Measure Title: TREATMENT OF CORONARY ARTERY DISEASE: MONITORING LIPID LEVELS

Disease State: Coronary Artery Disease
Indicator Category: 2º prevention

Strength of Recommendation: A
Quality of Evidence: Fair

Physician Specialties:
Primary: Cardiology, Mixed Specialty
Secondary: Family Practice, General Practice, 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, 18% of men and 35% of women will have a recurrent myocardial infarction (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 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), 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]

**Denominator**
Continuously enrolled members aged 19 to 76 years by the end of the reporting period, who were identified as having coronary artery disease.

**Denominator Exclusion**
Members who do not have pharmacy benefits or whose discharge status is 'expired'.

**Numerator**
Members who received a lipid panel during the reporting period.

**Interpretation of Score**
High score implies better performance.

**Physician Attribution**
Score all physicians (in the selected specialties) who saw the member during the reporting year.

**Source**
Health Benchmarks®, Inc

**External Files Required for Analysis**
None.

**References**


