

Antibiotic Decision Making

Data Collection Tool – Acute Bacterial Sinusitis

Directions:

Pull 10 or more charts of patients diagnosed with acute bacterial sinusitis and;

- 1) Over 12 months of age;
- 2) Exclude patients that were hospitalized

Answer the questions based on actual chart documentation.

Questions for Patients Diagnosed with Acute Bacterial Sinusitis:

1. During the patient history/examination did the patient meet one or more of the following criteria for diagnosing acute bacterial sinusitis?

Yes No

Criteria for diagnosing acute bacterial sinusitis:

Temperature $\geq 39^{\circ}\text{C}$ (102.2°F) and purulent nasal discharge for 3 or more days.

Persistent illness, ie, nasal discharge (of any quality) or daytime cough or both lasting 10 days or longer without improvement.

Worsening course, ie, worsening or new onset of nasal discharge, daytime cough, or fever after initial improvement.

2. Did the clinician assess the patient for additional observation (ie, watchful waiting) for 3 days if the patient met [criteria for additional outpatient observation](#)?

Yes No

3. Did the provider discuss and document instructions for the patient/family to call the practice if the patient has worsened or has not improved within 48-72 hours?

Yes, verbal discussion documented in the medical record

Yes, printed material provided and documented in the medical record

No documentation

4. Did any provider discuss and document the following risks of antibiotic therapy with the patient/family?

Yes No

Should always be discussed	Should be discussed if patient/family has concerns
<ul style="list-style-type: none"> ● Side effects 	<ul style="list-style-type: none"> ● Antibiotic resistance
<ul style="list-style-type: none"> ● Allergic reaction 	
<ul style="list-style-type: none"> ● Reasons an antibiotic is or is not prescribed 	

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5. What antibiotic was prescribed?

- a) amoxicillin
- b) amoxicillin-clavulanate
- c) cefdinir, cefuroxime, cefpodoxime, or ceftriaxone
- d) Other antibiotic prescribed
- e) None, additional observation (watchful waiting) chosen

If options b, c, or d are selected, **CONTINUE**



If option a) amoxicillin; or e) None, additional observation (watchful waiting) is selected **STOP**, you have completed your review of this patient.

6. If amoxicillin was not prescribed, what was the reason the patient was not treated with amoxicillin? (Select all that apply).

- a) Patient experienced previous severe allergic reaction
- b) Patient experienced previous non-severe allergic reaction
- c) Patient has taken amoxicillin in the past 30 days, or has purulent conjunctivitis, moderate to severe illness,
 younger than 2 years, attends child care
- d) Patient had previous drug reaction with amoxicillin-clavulanate
- e) Known or suspected multi-drug resistant organism
- f) None of the above

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Appendix

Criteria for Additional Outpatient Observation

Persistent illness is a criterion for additional outpatient observation. The clinician should either prescribe antibiotic therapy OR offer additional outpatient observation for 3 days to children with persistent illness (nasal discharge of any quality or cough or both for at least 10 days without evidence of improvement) (Evidence Quality: B; Recommendation).¹

Antibiotic therapy should commence if either the child does not improve clinically within several days of diagnosis or if there is clinical worsening of the child's condition at any time.

Reference: [AAP Clinical Practice Guideline for the Diagnosis and Management of Acute Bacterial Sinusitis in Children Aged 1 to 18 years. Pediatrics, 2013.](#)

Antibiotic Resistance

Antibiotic resistance refers to bacteria that have become resistance to the antibiotics designed to kill them. The overuse and/or inappropriate use of antibiotics can result in the drugs' ability to treat the infection.

Non-severe and Severe Allergic Reactions

- **Non-severe** symptoms include hives or pruritic (itchy) rashes.
- **Severe** symptoms include anaphylaxis, angioedema, throat tightening, wheezing plus shock, airway compromise, or cardiovascular collapse. Cardiac collapse requires intervention (eg epinephrine, corticosteroids, vasopressors).

Note: Side effects such as vomiting, abdominal pain, and diarrhea are *non-allergic*.

Other Antibiotic Prescribed¹

Antibiotic	Remarks
levofloxacin, linezolid, or clindamycin ²	May be recommended if: <ul style="list-style-type: none"> • Patient experienced previous <u>severe</u> allergic reaction • Patient had previous adverse drug reaction with amoxicillin-clavulanate • Patient had known or suspected multi-drug resistant organism
azithromycin, trimethoprim-sulfamethoxazole, cephalexin, cefixime, tetracycline, ciprofloxacin, or moxifloxacin	NOT recommended. These medications do not provide appropriate coverage for typical bacterial sinusitis pathogens.

¹[AAP Clinical Practice Guideline for the Diagnosis and Management of Acute Bacterial Sinusitis in Children Aged 1 to 18 years. Pediatrics, 2013.](#)