

# The Center for Health and Wellbeing

## An Evidence-based Approach to the Diagnosis of Pharyngitis

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Our Question How well do we adhere to clinical guidelines which outline when testing should be done to determine whether a student has streptococcal pharyngitis?

Background Pharyngitis is an extremely common presenting complaint in medical clinics. A specific set of clinical criteria have been studied and found to be of use in helping clinicians decide when it is appropriate to test or treat for streptococcal pharyngitis. Use of the *modified Centor criteria* minimizes the costs of testing and the risks and costs of unnecessary treatment. Testing for the presence of Group A streptococcus is *not* recommended for a Centor score of 0 or 1.

### First Study – Design

- 45 charts with a diagnosis of pharyngitis or acute tonsillitis were reviewed. History and physical exam findings were scored using the modified Centor criteria.

### First Study – Results

- 40 of 45 charts (89%) listed all of the modified Centor criteria.
- Rapid strep testing was carried out in 84% of these patients. Of these 38 tests, 3 were positive for Group A streptococcus.
- Of the 14 patients with a modified Centor score of 0 or 1, 12 underwent testing for the presence of Group A streptococcus. 48% of the tests performed among all patients could have been avoided by adhering to the criteria

### First Study – Conclusions

- Clinicians did not appear to be using the modified Centor Criteria to guide their decisions about whether to test patients for the presence of Group A Streptococcal infection.



### The Interventions – What we did to improve our performance

- Conduct a professional development session to educate/remind clinicians about an evidence-based approach to pharyngitis.
- Encourage clinicians to thoroughly document history and physical exam findings.
- Modify the medical record template to include the modified Centor criteria.



### The Re-Study: Did our intervention work?

- 55 charts seen for pharyngitis or acute tonsillitis following the interventions listed above were reviewed for use of the modified Centor criteria in the evaluation of sore throat.
- 85% of charts noted the presence or absence of all Centor criteria.
- The prevalence of rapid strep testing in this sample was 69% (compared with 84% in the initial study).
- Of nine patients with a modified Centor score of 0 or 1, two patients (22%) underwent testing. In the initial study, 85% of patients with a score of 0 or 1 underwent this unnecessary testing.