262-6, 22748-8, 24331-1, 39469-2, 49132-4 (*if available*)
CPT category II code(s): 3048F, 3049F, 3050F

Physician Attribution

Physician Attribution Description **If client data does not contain PCP:**
Score all physicians (in the selected specialties) who saw the member during the measurement year.

If client data does contain PCP:

Score all primary care physicians who were assigned to the member during the measurement year.

References

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CONFIDENTIAL

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

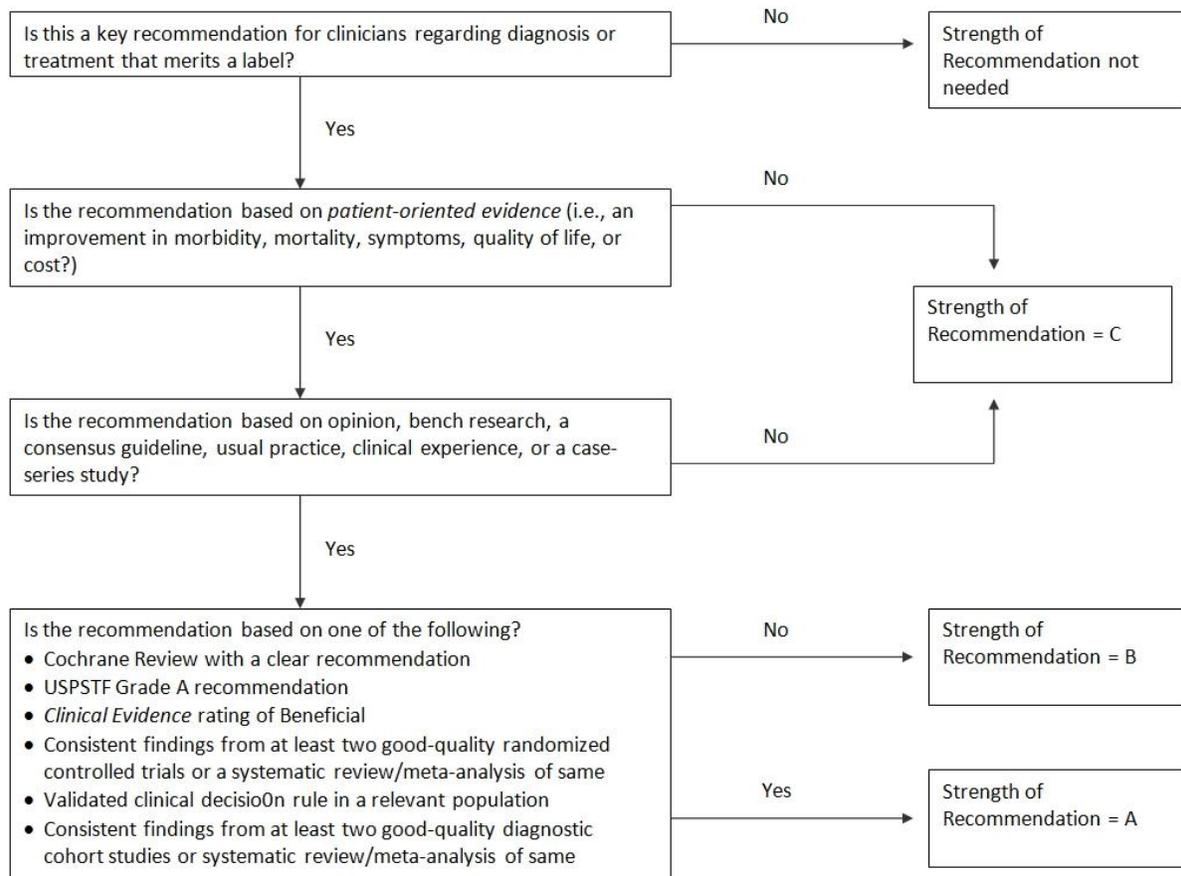


FIGURE 2. Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation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