



Measure Title	APPROPRIATE TESTING FOR CHILDREN WITH PHARYNGITIS	
Disease State	Pharyngitis	Indicator Classification¹ Diagnosis
Strength of Recommendation²	B	
Specialties	Allergy, Critical Care Medicine, Family Practice, Infectious Disease, Gerontology, Internal Medicine, Pediatrics	
Clinical Rationale	<p>Disease Burden</p> <ul style="list-style-type: none"> In 2002, pharyngitis accounted for approximately 10 million office visits in the United States.[1] <p>Reason for Indicated Intervention or Treatment</p> <ul style="list-style-type: none"> Widespread inappropriate antibiotic utilization has led to increasing levels of antibiotic resistance in bacteria that were once highly susceptible to antimicrobials.[2-4] Group A streptococcus (GAS) is a highly treatable infection, but is the cause of pharyngitis in only about 10 percent of patients who present with acute pharyngitis. A vast majority of patients continue to receive antibiotic therapy for pharyngitis in the absence of a confirmatory test.[5] In light of increasing antibiotic resistance, it is important for providers to use antibiotics judiciously.[6-8] Yet, it is difficult to distinguish between viral and bacterial sore throats and physicians may overestimate the probability of bacterial infection.[9, 10] <p>Evidence supporting Intervention or Treatment</p> <ul style="list-style-type: none"> One large survey of members of the American Academy of Pediatrics suggests that there is much room for improvement in the management of acute pharyngitis in children and adolescents. For example, many physicians use empirical therapy without diagnostic testing.[11] Combining a clinical approach with use of the rapid streptococcal antigen test efficiently reduces inappropriate antibiotic prescriptions, whereas empirical therapy in patients with 3 or 4 clinical symptoms or signs results in antibiotic overuse.[12] Furthermore, in one randomized trial of children given either penicillin or placebo for sore throat, the antibiotic had no significant beneficial effect on duration of symptoms, and served only to reduce streptococcal sequelae.[13] <p>Clinical Recommendations</p> <ul style="list-style-type: none"> The American Academy of Family Physicians states that diagnosis of group A streptococcal pharyngitis should be based on results of appropriate laboratory tests in conjunction with clinical and epidemiologic findings. Antimicrobial therapy should not be given to a child with pharyngitis in the absence of a diagnosed group A streptococcal or other bacterial infection. [5] The Infectious Disease Society of America's Practice Guidelines for the Diagnosis and Management of Group A Streptococcal Pharyngitis conclude that "unless the physician is able with confidence to exclude the diagnosis of streptococcal pharyngitis on epidemiological and clinical grounds, a laboratory test should be done to determine whether group A 	

streptococci are present in the pharynx.” [14]

- The American College of Physicians—American Society of Internal Medicine recommends using a complete physical examination and history or rapid antigen testing for patients with three or fewer of four clinical criteria (history of fever, tonsillar exudates, tender anterior cervical lymphadenopathy, and absence of cough).[15]
- The Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease of the Council on Cardiovascular Disease in the Young, and the American Heart Association guideline *The Treatment of acute streptococcal pharyngitis and prevention of rheumatic fever: a statement for health professionals* states that “Diagnosis of GAS pharyngitis is best accomplished by a throat culture.”[16]

