
2017 OPTIONS FOR INDIVIDUAL MEASURES: 
REGISTRY ONLY

MEASURE TYPE: 
Process

DESCRIPTION: 
Percentage of patients aged 2 years and older with a diagnosis of AOE who were not prescribed systemic antimicrobial therapy

INSTRUCTIONS: 
This measure may be reported based on the actions of the reporting eligible clinician who performs the quality action, described in the measure, based on services provided within measure-specific denominator coding. This measure is to be reported once for each occurrence of AOE during the performance period. Each unique occurrence is defined as a 30-day period from onset of AOE. Claims data will be analyzed to determine unique occurrences. If multiple claims are submitted within that 30-day period, only one instance of reporting will be counted.

Eligible clinicians who report on this measure may also find Measure #91: Acute Otitis Externa: Topical Therapy to be clinically relevant. The measure developer intended for measures #91: Acute Otitis Externa: Topical Therapy and measure #93: Acute Otitis Externa: Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use to be paired measures, as they can both be implemented to measure care provided to patients diagnosed with diffuse, uncomplicated AOE.

Measure Reporting: 
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR: 
All patients aged 2 years and older with a diagnosis of AOE

Denominator Criteria (Eligible Cases): 
Patients aged ≥ 2 years on date of encounter
AND
Diagnosis for AOE (ICD-10-CM): H60.00, H60.01, H60.02, H60.03, H60.10, H60.11, H60.12, H60.13, H60.311, H60.312, H60.313, H60.319, H60.321, H60.322, H60.323, H60.329, H60.331, H60.332, H60.333, H60.339, H60.391, H60.392, H60.393, H60.399, H60.501, H60.502, H60.503, H60.509, H60.511, H60.512, H60.513, H60.519, H60.521, H60.522, H60.523, H60.529, H60.531, H60.532, H60.533, H60.539, H60.541, H60.542, H60.543, H60.549, H60.551, H60.552, H60.553, H60.559, H60.591, H60.592, H60.593, H60.599, H61.90, H61.91, H61.92, H61.93, H62.40, H62.41, H62.42, H62.43, H62.8X1, H62.8X2, H62.8X3, H62.8X9
AND
Patient encounter during the performance period (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99281, 99282, 99283, 99284, 99285, 99304, 99305, 99306, 99307, 99308, 99309, 99310, 99324, 99325, 99326, 99327, 99328, 99334, 99335, 99336, 99341, 99342, 99343, 99344, 99345, 99347, 99348, 99349, 99350

WITHOUT
Telehealth Modifier: GQ, GT
NUMERATOR:
Patients who were not prescribed systemic antimicrobial therapy

Numerator Instructions: For performance, the measure will be calculated as the number of patients for whom systemic antimicrobial therapy was not prescribed over the number of patients in the denominator (patients aged 2 years and older with acute otitis externa). A higher score indicates appropriate treatment of patients with AOE (e.g., the proportion for whom systemic antimicrobials were not prescribed).

Numerator Options:
Performance Met: Systemic antimicrobial therapy not prescribed (4132F)

OR

Denominator Exception: Documentation of medical reason(s) for prescribing systemic antimicrobial therapy (eg, coexisting diabetes, immune deficiency) (4131F with 1P)

OR

Performance Not Met: Systemic antimicrobial therapy prescribed (4131F)

RATIONALE:
Despite their limited utility, about 20-40 percent of patients with AOE receive oral antibiotics, often in addition to topical therapy. “There are no data on the efficacy of systemic therapy using appropriate antibacterials and stratified by severity of the infection. Moreover, orally administered antibiotics have significant adverse effects that include rashes, vomiting, diarrhea, allergic reactions, altered nasopharyngeal flora, and development of bacterial resistance.” The use of systemic antimicrobial therapy to treat AOE should be limited only to those clinical situations in which it is indicated.

CLINICAL RECOMMENDATION STATEMENTS:
Clinicians should not prescribe systemic antimicrobials as initial therapy for diffuse, uncomplicated AOE unless there is extension outside the ear canal or the presence of specific host factors that would indicate a need for systemic therapy.

Strong recommendation based on randomized controlled trials with minor limitations and a preponderance of benefit over harm. [Aggregate evidence quality – Grade B] (AAO-HNSF, 2014)

COPYRIGHT:
The Measures are not clinical guidelines, do not establish a standard of medical care, and have not been tested for all potential applications.

The Measures, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, e.g. use by health care providers in connection with their practices. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain.

Commercial uses of the Measures require a license agreement between the user and the PCPI® Foundation (PCPI®); or the American Academy of Otolaryngology – Head and Neck Surgery Foundation (AAO-HNS Foundation). Neither AAO-HNS, nor AAO-HNS Foundation, nor the American Medical Association (AMA), nor the AMA-convened Physician Consortium for Performance Improvement® (AMA-PCPI), now known as the PCPI, nor their members shall be responsible for any use of the Measures.

