



Measure Title ADHERENCE TO LIPID-LOWERING MEDICATION

Disease State Hyperlipidemia **Indicator Classification¹** Adherence

Strength of Recommendation² A (*Lipid Lowering Medication*)
C (*Physician Impact on Adherence*)

Physician Specialties Cardiovascular Disease, Endocrinology, Family Practice, Gerontology, Internal Medicine

Clinical Rationale

Disease Burden

- More than 50 million U.S. adults have blood cholesterol levels high enough to require medical advice and treatment.[2]
- Poor adherence to drug therapy remains a major therapeutic challenge. On average, patients prescribed lipid-lowering drugs remain without filled prescriptions for over one-third of the year.[3] In fact, only about half of the patients are still taking lipid-lowering drugs six months after they are given a prescription, and only 30-40% are taking them after 12 months.[4]
- Adherence is defined as the extent to which patients take their medications as prescribed. As such, non-adherence includes events such as not filling or refilling a prescription, taking an incorrect medication dose, missing a dose, or taking a medication at the wrong time.[5, 6]

Reason for Indicated Intervention or Treatment

- Evidence suggests that physician counseling regarding disease risk factors and medication persistence plays an important role in maximizing patient adherence.

Evidence supporting Intervention or Treatment

- The West of Scotland Coronary Prevention Study Group found in a randomized controlled trial that patients with a lipid lowering medication adherence rate greater than 75% reduced their risk of death from any cause by one third more than those with lower compliance.[7]
- Early and frequent follow up by physicians, and especially lipid testing, has been associated with increased adherence to lipid lowering therapy.[8]
- Several strategies may help increase adherence to lipid-lowering drug regimes, including prescription of well tolerated drugs, educating patients, providing regular follow up, and behavioral interventions. [9, 10] Physicians may also play a role by simplifying drug regimes and initiating all heart disease medications (e.g. antihypertensives and lipid lowering drugs) at the same time.[11] Greater adherence may also follow from initial, measurable results (greater reduction in LDL cholesterol levels during the first three months of statin therapy have been associated with greater adherence 4-36 months after the initial prescription).[8]
- A recent Cochrane Database meta-analyses of studies aimed at improving medication adherence (not specifically focused on glaucoma) found that almost all of the interventions that were effective for long-term care were complex, including combinations of more convenient care, information, reminders, self-monitoring, reinforcement, counseling, family therapy, and other forms of additional supervision or attention by a health care provider (physician, nurse, pharmacist or other).[12]

- A large review article in the New England Journal of Medicine suggested that “practitioners should always look for poor adherence and can enhance adherence by emphasizing the value of a patient’s regime, making the regime simple, and customizing the regime to a patient’s lifestyle. Asking patients non-judgmentally about medication-taking behavior is a practical strategy for identifying poor adherence. A collaborative approach to care augments adherence. Patients who have difficulty maintaining adequate adherence need more intensive strategies than do patients who have less difficulty with adherence, a more forgiving regime, or both... new technologies such as reminders through cell phones and personal digital assistants and pillboxes with paging systems may be needed to help patients who have the most difficulty meeting the goals of a regime.” [13] Another review in the Canadian Journal of Public Health included similar suggestions. [14]

Clinical Recommendations

- The American Heart Association expert panel on compliance recommends that patients, providers and healthcare organizations integrate efforts to reduce noncompliance with medications. This includes improved patient education, contracts, self-monitoring, telephone follow-ups, and social support.[15]
- 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) concluded that none of the current methods of improving adherence with chronic health problems are very effective, and that there is little evidence patient medication adherence can be improved in a consistent manner. However, physicians should pay attention to potential interventions to improving adherence to treatment.[16]
- The Institute for Clinical Systems Improvement suggests that “Asking non-threatening, open-ended questions during patient interviews can be a useful method of assessing medication adherence. The interview should include probes for factors that contribute to non-adherence including adverse reactions, misunderstandings of asymptomatic or chronic disease treatment, depression, cognitive impairment, complex dosing regimens, and financial constraints.”[17]

