



Antibiotic Utilization for Respiratory Conditions (AXR)

AXR Measure Description¹

This measure summarizes data on 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. The organization reports three age stratifications for each product line (Commercial, Medicare, Medicaid). The measure considers only episodes that occur in an outpatient setting (outpatient, telephone, observation or ED visit, e-visit or virtual check-in).

Why is AXR Important?¹

Antibiotics are powerful tools to treat bacterial infections. However, incorrect use can lead to problems such as antibiotic resistance—where drugs designed to kill germs like bacteria no longer work. Nearly 3 million antibiotic-resistant infections are reported each year in the United States, and more than 35,000 people die from those infections, according to the Centers for Disease Control’s 2019 Antibiotic Resistance Threats Report (CDC, 2019). Tracking antibiotic use for respiratory conditions, for which antibiotics often are incorrectly given, can help health plans to monitor antibiotic use to ensure they are being prescribed correctly.

Best Practices

- ✓ Avoid prescribing an antibiotic unless there is a bacterial etiology.
- ✓ An episode will not count toward the measure denominator if the member was diagnosed with a competing diagnosis on or 3 days after the episode date.
- ✓ This measure is based on episodes; members may have multiple episodes.
- ✓ The CDC offers materials and tools about antibiotic resistance, appropriate prescribing and use for common infections.
- ✓ Telehealth visits are allowed for this measure.

Numerator Compliance²

Data Collection Method²

Dispensed prescription for an antibiotic medication from the AXR Antibiotic Medications List on or 3 days after the episode date.

Administrative (Claims)

Refer to next page for the list of medications.



Trillium Percentages/NCQA National Averages¹

AXR	Measurement Year	Trillium	NCQA National Average
Total	2023	22.47	26.10
	2022	-	-

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¹ Source: <https://www.ncqa.org/report-cards/health-plans/state-of-health-care-quality-report/measures-list/>

² Source: HEDIS MY 2025 Tech Specs Manual Vol. 2

AXR Numerator Medications²

Description		Prescription
Absorbable sulfonamides	Sulfadiazine	Sulfamethoxazole-trimethoprim
Aminoglycoside	Amikacin Gentamicin	Streptomycin Tobramycin
Amoxicillin/clavulanate	Amoxicillin-clavulanate	
Azithromycin and clarithromycin	Azithromycin	Clarithromycin
Cephalosporin (first generation)	Cefadroxil Cefazolin Cephalexin	
Cephalosporin (second, third, fourth generation)	Cefaclor Cefdinir Cefepime Cefixime Cefotaxime Cefotetan	Cefoxitin Cefpodoxime Cefprozil Ceftazidime Ceftriaxone Cefuroxime
Clindamycin	Clindamycin	
Lincosamide (other than clindamycin)	Lincomycin	
Macrolide (other than azithromycin and clarithromycin)	Erythromycin	
Miscellaneous antibiotics	Aztreonam Chloramphenicol Dalfopristin-quinupristin Daptomycin Fosfomycin Linezolid	Metronidazole Nitrofurantoin Nitrofurantoin macrocrystals-monohydrate Rifampin Telavancin Trimethoprim Vancomycin
Penicillin (other than amoxicillin/clavulanate)	Amoxicillin Ampicillin Ampicillin-sulbactam Dicloxacillin Nafcillin Oxacillin	Penicillin G benzathine Penicillin G benzathine-procaine Penicillin G potassium Penicillin G procaine Penicillin G sodium Penicillin V potassium Piperacillin-tazobactam
Quinolones	Ciprofloxacin Gemifloxacin	Levofloxacin Moxifloxacin Ofloxacin
Tetracyclines	Doxycycline Minocycline Tetracycline	

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