Source	Adapted from HEDIS: HEDIS does not specify how far back to look for active prescriptions. HBI’s 90 day period was set based on internal research suggesting that 99% of prescriptions are for 90 day supply or less. HEDIS also used 13X OR 43X Bill Type Codes, however our data does not currently use these codes.
Denominator	Members ages 3-18 years old by the end of the sixth month of the measurement year, who were diagnosed with pharyngitis in an outpatient or emergency room setting during the one year period starting six months prior to the measurement year, who received an antibiotic prescription in the 0-3 days following their index diagnosis, and who were continuously enrolled from 30 days prior to the index diagnosis date through 3 days following the index date.
Denominator Exclusion	Exclude all cases in which there was a diagnosis other than pharyngitis on the same claim, where there was a previous diagnosis of pharyngitis in the 1-30 days prior to the diagnosis, or where the member was on an antibiotic in the 1-30 days prior to the index diagnosis date.
Numerator	Count all members who were given a strep test in the seven day period starting three days prior to the index diagnosis date and ending three days after the index diagnosis date.
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.
External Files Required for Analysis	Phartest_medlist.xls Source: NCQA Updated Annually
References	<ol style="list-style-type: none">1. Woodwell, D.A. and D.K. Cherry, <i>National Ambulatory Medical Care Survey: 2002 summary</i>. Adv Data, 2004(346): p. 1-44.2. Jernigan, D.B., M.S. Cetron, and R.F. Breiman, <i>Minimizing the impact of drug-resistant Streptococcus pneumoniae (DRSP). A strategy from the DRSP Working Group</i>. Jama, 1996. 275(3): p. 206-9.3. Kunin, C.M., <i>Resistance to antimicrobial drugs--a worldwide calamity</i>. Ann Intern Med, 1993. 118(7): p. 557-61.

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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

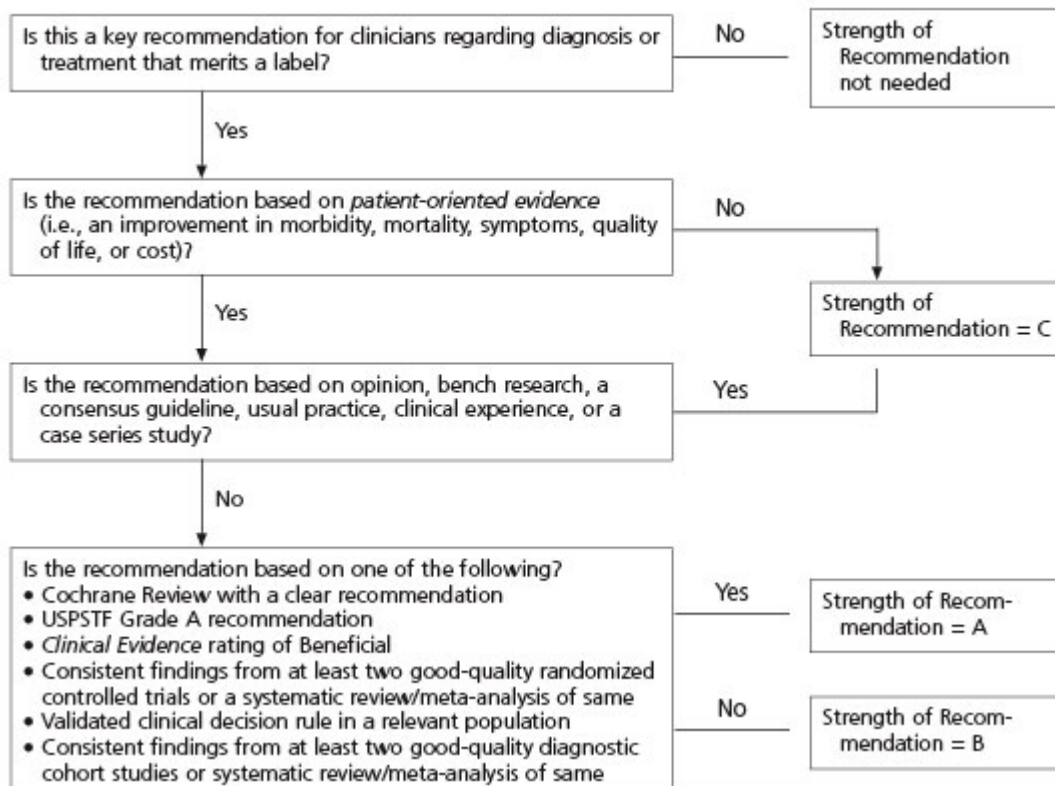


FIGURE 2. Algorithm for determining the strength of a recommendation based on a body of evidence (applies to clinical recommendations regarding diagnosis, treatment, prevention, or screening). While this algorithm provides a general guideline, authors and editors may adjust the strength of recommendation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