Source	Health Benchmarks®, Inc
Denominator	Continuously enrolled members ages 19 years and older at the end of the measurement year, who were diagnosed with hyperlipidemia and had at least a 60 day supply for lipid-lowering medications at any time during one year period starting six months prior to the measurement year.
Denominator Exclusion	Members without pharmacy benefits.
Numerator	Members who received lipid-lowering drug prescription coverage for at least 80 percent of the days in the six months following the index prescription (includes overlapping days).
Interpretation of Score	High score implies better performance.

Physician Attribution

All physicians in the applicable specialty areas who came in contact with the member starting on the index date (date of service of the first prescription) through the 0-6 months after (inclusive).

External Files Required for Analysis

Filename: lip_medlist_2006.xls
Location: Q:\HBI Indicators\2005\2005 Specifications\Final Specifications\Done
Source: HBI, Master NDC

References

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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).

² Strength of Recommendation

Strength of Recommendation Based on a Body of Evidence

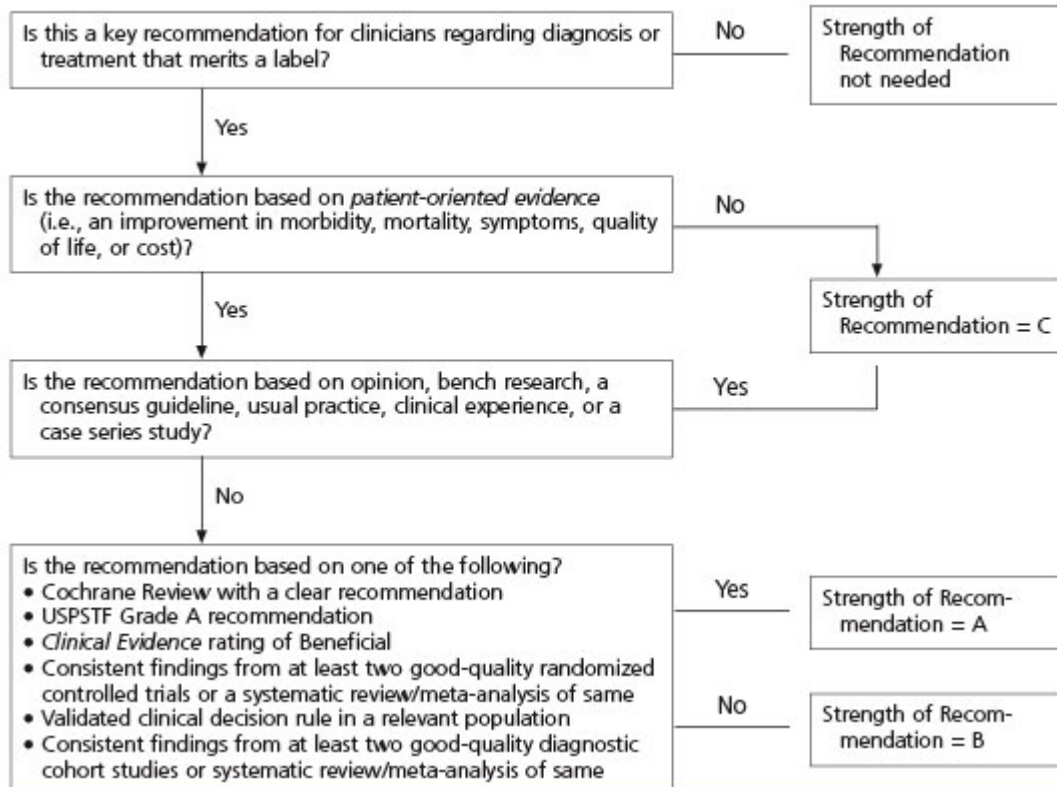


FIGURE 2. Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation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