

# Antibiotic Utilization for Respiratory Conditions (AXR)

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## SUMMARY OF CHANGES TO HEDIS MY 2022

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- This is a first-year measure.

### Description

The percentage of episodes for members 3 months of age and older with a diagnosis of a respiratory condition that resulted in an antibiotic dispensing event.

### Definitions

<b>Intake Period</b>	A 12-month window that begins on July 1 of the year prior to the measurement year and ends on June 30 of the measurement year. The Intake Period captures eligible episodes of treatment.
<b>Episode Date</b>	The date of service for any outpatient, telephone, observation or ED visit, e-visit or virtual check-in during the Intake Period with a diagnosis of a respiratory condition.
<b>Negative Medication History</b>	<p>To qualify for Negative Medication History, the following criteria must be met:</p> <ul style="list-style-type: none"><li>• A period of 30 days prior to the Episode Date when the member had no pharmacy claims for either new or refill prescriptions for a listed antibiotic drug.</li><li>• No prescriptions dispensed more than 30 days prior to the Episode Date that are active on the Episode Date.</li></ul> <p>A prescription is considered active if the “days supply” indicated on the date when the member was dispensed the prescription is the number of days or more between that date and the relevant service date. The 30-day look-back period for pharmacy data includes the 30 days prior to the Intake Period.</p>
<b>Negative Comorbid Condition History</b>	A period of 12 months prior to and including the Episode Date when the member had no claims/encounters with any diagnosis for a comorbid condition.
<b>Negative Competing Diagnosis</b>	The Episode Date and three days following the Episode Date when the member had no claims/encounters with a competing diagnosis.

### Eligible Population

<b>Product lines</b>	Commercial, Medicaid, Medicare (report each product line separately).
<b>Ages</b>	Members who were 3 months of age or older as of the Episode Date. Report three age stratifications and a total rate: <ul style="list-style-type: none"><li>• 3 months–17 years.</li><li>• 18–64 years.</li><li>• 65 years and older.</li><li>• Total.</li></ul>

<b>Continuous enrollment</b>	The total is the sum of the age stratifications. 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).
<b>Allowable gap</b>	No gaps in enrollment during the continuous enrollment period.
<b>Anchor date</b>	None.
<b>Benefit</b>	Medical and Pharmacy.
<b>Event/diagnosis</b>	Follow the steps below to identify the eligible population: <ul style="list-style-type: none"> <li><b>Step 1</b> Identify all members who had an outpatient visit (<u>Outpatient Value Set</u>), a telephone visit (<u>Telephone Visits Value Set</u>), an e-visit or virtual check-in (<u>Online Assessments Value Set</u>), an observation visit (<u>Observation Value Set</u>) or an ED visit (<u>ED Value Set</u>) during the Intake Period, with a diagnosis of a respiratory condition (<u>Respiratory Conditions and Symptoms Value Set</u>).</li> <li><b>Step 2</b> Determine all respiratory condition Episode Dates. For each member identified in step 1, determine all outpatient, telephone, observation or ED visits, e-visits and virtual check-ins with a diagnosis of a respiratory condition.  Do not include visits that result in an inpatient stay (<u>Inpatient Stay Value Set</u>).</li> <li><b>Step 3</b> Test for Negative Comorbid Condition History. Exclude Episode Dates when the member had a claim/encounter with any diagnosis for a comorbid condition during the 12 months prior to or on the Episode Date. A code from any of the following meets criteria for a comorbid condition: <ul style="list-style-type: none"> <li>• <u>HIV Value Set</u>.</li> <li>• <u>HIV Type 2 Value Set</u>.</li> <li>• <u>Malignant Neoplasms Value Set</u>.</li> <li>• <u>Other Malignant Neoplasm of Skin Value Set</u>.</li> <li>• <u>Emphysema Value Set</u>.</li> <li>• <u>COPD Value Set</u>.</li> <li>• <u>Comorbid Conditions Value Set</u>.</li> <li>• <u>Disorders of the Immune System Value Set</u>.</li> </ul> </li> <li><b>Step 4</b> Test for Negative Medication History. Exclude Episode Dates where a new or refill prescription for an antibiotic medication (<u>AXR Antibiotic Medications List</u>) was dispensed 30 days prior to the Episode Date or was active on the Episode Date.</li> <li><b>Step 5</b> Test for Negative Competing Diagnosis. Exclude Episode Dates where the member had a claim/encounter with a competing diagnosis on or 3 days after the Episode Date. A code from the following meets criteria for a competing diagnosis: <ul style="list-style-type: none"> <li>• <u>AXR Competing Diagnosis Value Set</u>.</li> </ul> </li> <li><b>Step 6</b> Calculate continuous enrollment. The member must be continuously enrolled without a gap in coverage from 30 days prior to the Episode Date through 3 days after the Episode Date (34 total days).</li> </ul>

