

Judicious Use of Antibiotics

Measures

Track 2: Acute Otitis Media

Directions:

Pull 10 or more charts of patients diagnosed with Acute Otitis Media (AOM);

1) Over 6 months of age

2) Exclude patients with the following:

- tympanostomy (myringotomy) tubes;
- major congenital conditions;
- immunocompromised status

Aim	Data Collection Question	Measure	Goal
100% of patients with otalgia will have pain treatment recommended	1. If otalgia was present, was pain treatment recommended? <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A, otalgia not present, or only mild pain	Name: Pain treatment recommended for otalgia Definition: Percentage of patients for whom pain treatment was recommended for otalgia Source: Question #1 Numerator: Yes selected in Question #1 Denominator: Total Number of Charts Minus N/A, otalgia not present, or only mild pain selected in Question #1	100%


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Aim	Data Collection Question	Measure	Goal
<p>100% of patients diagnosed with AOM will have two or more of the following AOM criteria present upon examination:</p> <ul style="list-style-type: none"> • bulging of the tympanic membrane • erythema • recent (<48 hrs) onset of ear pain (otalgia) • intense erythema • new onset of otorrhea not due to acute otitis externa 	<p>2. Were at least two of the following criteria for diagnosing AOM present upon the examination?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p> <ul style="list-style-type: none"> • bulging of the tympanic membrane • erythema • recent (<48 hrs) onset of ear pain (otalgia) • intense erythema • new onset of otorrhea, not due to acute otitis externa 	<p>Name: Appropriate diagnosis based on AOM criteria</p> <p>Definition: Percentage of patients diagnosed with AOM that had two or more AOM criteria present upon exam</p> <p>Source: Question #2</p> <p>Numerator: Yes selected in Question #2</p> <p>Denominator: Total Number of Charts</p>	100%
<p>100% of patients will be assessed for the option of additional observation (ie, watchful waiting) criteria based on Table 4: Recommendations for Initial Management for Uncomplicated AOM</p>	<p>3. Did the provider seeing the patient assess the patient for, additional observation (ie, watchful waiting) criteria based on Table 4: Recommendations for Initial Management for Uncomplicated AOM?</p> <p><input type="radio"/> Yes</p> <p><input type="radio"/> No</p>	<p>Name: Additional observation (ie, watchful waiting) criteria assessed</p> <p>Definition: Percentage of patients who were assessed for additional observation (ie, watchful waiting) criteria based on Table 4: Recommendations for Initial Management for Uncomplicated AOM</p> <p>Source: Question #3</p> <p>Numerator: Yes, selected in Question #3</p> <p>Denominator: Total Number of Charts</p>	100%

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Aim	Data Collection Question	Measure	Goal						
100% of patient's medical records will have documentation that the patient/family was instructed to call if patient worsens or has not improved within 48-72 hours	<div>4. Did the provider seeing the patient document in the medical record that this patient/family was instructed to call if patient worsens or has not improved within 48-72 hours?</div> <div><div><div><div></div></div><div>Yes, verbal discussion, and/or printed material provided and documented in the medical record</div></div><div><div></div><div>No documentation</div></div></div>	<div>Name: 48- 72 hours follow-up plan documented</div> <div>Definition: Percent of patients with documentation that the patient/family were instructed to call if patient worsens or has not improved in 48-72 hours</div> <div>Source: Question #4</div> <div>Numerator: Yes, Selected in Question #4</div> <div>Denominator: Total Number of Charts</div>	100%						
100% of patients prescribed antibiotics will have documentation that the risks of antibiotic therapy were discussed with the patient/family	<div>5. Did the provider seeing the patient discuss and document the following risks of antibiotic therapy with the patient/family?</div> <div><div><div><div></div></div><div>Yes</div></div><div><div></div><div>No</div></div><div><div></div><div>NA, no antibiotic prescribed</div></div></div> <table><tr><th>Should always be discussed</th><th>Should be discussed if patient/family has concerns:</th></tr><tr><td><div><div></div><div>Side effects</div></div></td><td><div><div></div><div>Antibiotic resistance</div></div></td></tr><tr><td><div><div></div><div>Allergic reaction</div></div></td><td></td></tr></table> <div><div>If Yes, or No selected, CONTINUE</div><div><div><div></div></div><div>If NA, no antibiotic prescribed STOP, you have completed your review of this patient.</div></div></div>	Should always be discussed	Should be discussed if patient/family has concerns:	<div><div></div><div>Side effects</div></div>	<div><div></div><div>Antibiotic resistance</div></div>	<div><div></div><div>Allergic reaction</div></div>		<div>Name: Risks of antibiotic therapy discussed with patient/family</div> <div>Definition: Percentage of patients prescribed antibiotics with documentation that risks of antibiotic therapy were discussed with the patient/family</div> <div>Source: Question #5</div> <div>Numerator: Yes selected in Question #5</div> <div>Denominator: Total Number of Charts MINUS N/A, no antibiotic prescribed selected in Question #5</div> <div>NOTE: Physicians may want to discuss risks of antibiotic therapy with patient/family, however, it is not required unless an antibiotic is prescribed</div>	100%
Should always be discussed	Should be discussed if patient/family has concerns:								
<div><div></div><div>Side effects</div></div>	<div><div></div><div>Antibiotic resistance</div></div>								
<div><div></div><div>Allergic reaction</div></div>									

