Health Benchmarks®
Clinical Quality Indicator Specification 2007

Client HEALTH BENCHMARKS, INC. STANDARD ALGORITHM
Implemented for Blue Cross Blue Shield of Texas

Measure Title TREATMENT OF CARDIOVASCULAR CONDITIONS: MONITORING LIPID LEVELS

Disease State Cardiovascular Conditions **Indicator Classification**[1] 2º prevention

Strength of Recommendation[2] C

Organizations Providing Recommendation NCQA (HEDIS 2007 Technical Specification), 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), The American College of Cardiology, The American Heart Association

Clinical Intent To ensure that members with cardiovascular conditions receive lipid level monitoring at a clinically appropriate frequency.

Physician Specialties Cardiovascular Disease – Non-interventional, Family Practice, Geriatric Medicine, Internal Medicine

Clinical Rationale

Disease Burden

- 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, 2]
- In 2002, 13 million adults in the United States (6.9% of the population) had coronary heart disease [CHD] [1], which accounts for more than half of all cardiovascular events in men and women under the age of 75.[3]
- One of every five deaths in the United States in 2002 (approximately 650,000 deaths) was attributed to CHD.[1]
- Within 6 years of a myocardial infarction (MI), 18% of men and 35% of women will have a recurrent MI, and 7% of men and 6% of women will experience sudden death.[4]

Reason for Indicated Intervention or Treatment

- Increased blood cholesterol increases the risk for coronary heart disease. Lipid-lowering therapy can help decrease or reverse atherosclerotic lesion progression [5-8], decrease inflammation [9-12], and help with plaque stabilization, endothelial dysfunction reversal, and thrombogenicity reduction.[6, 13, 14]
- Clinically, lipid-lowering drug treatment is associated with decreased mortality and a lower incidence of cardiovascular events.[15-32]

Evidence supporting Intervention or Treatment

- 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 [16, 17], normal, or slightly elevated [18-24] 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.[25-32]
- No well designed trials have directly evaluated whether routine monitoring of

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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. (JAMA ATPIII executive summary, 2001)
- 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), released in 2002, recommends that patients with CHD achieve a target LDL cholesterol < 100 mg/ dL.[33]
- The ATP III recommends initiating drug therapy (in addition to intensive lifestyle therapy) in patients with baseline cholesterol levels >=130 mg/ dL. For those with LDL levels between 100-129 mg/dL, therapeutic lifestyle changes should be initiated, and clinical judgment should be used to decide about lipid-lowering medication use.[33]
- In 2004, the Coordinating Committee of the National Cholesterol Education Program (NCEP) of the National Heart, Lung and Blood Institute proposed modifications to the ATP III guidelines, and endorsed optional treatment of patients at very high risk for a coronary event (including those with acute coronary syndromes) to achieve an LDL cholesterol level < 70 mg/dL.[34]
- The American College of Cardiology (ACC) and American Heart Association (AHA) endorsed the above recommendations for patients with coronary artery disease [35-37], and recommended a target LDL level "substantially less than 100 mg/dL" for patients with a ST-elevation myocardial infarction.[35]

Source

Adapted from the Health Plan Employer Data and Information Set (HEDIS®) 2007 Technical Specification

Denominator

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) in 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 Exclusion

N/A

Numerator

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

Interpretation of Score

High score implies better performance

Physician Attribution

Score all physicians (in the selected specialties) who saw the member during the measurement year.

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[1] **Indicator Classification** (Adapted from Health Plan Employer Data Information Set (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).

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[2] **Strength of Recommendation**

Strength of Recommendation Based on a Body of Evidence

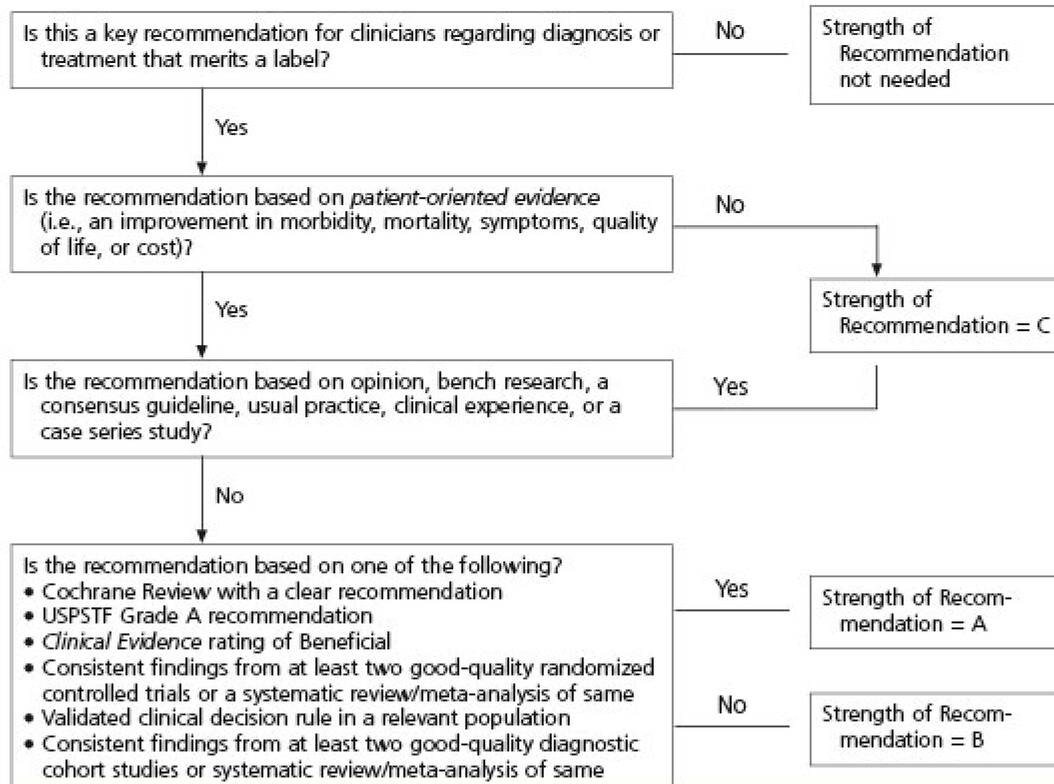

FIGURE 2. Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation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

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