The AMA’s and AMA-PCPI’s significant past efforts and contributions to the development and updating of the Measures is acknowledged. AAO-HNS and AAO-HNS Foundation are solely responsible for the review and enhancement (“Maintenance”) of the Measures as of August 14, 2014.

AAO-HNS and AAO-HNS Foundation encourage use of the Measures by other health care professionals, where
THE MEASURES AND SPECIFICATIONS ARE PROVIDED “AS IS” WITHOUT WARRANTY OF ANY KIND.


Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. AAO-HNS, AAO-HNS Foundation, the AMA, the PCPI and its members and former members of the AMA-PCPI disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

2017 Registry Individual Measure Flow
#93 NQF # 0654: Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use

**SAMPLE CALCULATIONS:**

**Data Completeness**

\[
\text{Data Completeness} = \frac{\text{Performance Met (a=4 episodes)} + \text{Denominator Exception (b=1 episode)} + \text{Performance Not Met (c=2 episodes)}}{\text{Eligible Population / Denominator (d=8 episodes)}} = \frac{7 \text{ episodes}}{8 \text{ episodes}} = 87.50\%
\]

**Performance Rate**

\[
\text{Performance Rate} = \frac{\text{Performance Met (a=4 episodes)}}{\text{Data Completeness Numerator (7 episodes)} - \text{Denominator Exception (b=1 episode)}} = \frac{4 \text{ episodes}}{6 \text{ episodes}} = 66.67\%
\]

*See the posted Measure Specification for specific coding and instructions to report this measure.

**NOTE:** Reporting Frequency: Episode

CPT only copyright 2016 American Medical Association. All rights reserved. The measure diagrams were developed by CMS as a supplemental resource to be used in conjunction with the measure specifications. They should not be used alone or as a substitution for the measure specification.

v1
2017 Registry Individual Measure Flow

#93 NQF # 0654: Acute Otitis Externa (AOE): Systemic Antimicrobial Therapy – Avoidance of Inappropriate Use

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator

2. Check Patient Age:
   a. If the Age is greater than or equal to 2 years of age on Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
   b. If the Age is greater than or equal to 2 years of age on Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.

3. Check Patient Diagnosis:
   a. If Diagnosis of AOE as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Diagnosis of AOE as Listed in the Denominator equals Yes, proceed to check Encounter Performed.

4. Check Encounter Performed:
   a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
   b. If Encounter as Listed in the Denominator equals Yes, proceed to check Telehealth Modifier

5. Check Telehealth Modifier:
   a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
   b. If Telehealth Modifier equals No, include in the Eligible population.

6. Denominator Population
   a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 episodes in the sample calculation.

7. Start Numerator

8. Check Systemic Antimicrobial Therapy Not Prescribed:
   a. If Systemic Antimicrobial Therapy Not Prescribed equals Yes, include in Data Completeness Met and Performance Met.
   b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 episodes in Sample Calculation.
   c. If Systemic Antimicrobial Therapy Not Prescribed equals No, proceed to Systemic Antimicrobial Therapy
Prescribed for Medical Reason.

9. Check Systemic Antimicrobial Therapy Prescribed for Medical Reason:
   a. If Systemic Antimicrobial Therapy Prescribed for Medical Reason equals Yes, include in Data Completeness Met and Denominator Exception.
   
   b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter b equals 1 episode in the Sample Calculation.
   
   c. If Systemic Antimicrobial Therapy Prescribed for Medical Reason equals No, proceed to Systemic Antimicrobial Therapy Prescribed.

10. Check Systemic Antimicrobial Therapy Prescribed:
   a. If Systemic Antimicrobial Therapy Prescribed equals Yes, include in the Data Completeness Met and Performance Not Met.
   
   b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 2 episodes in the Sample Calculation.
   
   c. If Systemic Antimicrobial Therapy Prescribed equals No, proceed to Data Completeness Not Met.

11. Check Data Completeness Not Met:
   a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 episode has been subtracted from the data completeness numerator in the sample calculation.

### SAMPLE CALCULATIONS:

<table>
<thead>
<tr>
<th>Data Completeness=</th>
<th>Performance Met (a=4 episodes) + Denominator Exception (b=1 episode) + Performance Not Met (c=2 episodes) = 7 episodes</th>
<th>87.50%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Eligible Population / Denominator (d=8 episodes)</td>
<td>8 episodes</td>
</tr>
<tr>
<td>Performance Rate=</td>
<td>Performance Met (a=4 episodes) = 4 episodes = 66.67%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Data Completeness Numerator (7 episodes) – Denominator Exception (b=1 episode) = 6 episodes</td>
<td></td>
</tr>
</tbody>
</table>