Measures

Track 4: 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.

Aim	Data Collection Question	Measure	Goal
100% of patients 12 months of age or older diagnosed with acute bacterial sinusitis will present with one or more of the acute bacterial sinusitis criteria	1. During the patient history/examination did the patient meet <u>one or more</u> of the following criteria for diagnosing acute bacterial sinusitis? O Yes O No **Criteria for diagnosing acute bacterial sinusitis:** Temperature ≥39°C (102.2°F) and purulent nasal discharge for 3 or more days. Persistent illness, ie, nasal discharge (of any quality) <u>or</u> daytime cough <u>or</u> 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.	**Name**: Appropriate diagnosis of acute bacterial sinusitis based on acute bacterial sinusitis criteria present upon exam **Definition**: Percentage of patients 12 months of age or older who are appropriately diagnosed with acute bacterial sinusitis that present with one or more of the criteria for acute bacterial sinusitis **Source**: Question #1 **Numerator: Yes** selected in Question **#1** **Denominator:** Total Number of Charts of patients with **Yes** selected in Question **#1** **KCA: Diagnose Infection Accurately**	100%

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Aim	Data Collection Question	Measure	Goal
100% of patients will be assessed for the option of additional observation (ie, watchful waiting) for 3 days if criteria for additional outpatient observation is met	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? O Yes O No	**Name**: Additional observation (ie, watchful waiting) criteria assessed **Definition**: Percentage of patients who were assessed for 3 days of additional observation (ie, watchful waiting) if the patient met criteria for additional outpatient observation **Source**: Question #2 **Numerator: Yes,** selected in Question **#2** **Denominator:** Total Number of Charts Note: *"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)* **KCA: Diagnose Infection Accurately**	100%
100% of patient medical records will have documentation that the patient/family was instructed to call if patient worsens or has not improved within 48-72 hours	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? O Yes, verbal discussion, and/or printed material provided and documented in the medical record O No documentation	**Name**: 48- 72 hours follow-up plan documented **Definition**: Percent of patients with documentation in the medical record that the patient/family were instructed to call if patient worsens or has not improved within 48-72 hours **Source**: Question **#3** **Numerator: Yes,** Selected in Question **#3** **Denominator:** Total Number of Charts **KCA: Treat Infection Effectively**	100%

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Antibiotic Decision Making

Aim	Data Collection Question	Measure	Goal
100% of patient charts will have documentation that the risks of antibiotic therapy were discussed with the patient/family	4. Did any provider discuss and document the following risks of antibiotic therapy with the patient/family? O Yes O No **Should always be discussed** • Side effects • Allergic reaction • Reasons an antibiotic is or is not prescribed **Should be discussed if patient/family has concerns** • Antibiotic resistance	**Name**: Risks of antibiotic therapy discussed with patient/family and documented **Definition**: Percentage of patients with documentation that risks of antibiotic therapy were discussed with the patient/family **Source**: Question #5 **Numerator: Yes** selected in Question **#5** **Denominator:** Total Number of Charts **NOTE:** *It is important that patients and families understand the risks of antibiotic therapy and the reasons an antibiotic is or is not prescribed.* **KCA: Provide Guidance and Education**	100%

80% of patients with acute bacterial sinusitis will be prescribed antibiotics judiciously	5. What antibiotic was prescribed?
	  a) O amoxicillin
	  b) O amoxicillin-clavulanate
	  c) O cefdinir, cefuroxime, cefpodoxime, or ceftriaxone
	  d) O Other antibiotic prescribed
	  e) None, additional observation (watchful waiting) chosen
	
	If option b, c, or d is selected, *CONTINUE*
	
	🛑 **If option a) amoxicillin; or**
	e) None, additional observation (watchful waiting) is selected STOP, you have completed your review of this patient.
		Name: Judicious use of antibiotics
		
		Definition: Percentage of patients prescribed antibiotics for acute bacterial sinusitis judiciously
		
		Source: Questions #5 & #6
		
		Numerator: a) amoxicillin selected in Question **#5 OR b)** amoxicillin-clavulanate selected in Question **#5 AND** reasons **a, b or c** selected in Question **#6 OR c)** cefdinir, cefuroxime, cefpodoxime, or ceftriaxone selected in Question **#5 AND** reasons **a, b, d** or **e** selected in Question **#6**
		
		Denominator: Total number of charts **MINUS e) None, additional observation (watchful waiting**) selected in Question **#5**
		
		KCA: Treat Infection Effectively
			80%

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Aim	Data Collection Question	Measure	Goal
N/A	6. If amoxicillin was not prescribed, what was the reason the patient was **not** treated with amoxicillin? *(Select all that apply).* a) O Patient experienced previous severe allergic reaction b) O Patient experienced previous non-severe allergic reaction c) O 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) O Patient had previous adverse drug reaction with amoxicillin-clavulanate e) O Known or suspected multi-drug resistant organism f) O None of the above	**Not Measured** **NOTE: This question is only asked if option a) amoxicillin is not selected in Question # 5**	N/A

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

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.

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 Prescribed[1]

Antibiotic	Remarks
levofloxacin, linezolid, or clindamycin[2]	May be recommended if: • Patient experienced previous severe allergic reaction • Patient had previous adverse drug reaction with amoxicillin-clavulanate • Patient had known or suspected multi-drug resistant organism
azithromycin, trimethoprim-sulfamethoxasole, cephalexin, cefixime, tetracycline, ciprofloxacin, or moxifloxacin	NOT recommended. These medications do not provide appropriate coverage for typical bacterial sinusitis pathogens.

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