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Aim	Data Collection Question	Measure	Goal
80% of patients treated for AOM will have the appropriate antibiotic prescribed judiciously	<p>6. What antibiotic was prescribed?</p> <p>a) <input type="radio"/> amoxicillin</p> <p>b) <input type="radio"/> amoxicillin-clavulanate</p> <p>c) <input type="radio"/> cefdinir, cefuroxime, cefpodoxime, or ceftriaxone</p> <p>d) <input type="radio"/> Other antibiotic chosen</p> <p>e) <input type="radio"/> None, additional observation (watchful waiting) chosen</p> <p> If option a) amoxicillin; or e) None, additional observation is selected STOP, you have completed your review of this patient.</p> <p>If option b, c or d is selected, CONTINUE</p>	<p>Name: Judicious use of antibiotics</p> <p>Definition: Percentage of patients prescribed antibiotics for AOM judiciously</p> <p>Source: Questions #6 & 7</p> <p>Numerator: (a) amoxicillin selected in Question #6; OR b) amoxicillin-clavulanate selected in Question #6 AND reasons a-e selected in Question #7 OR c) cefdinir, cefuroxime, cefpodoxime, or ceftriaxone selected in Question #6 AND reasons a, b, d or e selected in Question #7</p> <p>Denominator: Total number of charts MINUS (e) None, additional observation (watchful waiting) selected in Question #6</p>	80%

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Aim	Data Collection Question	Measure	Goal
	<p>7. If amoxicillin was not prescribed, what was the reason the patient was not treated with amoxicillin? (Select <u>all</u> that apply)</p> <p>a) <input type="radio"/> Patient experienced previous severe allergic reaction</p> <p>b) <input type="radio"/> Patient experienced previous non-severe allergic reaction</p> <p>c) <input type="radio"/> Patient has taken amoxicillin in the past 30 days, or has purulent conjunctivitis</p> <p>d) <input type="radio"/> Patient had previous adverse drug reaction with amoxicillin-clavulanate</p> <p>e) <input type="radio"/> Patient had known or suspected multi-drug resistant organism</p> <p>f) <input type="radio"/> None of the above</p>	<p>Not Measured</p> <p>NOTE: This question is only asked if option a) amoxicillin is <u>not</u> selected in Question #6</p>	

* Definitions and references available in the Appendix

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Appendix

[Otitis media](#) may present as holding, tugging, rubbing of the ear in a non-verbal child

TABLE 4

Recommendations for Initial Management for Uncomplicated AOM^a

Age	Otorrhea With AOM ^a	Unilateral or Bilateral AOM ^a With Severe Symptoms ^b	Bilateral AOM ^a Without Otorrhea	Unilateral AOM ^a Without Otorrhea
6 mo to 2 y	Antibiotic therapy	Antibiotic therapy	Antibiotic therapy	Antibiotic therapy or additional observation
≥2 y	Antibiotic therapy	Antibiotic therapy	Antibiotic therapy or additional observation	Antibiotic therapy or additional observation ^c

Discuss: Physicians may want to discuss risks of antibiotic therapy with patient/family, however, it is not required unless an antibiotic is prescribed.

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 chosen:

Alternative Antibiotic:	Acceptable Reasons For Alternative Antibiotic:
levofloxacin, linezolid, or clindamycin	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-sulfamethoxazole, cephalexin, cefixime, tetracycline, ciprofloxacin, or moxifloxacin	These medications are considered broad-spectrum antibiotics and should not be prescribed for AOM