**Step 7** Deduplicate eligible episodes. If a member has more than one eligible episode in a 31-day period, include only the first eligible episode. For example, if a member has an eligible episode on January 1, include the January 1 visit and do not include eligible episodes that occur on or between January 2 and January 31; then, if applicable, include the next eligible episode that occurs on or after February 1. Identify visits chronologically, including only one per 31-day period.

**Note:** The denominator for this measure is based on episodes, not on members. All eligible episodes that were not excluded or deduplicated remain in the denominator.

**Step 8: Required exclusion** Members in hospice or using hospice services anytime during the measurement year. Refer to *General Guideline 17: Members in Hospice*.

### Administrative Specification

**Denominator** The eligible population.

**Numerator** Dispensed prescription for an antibiotic medication from the AXR Antibiotic Medications List on or 3 days after the Episode Date.

#### AXR Antibiotic Medications

Description	Prescriptions
Absorbable sulfonamides	<ul style="list-style-type: none"> <li>• Sulfadiazine</li> <li>• Sulfamethoxazole-trimethoprim</li> </ul>
Aminoglycoside	<ul style="list-style-type: none"> <li>• Amikacin</li> <li>• Streptomycin</li> <li>• Gentamicin</li> <li>• Tobramycin</li> </ul>
Amoxicillin/clavulanate	<ul style="list-style-type: none"> <li>• Amoxicillin-clavulanate</li> </ul>
Azithromycin and clarithromycin	<ul style="list-style-type: none"> <li>• Azithromycin</li> <li>• Clarithromycin</li> </ul>
Cephalosporin (first generation)	<ul style="list-style-type: none"> <li>• Cefadroxil</li> <li>• Cephalexin</li> <li>• Cefazolin</li> </ul>
Cephalosporin (second, third, fourth generation)	<ul style="list-style-type: none"> <li>• Cefaclor</li> <li>• Cefdinir</li> <li>• Cefditoren</li> <li>• Cefepime</li> <li>• Cefixime</li> <li>• Cefotaxime</li> <li>• Cefotetan</li> <li>• Cefoxitin</li> <li>• Cefpodoxime</li> <li>• Cefprozil</li> <li>• Ceftriaxone</li> <li>• Cefuroxime</li> <li>• Ceftazidime</li> <li>• Ceftibuten</li> </ul>
Clindamycin	<ul style="list-style-type: none"> <li>• Clindamycin</li> </ul>
Ketolide	<ul style="list-style-type: none"> <li>• Telithromycin</li> </ul>
Lincosamide (other than clindamycin)	<ul style="list-style-type: none"> <li>• Lincomycin</li> </ul>
Macrolide (other than azithromycin and clarithromycin)	<ul style="list-style-type: none"> <li>• Erythromycin</li> </ul>
Penicillin (other than amoxicillin/ clavulanate)	<ul style="list-style-type: none"> <li>• Ampicillin</li> <li>• Ampicillin-sulbactam</li> <li>• Amoxicillin</li> <li>• Penicillin G benzathine-procaine</li> <li>• Penicillin G potassium</li> <li>• Penicillin G procaine</li> </ul>

Description	Prescriptions
	<ul style="list-style-type: none"><li>• Dicloxacillin</li><li>• Nafcillin</li><li>• Oxacillin</li><li>• Penicillin G benzathine</li><li>• Penicillin G sodium</li><li>• Penicillin V potassium</li><li>• Piperacillin-tazobactam</li></ul>