

Health Benchmarks[®] Program

Clinical Quality Indicator Specification 2011

Measure Title	ADHERENCE TO STATINS	
Disease State	Hyperlipidemia	Indicator Classification¹ Adherence
Strength of Recommendation²	A	
Organizations Providing Recommendation	American Heart Association Institute for Clinical Systems Improvement National Heart, Blood and Lung Institute	
Clinical Intent	To ensure that members who are taking statins to treat hyperlipidemia filled sufficient medication to have at least 80% coverage during the measurement year.	
Background	<p>Disease Burden</p> <ul style="list-style-type: none"> • The main goal of cholesterol-lowering treatment is to lower the LDL level enough to reduce the risk of developing heart disease or having a heart attack.[1] • More than 50 million U.S. adults have blood cholesterol levels high enough to require medical advice and treatment.[2] • An estimated 102 million American adults have total blood cholesterol levels of 200 mg/dL and higher, which is above desirable levels. Of these, 35 million have levels of 240 mg/dL or higher, which is considered high risk.[3] • Poor adherence to drug therapy remains a major therapeutic challenge. On average, patients who are prescribed lipid-lowering drugs do not fill their prescriptions for over one-third of the year.[4] Only half of patients continue to take lipid-lowering drugs six months after they are given a prescription and only 30-40% of patients continue to take them after 12 months.[2, 5, 6] • Adherence is defined as the extent to which patients take 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.[7, 8] <p>Reason for Indicated Intervention or Treatment</p> <ul style="list-style-type: none"> • Evidence suggests that physician counseling regarding disease risk factors and medication persistence plays an important role in maximizing patient adherence.[6] <p>Evidence Supporting Intervention or Treatment</p> <ul style="list-style-type: none"> • 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.[9]
- Early and frequent follow up by physicians, and especially lipid testing, has been associated with increased adherence to lipid lowering therapy. [10]
 - 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.[6, 11-13] Physicians may also play a role by simplifying drug regimes and initiating all heart disease medications (i.e., antihypertensives and lipid lowering drugs) at the same time.[6, 14] Greater adherence may also follow from initial, measurable results (e.g., a reduction in LDL cholesterol levels during the first three months of statin therapy).[10]
 - A recent two year randomized controlled trial combined patient education with the provision of labeled blister packs containing daily doses of all medicines. The study found a “marked and sustained increase in medication adherence” among patients receiving the intervention; adherence jumped from 61% to 96%.[15]
 - A recent Cochrane Database meta-analysis of studies aimed at improving medication adherence (not specifically focused on lipid lowering medications) found that almost all interventions effective for long-term care are complex and multi-faceted, including 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).[16]
 - 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 regimen, making the regimen simple, and customizing the regimen 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 regimen, 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 regimen.”[17] Another review in the Canadian Journal of Public Health included similar suggestions.[18]
 - A study using Medicare Current Beneficiary Survey Data found that each additional statin prescription filled by diabetic user of statins significantly reduced the risk of hospitalization by 0.5%.[19]
 - 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.[20]

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) 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.[2]
- The Institute for Clinical Systems Improvement suggests various ways to improve adherence, including “asking about compliance in a non-threatening way at each visit; simplification of the drug regimen (frequency and complexity); reminder systems; drug count devices; pill minders; involvement of family or friends; a health care team approach including nurses, dieticians, pharmacists and educators, in addition to physicians; written instructions; and educating the patient about the medications, including potential adverse effects, importance of therapy, realistic goals, necessity of life-long treatment, and importance of continued attention to non-pharmacologic therapy (i.e., diet, exercise).” [21]

Source IMS Health
Endorsed by the National Quality Forum (NQF)

Denominator

Denominator Definition Continuously enrolled members ages 19 years or older by the end of the measurement year who had a diagnosis of hyperlipidemia anytime prior to the end of the measurement year, cardiovascular disease or diabetes during the year prior to the measurement year, and filled at least a 60 days supply of statin during the measurement year.

Denominator Index Date First instance of members who filled a prescription for a statin during the measurement year.

Denominator Encounters/Claims Criteria CPT-4 code(s): 33510-33514, 33516-33519, 33521-33523, 33533-33536, 92980, 92982, 92995

HCPCS code(s): G0290, S2205-S2209

ICD-9 diagnosis code(s): 250.xx, 272.0, 272.1, 272.2, 272.3, 272.4, 357.2x, 362.0x, 366.41, 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, 648.0x

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

Drug list: fluvastatin, atorvastatin, simvastatin, pravastatin, lovastatin, rosuvastatin, pivalastatin), and combinations

Denominator Exclusion

Denominator Exclusion Definition Members who were pregnant or diagnosed with myositis or rhabdomyolysis during the measurement year, members diagnosed with acute renal disease during the measurement year, members diagnosed with liver dysfunction (acute or chronic), alcoholism, or liver transplantation during the measurement year or members who were newly started on statin medication in the 4th through 12th month of the measurement year. Of note, MPR will not be calculated for these individuals, thus they will be dropped from the denominator.

Denominator Exclusion Claims Criteria CPT-4 code(s): 59000, 59001, 59012, 59015, 59020, 59025, 59030, 59050, 59051, 59070, 59072, 59074, 59076, 59100, 59120, 59121, 59130, 59135, 59136, 59140, 59150, 59151, 59160, 59200, 59300, 59320, 59325, 59350, 59400, 59409, 59410, 59412, 59414, 59425, 59426, 59430, 59510, 59514, 59515, 59525, 59610, 59612, 59614, 59618, 59620, 59622, 59812, 59820, 59821, 59830, 59840, 59841, 59850-59852, 59855-59857, 59866, 59870, 59871, 59897-59899, 76801, 76802, 76805, 76810-76821, 76825-76828, 76941, 76945, 76946, 82106, 82143, 82731, 88235, 88267, 88269, 0500F-0503F

DRG code(s): 370-391

ICD-9 diagnosis code(s): 070.xx, 121.1, 265.2, 275.0x, 275.1, 291.x, 303.01, 303.9, 456.2x, 570, 571.xx, 572.xx, 573.xx, 584.x, 630.xx-677.xx, 710.3, 710.4, 728.19, 728.81, 728.88, 729.1x, 763.89, 788.5x, 864.xx, 996.82, 997.4, E878.0, V22.xx, V23.xx, V24.xx, V27.xx, V28.xx, V42.7, V72.42

ICD-9 surgical proc code(s): 66.62, 69.0x, 72.xx-75.8x

MS-DRG code(s): 765-770, 774-782, 789-795

Drug list: Fluvastatin, Atorvastatin, Simvastatin, Pravastatin, Lovastatin, Rosuvastatin, Pivastatin, and combinations (route = oral)

Numerator

Numerator Definition The numerator consists of members in the denominator who filled a sufficient days supply of a statin to provide for at least 80% coverage (Medication Possession Ratio (MPR) \geq 80%) during the measurement year. Of note, new users of a statin that started after the first 3 months of the measurement year will be excluded from the calculation.

Numerator Claims Criteria N/A

Physician Attribution

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

References

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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

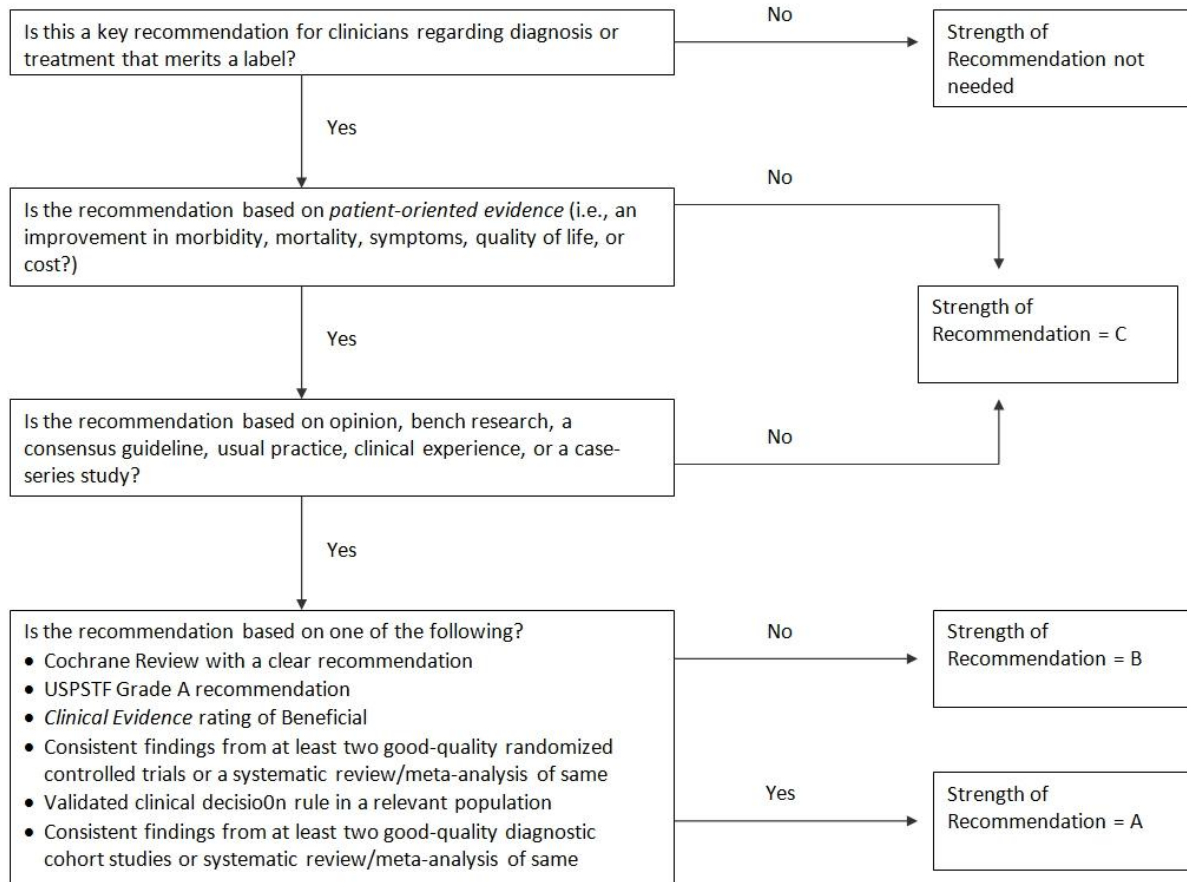


FIGURE 2. Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation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